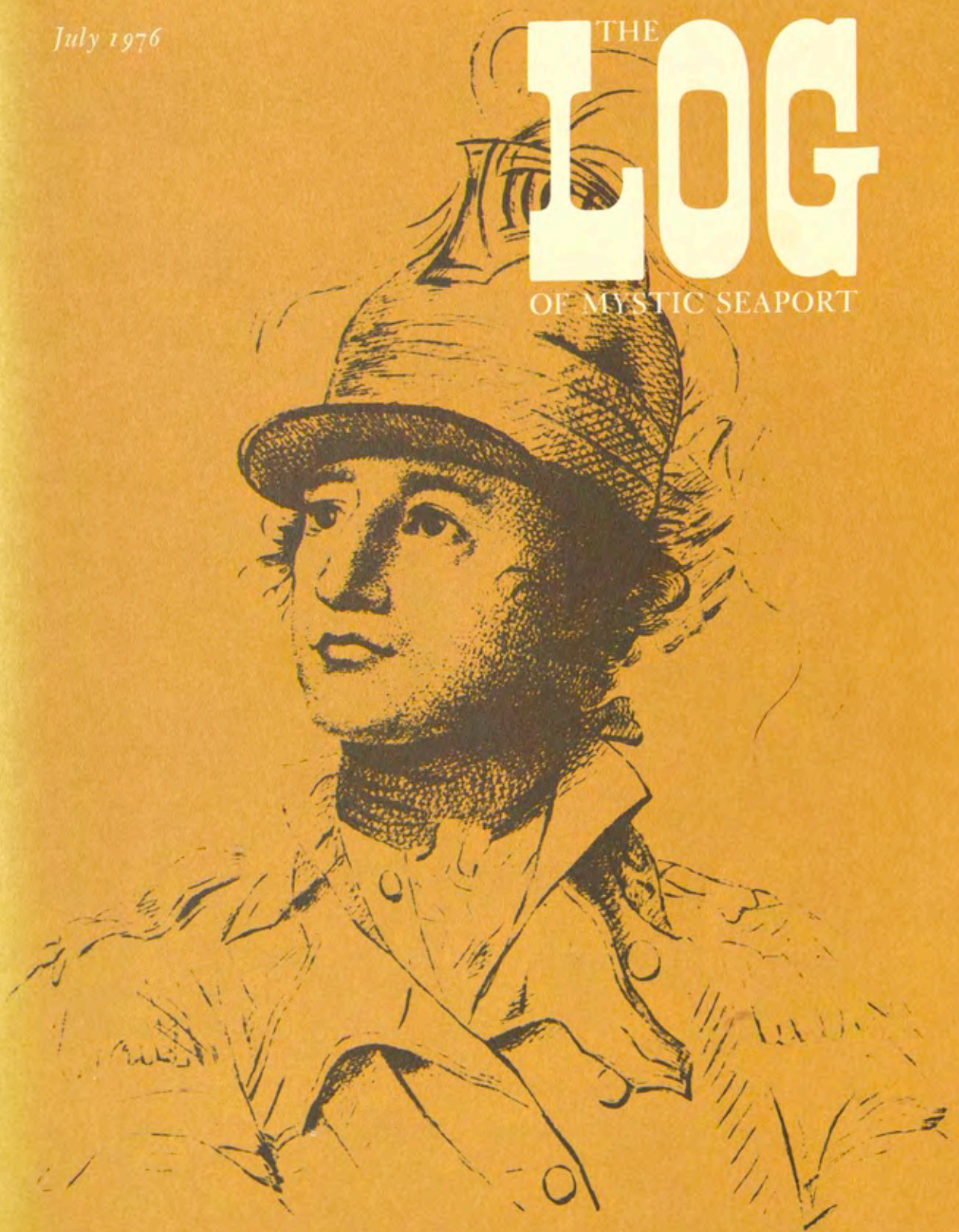
July 1976

THE LOG OF MYSTIC SEAPORT



BICENTENNIAL ISSUE

Officers and Trustees of Mystic Seaport, Inc.

Francis Day Rogers, *Chairman of the Board*
William C. Ridgway, Jr., *President*
Waldo Howland, *Vice President*
Clifford D. Mallory, Jr., *Vice President*
William H. Moore, *Vice President*
Atwood C. Ely, *Treasurer*

TRUSTEES EMERITI
John P. Blair
Leonard P. Moore
Joseph S. Santin
Rudolph J. Schaefer
Jerome W. Sinsheimer
John R. Wheeler

BOARD OF TRUSTEES
Robert P. Anderson
Homer D. Babbidge, Jr.
Rensselaer W. Bartram III
E. Jared Bliss, Jr.
James L. Christy
Percy Chubb II
Briggs S. Cunningham
John R. Deupree
John W. Draper
F. George duPont
Mrs. Henry B. duPont
Atwood C. Ely
William P. Gwinn
Waldo Howland
Jakob Isbrandtsen
Lionel Jackson
Irving M. Johnson
Donald B. Kipp
Robert P. Koenig
Stanley Livingston, Jr.
Charles S. Lowry
John Macomber
Clifford D. Mallory, Jr.
G. Barron Mallory
Margaret P. Mallory
Richard C. McCurdy
Thomas L. Miller
William H. Moore
Robert L. Newell
Alfred Ogden
Harris B. Parsons
Hugh M. Pierce
William C. Ridgway, Jr.
Francis Day Rogers
Peter D. Sanger
Rudolph J. Schaefer III
Henry A. Scheel
Emil Silberman
E. Newbold Smith
Olin J. Stephens II
Robert G. Stone, Jr.
Oscar S. Straus II
Rudolf L. Talbot
Alexander O. Vietor
Thomas J. Watson, Jr.
William Blunt White
Thomas R. Wilcox
Jacques D. Wimpfheimer

Staff Officers

Waldo C. M. Johnston, *Director*
Franklin Kneedler, *Director of Administration*
J. Revell Carr, *Curator*
Michael D. Sturges, *Director of Education*
Benjamin W. Labaree, *Director of Munson Institute*
Oliver Denison III, *Secretary and Assistant Treasurer*

The Log *of Mystic Seaport*

Editorial Board: Percy Knauth, *Editor*; Dorothy E. R. Brewington, J. Revell Carr, Flora H. Fairchild, John Gardner, Waldo C. M. Johnston, Donald R. Judge, Franklin Kneedler, Albert O. Louer, Michael D. Sturges
Photography Staff: Kenneth Mahler, Mary Anne Stets, Claire L. White
Design and Production: Klaus Gemming

Members and friends of Mystic Seaport are encouraged to submit articles and photographs for consideration by the Editorial Board. Prospective authors may obtain editorial guidelines from the Publications Department at the Seaport. All articles published in *The Log* are the responsibility of the signed authors and may not always express either the views of the Board or the policies of Mystic Seaport, Inc.

© 1976, Mystic Seaport, Inc., Mystic, Connecticut 06355. All rights reserved.
Composed by Finn Typographic Service, Inc. Printed by The Meriden Gravure Company. Bound by Mueller Trade Bindery Corp.

COVER: *Colonel Benjamin Tallmadge, an early hero of the American Revolution, led brilliant strikes against the British in the whaleboat war of Long Island Sound (see p. 59).*

FACING PAGE: *The sloop* Alexander and Martha, *built in 1681 by Joseph Wells at Stonington, was a forerunner of the fleet that in years to come would sail from seaports along the Connecticut coast. Sixth in a series by the late John F. Leavitt depicting vessels built on or near the Mystic River.*

Volume 28, Number 2 / July 1976

THE LOG OF MYSTIC SEAPORT

CONTENTS

American Colonial Shipbuilding
WILLIAM A. BAKER 34

Revolutionary Broadsides
DOROTHY BREWINGTON 45

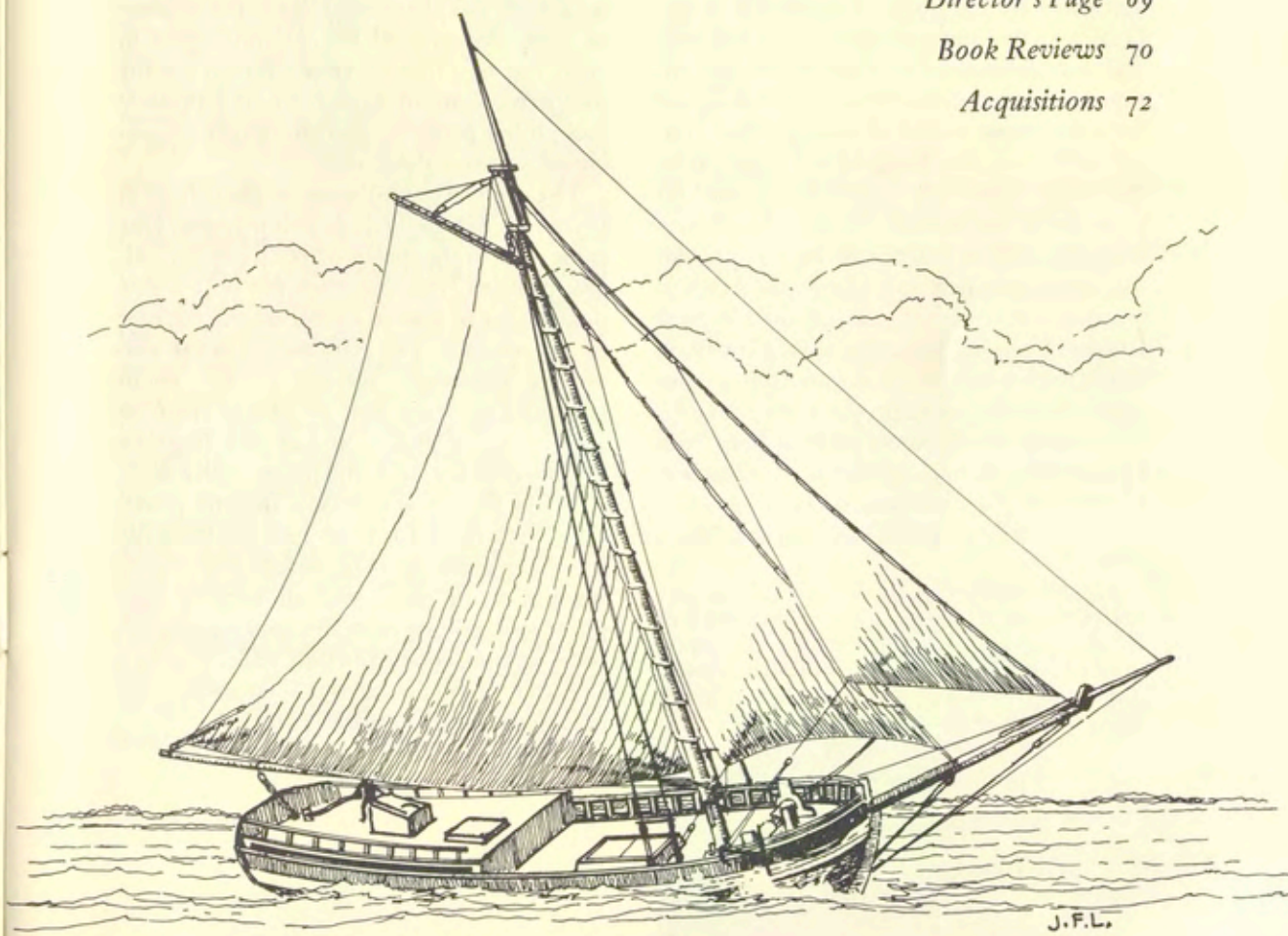
The Hart Brothers of Saybrook, Connecticut: Soldiers and Privateers of the Revolution
STUART M. FRANK 49

Whaleboat Warfare on the Sound
JOHN GARDNER 59

Director's Page 69

Book Reviews 70

Acquisitions 72



American Colonial Shipbuilding

By WILLIAM A. BAKER*

There is a prevailing myth in America that the vessels built in the early period of colonization were of necessity crude affairs. How could they have been otherwise with the tools then available? "It will be hard for some students to believe," so declared a descriptive brochure of a tool exhibit in a New England town recently, "that with these crude broadaxes, adzes and caulking irons, men built magnificent ships. . . ." The answer, of course, lies not in the tools but in the men who used them.

They were craftsmen by any standard, and if we look at some of the fine furniture built in those days it is not surprising that other craftsmen should build "magnificent ships." Quality in the construction of boats and ships is always determined by class rather than antiquity: a seventeenth-century craft designed for a fisherman would obviously differ considerably from one designed as a royal yacht. But early American shipbuilding was far from crude, and in respect to size, also, American shipwrights deserve to be recognized: the largest merchant ship of colonial America was one of no less than 720 tons, built in New London by John Jeffrey in 1725. Clearly, in this bicentennial year, it is time to put colonial shipbuilding in its proper perspective.

The first vessel known to have been built by English colonists in North America was the pinnace *Virginia*, launched at Popham at the mouth of the Kennebec River in Maine early in 1608. She may have been rough in some respects—she was intended for coastwise trading—but she was not constructed by novices. The work was done under the supervision of "one Digby of London," who was called the "chief shipwright," which perhaps implies that there were other shipwrights among the colonists. The logistics of building even one vessel in a new colony were not simple, for everything not made of wood had to be brought from England.

The *Virginia* measured about 30 tons and was perhaps about 50 feet long over all. She was seaworthy enough to take some of the Popham colonists back to England when the settlement was abandoned late in the summer of 1608. She crossed the Atlantic again in 1609, one of a fleet of vessels bound for the southern colony of Jamestown. It is possible though not probable that she was in Massachusetts waters about 1630.

The original complement of the colony at Plymouth did not include a shipwright. One came over in the spring of 1624, but the colony profited from his work for only a few months, for he died of a fever during the heat of the summer. The settlement's house carpenters apparently learned enough about boatbuilding from him to enable them in 1626 to cut a shallop in half and lengthen her, build up her sides, and fit her with a deck.

When Boston was settled, definite provisions were made for boat- and shipbuilding. By the middle of 1629, seven shipwrights were at work there, and all sorts of supplies were arriving from England—pitch, tar, rosin, oakum, rope, sail cloth, nails, iron bars and lead. Shipbuilding was soon under way in various nearby locations as well.

* William Avery Baker, a naval architect by profession, is one of America's leading authorities on colonial ships and shipbuilding. He is curator of the Francis Hart Nautical Museum at the Massachusetts Institute of Technology and the author of several books on maritime historical subjects.



The pinnace *Virginia*, built in 1607, was the first vessel launched from an American shipyard.

The first vessel built after the founding of the Massachusetts Bay colony was the bark *Blessing of the Bay*, launched into Boston's Mystic River on 4 July 1631. In 1632 a ship measuring 100 tons slid into the Mystic; a ship of unknown tonnage was completed in 1633, and the keel was laid for a 200-tonner. From the number of shallops, pinnaces and barks mentioned during the next few years it is obvious that shipbuilders were busy in all the towns on Massachusetts Bay. By 1641 in the Massachusetts Bay colony shipbuilding was of sufficient importance—with a 300-ton ship under construction—for the General Court to pass an act making it lawful for an owner having a vessel built to "appoint and put in some able man to survey the work and workmen from time to time, as is usual in England, and the same so appointed shall have such liberty and power as belongs to his office."

By 1665 there were said to have been about 300 New England-built vessels engaged in coastwise, West Indian and overseas trading, and some 1,300 small craft were employed in fishing. According to records of the period these totals included shallops, pinnaces, barks, ketches and ships. Shallops, the primary inshore fishing craft, were basically double-ended, open boats carrying a two-masted square rig of which the distinguishing feature was a foresail about one-quarter the area of the main. Some probably had a single-masted fore-and-aft rig. Pinnaces were square-sterned vessels with one deck; their spars and sails ranged from a simple, single-masted fore-and-aft rig to the full ship rig. Barks were small, decked vessels, often double-ended, that had two-masted square rigs similar to that of the shallop, or a simplified ship rig.

Ketches might be described very roughly as ships without foremasts, but there were important differences in the proportions of the sails. Usually double-ended and strongly built, ketches were the primary offshore fishing craft until about 1715. Ships usually had two decks and carried three-masted rigs with square sails on all masts. Up to about the middle of the century, however, some of the smaller ships had no square sails on their mizzenmasts.

By 1641 American yards were building many different ship types, including such as this bark.





The ketch *Adventure* was typical of the offshore fishing craft launched in the late 17th century.

Toward the end of the seventeenth century the shallops and small pinnaces were being replaced by what were called, for lack of a better name, simply "two-mast boats." They had fore-and-aft rigs. The larger pinnaces had gone out of service by the end of the third quarter of the century. At about the same time brigantines and snows started replacing the barks and medium-sized pinnaces.

The square-rigged ketches slowly lost favor, but a few were built even after the end of the War for Independence. There is some evidence that during the late seventeenth and early eighteenth centuries some of the smaller ketches had fore-and-aft rigs. These had largely disappeared by about 1720, having been replaced by the now familiar schooner that was first mentioned in Boston and Gloucester records about 1716.

A sloop, qualified by "Dutch," is mentioned in John Winthrop's *History of New England* as early as December 1635, but as a local type the sloop did not begin appearing in New England records until the 1660s. For a while there was some confusion between sloops and shallops—both terms, of course, came from the same source—but it was not long before sloops were recognized as having one mast, a gaff mainsail and at least one triangular headsail.

The designers and master-builders of these seventeenth-century vessels were generally one and the same. Naval architects in the modern sense, i.e. ship designers not necessarily involved in construction, did not exist. The master-builders, employing long-established rules for hull proportions, shape, scantlings and rig, delivered vessels similar to those already in service. Changes in successive hulls were small because both owners and builders hesitated to depart far from features that had proved satisfactory. Over the span of a few decades, however, certain trends were apparent. Changes in ships were the result of shifts in trade patterns, modifications of form, improvements in rig, and the availability of timber along with whim and fashion.

The various designing and building rules mentioned above usually were passed from a master-builder to his apprentices. These were the secrets of the art that were jealously guarded and rarely set down on paper except in a builder's notebook. An Italian manuscript on shipbuilding dated about 1445 contains such detailed information that it must represent the accumulated experience of several centuries. In this and later material, however, much was taken for granted, hence some of the design procedures are not entirely clear. *The Compleat Shipwright* of Edmund Bushnell, the first printed book on shipbuilding in the English language, was not published until about 1660, and it dealt mainly with the design of a small warship.

The 1445 Italian manuscript indicates that shipbuilders usually shaped every fifth frame according to rule; about two centuries later it was every third frame. These frames—in later years called "scattering" or "mold" frames—were erected on the keel, and rib-

bands were sprung around them to define the vessel's shape. The measurements needed for shaping the intermediate frames were taken from the ribbands. This practice points to the early use of some sort of sketch or draft; nothing as complete as produced today but something that showed the basic outlines and the four longitudinal guiding lines that determined the shape of a ship's hull, as well as the heights and breadths on the floor and the point of maximum breadth at each frame.

Perhaps the earliest reference to a sketch or draft in colonial times concerned the one sent from England in 1638 for the construction of a small vessel on Richmond Island, just south of Cape Elizabeth, Maine. Another reference to a draft appeared in the contract for the building of a vessel at Charlestown, Massachusetts, in 1695; the contract was in effect a detailed specification of the sizes of the vessel's structure. It is not likely that these examples are unique. Presumably a draft was sent from England for the construction of H.M.S. *Falkland*, 54 guns, at Portsmouth, New Hampshire, in 1696. The building of this ship gave some shipwrights a good chance to become acquainted with the latest ideas in naval ship design and construction.

Shipbuilding manuscripts dating from the late sixteenth and early seventeenth centuries usually show the outlines of the keel, stem, sternpost, three transverse sections and the transom. Sketches showing the same items, and in some cases even less, are the design files of present-day builders of wooden fishing and trading vessels who work in small yards along Denmark's west coast. The outlines of the transverse sections or frames, drawn with a compass, were composed of three or four tangent arcs of large radii, sometimes in the order of 250–300 feet, or were mathematical curves.

This system of designing had a long life and traces of its use can be seen in the lines of American naval vessels of the early 1800s. In a simplified form the system was employed in designing small boats for another half century. The system failed, however, to give a fair hull form at the bow and stern. Each master-builder had his own method for modifying the shapes of the ends so that they could be planked. Even as late as the War for Independence, in spite of developments in ship design procedures, the ends were not well defined. Two shipwrights working from the same plan might produce slightly different vessels.

The sketches or drafts that we have mentioned were drawn primarily to depict form; occasionally we also find outboard profiles showing the extent of the various decks and the exterior decorations. Rarely, however, do we find much about a vessel's structure, for shipwrights were so familiar with practical details that they did not require structural drawings.

The use of models in shipbuilding seems to have come rather late in the long history of the art. Familiar to most people are the full hull, built-up, elaborately decorated models—the so-called Admiralty type—that were produced during the seventeenth century to assist naval boards and heads of state in making decisions about new construction. A few such models, however, are known to have been made after completion of the vessels they represent.

The complexity of these Admiralty models points to a considerable period of development; yet the oldest known date only from the 1650s. Their existence is further proof of the use of sketches or drafts. During the second half of the seventeenth century the structure of these models became stylized, with far fewer pieces of framing than listed in contemporary scantling tables. It is thought that the Admiralty models show how ships were built in the early 1600s when timber supplies were plentiful. Considering the plenitude of North American timber supplies, it is possible that vessels continued to be constructed in the manner shown later in the colonies than in England.

The Admiralty models were not, however, the type from which a shipwright could take measurements for the construction of a full-

size vessel. The only known Admiralty-type model preserved from our colonial days represents the 44-gun ship *America*, built in Kittery, Maine, and launched in 1749; unlike the majority of such models, this one is fully planked. More useful to shipwrights were half models carved from solid blocks of wood which are thought to have been employed in England before 1700, though definite evidence is not available. Generally lacking decorations, such half models may have been made primarily to show the otherwise poorly defined ends. Some small American shipyards employed block models into the twentieth century.

Perhaps a logical development from the Admiralty model, the "hawk's-nest" half model was composed of a number of thin pieces of wood cut to frame outlines that were then mounted on a backboard. Other shaped pieces were added to show the details of the keel, stem and sternpost. Thin battens were sprung around the frames to determine whether they were fair and whether there would be any difficulty in planking. Hawk's-nest models were used by American builders into the early decades of the nineteenth century. It would have been difficult but not impossible to construct this type of model without a sketch or draft.

The now common "lift" model, composed of a number of horizontal layers of plank, is supposed to have been invented in the United States about 1795. It may actually have been in use before the War for Independence, but the evidence is too nebulous to pursue the discussion here. During the American colonial period it is likely that some shipwrights made half models just to be certain that their drawings were correct, while others made the necessary drawings from their models.

When the form of a vessel had been established by a draft, a model, or both, it had to be reproduced full size. There is evidence from the 1445 Italian manuscript and later sources that well into the seventeenth century for large vessels and perhaps as late as 1700 for small ones, the shapes of the mold frames were worked out directly on the timbers. By the mid-seventeenth century the better shipbuilders were "laying down" or "lofting" their vessels; this involved drawing all the frame outlines and the details of the ends on some sort of a platform or the floor of a large shed. From this loft work full-size patterns were made for each piece of a vessel's frame. While many colonial American shipwrights received only the practical training provided by an apprenticeship, some may have owned or borrowed a copy of Bushnell's *Compleat Shipwright*. In 1706 this was followed by John Hardingham's *The Accomplished Shipwright and Mariner*, which showed the differences between a ship designed for speed and one built for cargo capacity. It is quite likely that more shipwrights were familiar with the first really practical textbook on shipbuilding, William Sutherland's *The Ship-Builder's Assistant*, published in London in 1711. Filled with much useful material, it went through several editions with a number of changes—1726, 1755, 1760, 1784, 1794 and 1840. As even the last retained the tables of timber scantlings and rigging sizes found in the first edition, it can be seen that shipbuilding methods were fairly standard for several generations. While Sutherland wrote about practices in the Royal Navy's shipyards, they were likely similar in England's major private yards and the better colonial yards.

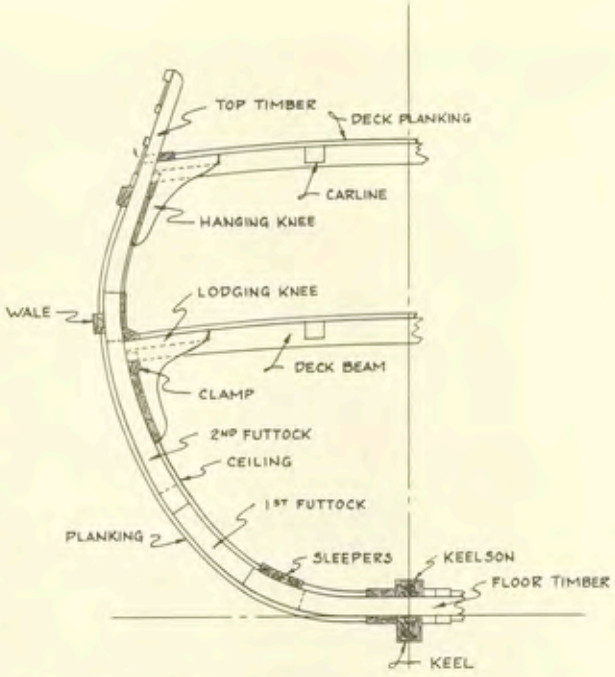
The reader should not assume that the long continued use of Sutherland's work indicated that colonial shipwrights were in a rut. Immigration of ship carpenters was encouraged and some probably came from countries other than England, thus ensuring a continuing flow of up to date knowledge of European design and building practices. In the larger North American ports shipbuilders were accustomed to seeing the latest Dutch, French and Spanish vessels as well as those from England. Colonial shipbuilding was so successful that by the 1720s London shipwrights wanted a size limitation imposed on the products of the North American yards. At the time Mas-

sachusetts builders were delivering ships for about £8 per ton while a comparable figure on the Thames was £15 or £16.

To see just what was involved, let us follow the building of a square-sterned ship of nearly 300 tons in New England in the year 1695. Her keel is 82 feet, her maximum breadth to the outside of her planking is 26 feet, while 11 feet is her depth of hold. She has two flush decks running from bow to stern—"frigate" built—a half deck, a roundhouse, a forecastle and a suitable head. Although she is being built in a well-established yard, there is no lack of suitable shipyard sites elsewhere in the colonies. Important site considerations are solid ground with a gentle slope to the water's edge, and water of sufficient depth so that the vessel will not hit bottom when launched. Large timbers set in the ground parallel to the water's edge will support a row of hard wood keel blocks stretching inland perpendicular to the shore. The uppermost block will be of soft wood that can easily be split out on launching day after the weight of the ship has been transferred to the launching ways.

The 12-inch square keel of our ship is in three pieces with 6-foot scarfs, each secured with six 1-inch bolts. A 3-inch thick false keel or shoe is spiked to the bottom for protection against grounding. The one-piece curved stem, 16 by 12 inches, is fitted with a false stem forward and backed by a 16-foot knee piece, as broad as convenient, at the stem-keel scarf. The main and false sternposts are 12 inches thick, the former 30 inches fore-and-aft on the keel and the latter 18 inches. The sternpost is bound to the keel by a large knee—horizontal arm 9 feet and vertical arm 7 feet—set on a piece of deadwood on the keel and bolted every 20 inches. The main or wing transom at the head of the sternpost is 14 inches thick and 2 feet 4 inches broad fore-and-aft while all the transoms below are of 12-inch stock. All of these, of course, are of good white oak, one of New England's finest shipbuilding timbers.

Regardless of the sequence of setting up



This cross-section shows typical colonial building methods in American yards of the 17th century.

the keel, stem and sternpost, the keel sections first will be scarfed and bolted together. The shoe will then be spiked to the underside of the keel and the whole manhandled onto the blocks. The stem, apron and knee are next attached to the forward end of the keel and the sternpost with attached transoms is set up aft. At the end of the colonial period the stem and sternpost were sometimes attached to the keel as they all lay flat; they were then rotated upward 90 degrees and the upright stem and sternpost were supported upright by shores.

Next, the floor timbers, the lowest pieces of framing, are put in place across the keel and every second one bolted through. The 18-foot-long midship floors, about 12 inches square at the centerline, are spaced about their own width apart; they are tapered in thickness to 9½ inches at their outer ends. A fore-and-aft ribband, about 4 or 5 inches square, is secured to the ends of the floors to hold them in position. The keelson, 16 inches broad and 12 inches thick, is also in three sections but its scarfs must be staggered with re-

spect to those of the keel. Notched down ¾ of an inch over each floor, the keelson is secured by bolts driven through it and the alternate unfastened floors into the keel.

The next pieces of framing, the futtocks (which originally were "foot hooks"), are about 12 inches wide, and in thickness they match the taper of the floors. The futtocks practically fill the spaces between the floors, lap them 7 feet and extend 2 feet 6 inches above the lower or gundeck. At the height of the maximum breadth—just above the lower deck—the futtocks are about 7½ inches thick. The third pieces of framing, the top timbers, butt against the floors. They are 7 to 8 inches broad and 3½ inches thick at the top of the main rail; their lower ends match the thicknesses of the floors and futtocks. Normally there are no connections between the several pieces of framing; they are effectively clamped in place by the outside planking and the inside ceiling.

The care taken in fabricating and erecting the framing will determine whether the ship is symmetrical or has sides that are only nearly alike. The framing of this ship, specified to be of white and black oak, is more like that of an Admiralty model than that of the contemporary English scantling tables, thus reflecting the abundance of suitable timber in the North American colonies. The major difference between it and a model is the long overlap of the top timbers and the futtocks, about 14 feet instead of a more usual 5 to 6 feet. By Sutherland's day the dwindling supplies of English timber were leading to the type of framing still used in the construction of large wooden vessels, in effect a double frame with each successive piece in one half forming the backing for the joint in the other. Such frames are put together on the ground or on a framing platform and then set up as a whole.

As the framing of our ship grows piece by piece, more ribbands are fitted and the planking and ceiling started. Except for a few special strakes, all the planking and ceiling will be of 3-inch white oak. The clamps for the lower deck, heavy fore-and-aft timbers that support the ends of the deck beams, are fastened to the inside of the frames to the proper sheer line; they are probably 14 inches wide by 5 inches thick with a 4-inch strake of ceiling immediately below.

The lower deck beams, 11 inches deep and from 14 to 17 inches wide, are spaced about 4 feet 6 inches apart and are secured to the ship's side by two knees at each end, one hanging and one lodging (horizontal) knee. In the better vessels the beam ends are dovetailed for part of their depth into the clamp. Between the great beams are half-beams spaced 10 inches apart. These lower deck beams and all others in the ship will be slightly cambered to drain water to the ship's sides. The waterways, thick planks running along the ship's side on top of the beams, are 4 inches thick while the decking is 3-inch plank. All the clamps, beams, waterways and decking are of white oak.

The upper deck is laid 6 feet plank to plank above the lower deck and has essentially the same type of structure, but its beams, spaced 5 feet apart, are only 9 inches deep and its planking is 2-inch pine. The structures above the upper deck—the forecastle, half deck and roundhouse—are of progressively lighter members. The oak beams of the forecastle, spaced 2 feet apart, are 5 inches deep by 10 inches broad, and those of the half deck, spaced the same, are 4½ by 8 inches. Every other beam has one knee at each end and the decking for both is 2-inch pine. The oak beams of the roundhouse are 4 by 7 inches and the decking is 1½-inch pine.

Prominent on the outside of the hull are heavy longitudinal timbers called wales. They are decorative as well as useful, for they set off the sheer of the hull in addition to binding the frames together and contributing some longitudinal strength to the hull. In the early colonial days these were single strakes of thick stuff, perhaps four or five on a side spaced from 15 to 36 inches apart; by the mid-eighteenth century the main wales were a band of three or four heavy strakes. Up to



Busy shipyard of colonial times is shown in this diorama at the Mariners Museum in Newport News, Va. Three large vessels are in various stages of construction.

about 1650 shipwrights took great care not to cut any wale at a gunport and avoided this by stepping decks or wales as necessary. Our ship will have two main wales, 7 inches thick by 13 inches broad, separated by a 4-inch plank of about the same width and having single 4-inch planks above and below. She will also have upper and lower channel wales, to take the rigging, that measure 4 by 12 inches and 4½ by 11 inches respectively.

In order to fit around the bow, sections of the wales will be sawn from curved timbers and it may be necessary to do the same with some of the ordinary planking. The only method known at the time for rendering a plank supple enough to bend was called "charring." One side of a plank was exposed to a slow fire while the other was kept wet. "Stoving," the softening of a plank in a bed of heated wet sand, was introduced about 1720, and the steam box came along in the middle 1730s.

When the main structure of our ship is completed, innumerable finishing details will be added—bulkheads, hatches, scuttles, gratings, gunports, channels, bitts, kevels, cleats, a windlass, a capstan, etc.—some of which will be done by ship joiners rather than shipwrights. Following is a list of some of the work that the joiners will do:

—make a bulkhead with a door for the great cabin.
—plane the great cabin deck.
—plane the deck in the steerage and round the edges of the beams overhead.
—plane the forecastle and roundhouse bulkheads and all rails.
—make close cabins (berths), settle beds, tables, chairs and binnacles.

In keeping with the fashion of the period our ship will, of course, be well decorated with carvings. On the stern these will include the taffrail, archboard, two quarter pieces, the brackets between the windows of the roundhouse and great cabin extending down to the lower counter, and the King's arms. Forward there will be a lion figure and the trailboards, rails and brackets of the head along with the supporters and two cat faces for the catheads. Other carvings will include friezes, brackets and timber heads on the forecastle and steerage bulkheads, a molding around the great cabin and a belfry.

Our colonial shipyards were located close to abundant supplies of timber, most of which was converted into usable form in the yards from the round timber, trunks of trees that came to them merely shorn of branches. The construction of a wooden ship required straight timber for keels, keelsons, sternposts,



Pit sawing was dusty drudgery at any colonial shipyard, but the only way to cut round timber from trees into usable planks. While one man worked from above, his partner stood in the pit in a rain of sawdust, pulling and pushing the big saw back and forth, as shown in this close-up from Mariners Museum diorama.

deck beams and carlines, while the stem and frames had to be cut from curved trunks and branches so the grain would follow the shape. Y-shaped floor timbers were needed at the ends of seventeenth-century vessels. When these could no longer be found in suitable sizes, the deadwoods forward and aft were built higher and the heels of the frames bolted to them.

Timber sawing in a shipyard was done with a framed or open pit saw. The piece to be sawn was hoisted onto heavy trestles or horses or rolled onto a frame over a pit. One man stood on the timber, lifting and guiding the saw, which was pulled down by a man under the trestles or in the pit. With a stream of sawdust covering him at every stroke, the latter's task was even more unpleasant in hot or windy weather.

Unlike England where hand sawyers rioted against the introduction of wind- or water-powered saw mills even as late as 1767, the North American colonies were so short of manpower that water-powered mills were built quite early. By about 1660 there were 15 such mills on the Piscataqua River and its tributaries in New Hampshire. A tide mill was constructed at Mystic, Connecticut, in 1652. Few shipyards, however, owned saw mills until the days of steam power. The yards probably purchased planking and decking from nearby mills, but much of this, too, was hand-sawn.

The various pieces of framing—floors, futtocks and top timbers—were "beaten" out of curved tree trunks and heavy branches by the ship carpenters using broadaxes and adzes. Because of the shapes required it was often one tree for one piece of framing. The broadaxes were employed mainly for work with the grain and the adzes across. In modern yards much of this sort of work is done with slabbing and band saws.

The better the colonial ship, the more iron fastenings it had. Iron was expensive and rather difficult to obtain, however, and the providing of iron work and nails along with the carvings and joiner work usually were the responsibility of the ship owner. We have noted that the keel scarfs of our new ship will be made up with six 1-inch bolts and that the floors and keelson will be bolted to the keel. Bolts will also be used in the stem, sternpost, knees, breasthooks and the plank butts and ends. Nails will be used for the superstructure planking and the roundhouse deck. The hull planking and ceiling and the planking of the upper and lower decks will be secured with well-seasoned oak pegs—"trunnels" or treenails. After being driven into carefully bored holes they are cut off flush, the ends "punched," and wedges pounded into them so that they act in the manner of rivets.

A Swedish shipbuilding book of 1691 illustrates the common tools used by Dutch, English and Swedish shipbuilders at just about the date we have assumed for our ship. Although there are some national characteristics, tools have changed so little since then that modern American shipwrights have no difficulty in identifying them. The collection includes one or more of the following:

broadax	scraper
chopping ax	caulking iron
hatchet	caulking mallet
adz	hammer
hand saw	maul
compass saw	crowbar
plane	pincers
chisel	calipers
gouge	dividers
drawknife	bevel
brace and bit	folding rule
auger	chalk lines

Today, some 280 years since the date assumed for the building of our colonial ship, the modern counterparts of these hand tools can be seen in daily use in Mystic Seaport's shipyard. They are employed in the rebuilding and preservation of a vast assortment of vessels and boats as well as in the construction of reproductions of historic types. Here traditional practices passed down from our colonial shipbuilders are still pursued, but they are tempered by the accumulated experience of 280 years.

At a Meeting of Delegates of the Towns in the Counties of New-London *and* Windham, *convened at* Norwich, *the* 8th *Day of* September 1774, *to conſult for their common Safety*, &c.

Hon. *Gurdon Saltonſtall*, Chairman.

Col. *William Williams*, Clerk.

THIS Convention taking into their ſerious Conſideration the preſent State of this Country, in that we are [redacted] threatned with the Loſs of our Liberties and conſtitutional Rights, &c.

And when we view it's State, as to Arms, military Knowlege, proper Stores, and the Attention of this People to their juſt Defence, whenever it ſhall ſo happen that any common Enemy ſhall riſe againſt us, and attempt our Subjection by Force of Arms, we cannot but be animated to addreſs ourſelves to all whoſe Buſineſs it is to attend upon military Affairs.

And in the firſt Place, We do ſeriouſly recommend to the Seleƈtmen of every Town within the Counties of *New-London* and *Windham*, that as ſpeedily as poſſible they ſupply their Town Stock with a full Complement of Ammunition and military Stores, as by Law is required.

2*dly*. We recommend earneſtly to every particular Troop and military Company within ſaid two Counties, both Officers and Soldiers, and all others living within their ſeveral and reſpeƈtive Limits, who by Law are required to provide and keep Arms and Ammunition, as ſpeedily as poſſible to arm and equip themſelves, agreeable to the Directions of the Laws of this Colony (excepting where in Arms it may be thought expedient to vary; that ſuch Variation be uniformly adopted.)

3*dly*. We ſeriouſly recommend it to all ſuch, as a Matter of very great Importance, that they as expeditiouſly as may be, improve in, and learn the Uſe and deſign of their Arms, by artillery Exerciſes or otherwiſe, that ſo they may anſwer the important Purpoſe of their Inſtitution, when Occaſion ſhall require, and become fitted to attend their Colonel and other Field Officers when by them called to regimental Reviews.

And as very great and ſpecial Advantages muſt ariſe from regimental Reviews and Exerciſes in the Militia of this Colony, at leaſt as often as once in four Years, as the Law requires, and the ſame having been omitted and neglected, we now earneſtly recommend to every Colonel and other the Field Officers of each Regiment within the two Counties, that on ſome proper Day or Days the preſent Autumn, they call together their ſeveral and reſpeƈtive Regiments, or ſuch Parts of them as ſhall be convenient, at ſome ſuitable and appointed Places, for the Purpoſes above-mentioned.

And would alſo further recommend to the Colonel, or chief Officer of each Regiment in ſaid two Counties, that they forthwith iſſue their Orders to the Captains of the ſeveral Companies in their reſpeƈtive Regiments, that they and their Companies immediately comply with the Requiſitions of the Laws of this Colony, both as to their Equipment with Arms and Ammunition, &c. and a due Attention to the Cultivation of military Skill and the Art of War; and that ſaid chief Officers exert themſelves in every proper and legal Way, in their important Department, for a general Improvement in, and Cultivation of the noble and important Art of military Skill and Diſcipline.

Voted and paſſed unanimouſly,

Teſt. WILLIAM WILLIAMS, Clerk.

Printed by JUDAH P. SPOONER, in NORWICH.

In 1774 this broadside alerted Connecticut citizens for possible state of emergency.

Revolutionary Broadsides

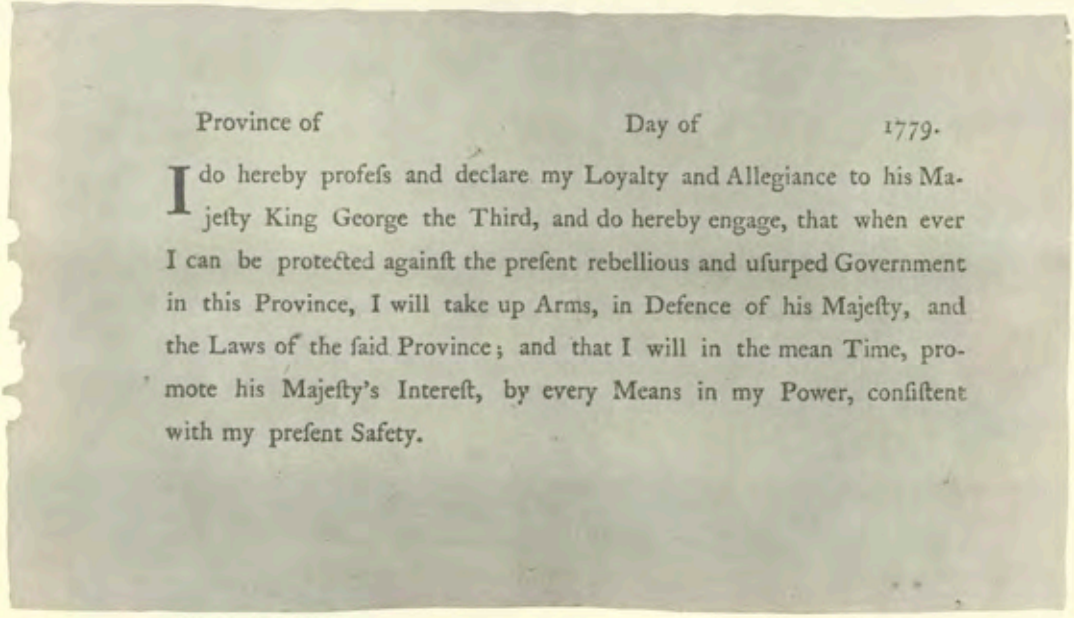
By DOROTHY BREWINGTON*

What you see printed on these pages affords a glimpse of a minor but nonetheless important aspect of daily life in America at the time of the Revolutionary War. These broadsides, in many small communities of the sprawling thirteen States, took the place of newspapers and spread the word of government regulations, the need for men to fight the war, often the progress of the war itself.

America in 1776 was a place where communication was vital, but where the means of communicating were poor and limited. Roads were bad and few and far between. Paper was scarce and type for printing even scarcer, having for the most part to be imported from overseas. Much of the commerce between the several States was carried out by sea, so that news from abroad or from another colony often came in with the ships that arrived from England or ports along the coast.

Many of the printers of the time were subsidized by Town Councils or the Federal government. For these official bodies they printed Acts and Decisions, recruiting posters, Instructions to local commanders or the captains of vessels putting out as privateers. These were the so-called broadsides which were exhibited in the windows of print shops, or in inns and taverns, or nailed to public bulletin boards: one of the most important systems then in use for broadcasting news.

*Dorothy Brewington is a self-taught historian who was born in New Jersey, raised in Florida, married in Pennsylvania and became a housewife on the eastern shore of Maryland. There she did research work in maritime history for her husband, the late Marion Brewington, which she still continues now in the G. W. Blunt White Library at Mystic Seaport.



Province of Day of 1779.

I do hereby profeſs and declare my Loyalty and Allegiance to his Majeſty King George the Third, and do hereby engage, that when ever I can be protected againſt the preſent rebellious and uſurped Government in this Province, I will take up Arms, in Defence of his Majeſty, and the Laws of the ſaid Province; and that I will in the mean Time, promote his Majeſty's Intereſt, by every Means in my Power, conſiſtent with my preſent Safety.

It is interesting to note the disclaimer in this 1779 oath of allegiance to King George III.

E15137

In CONGRESS,

WEDNESDAY. April 3, 1776.

INSTRUCTIONS *to the* COMMANDERS *of Private Ships or Veſſels of War, which ſhall have Commiſſions or Letters of Marque and Repriſal, authoriſing them to make Captures of Britiſh Veſſels and Cargoes.*

I.

YOU may, by Force of Arms, attack, ſubdue, and take all Ships and other Veſſels belonging to the Subjects of the King of Great-Britain, on the High Seas, or between High-water and Low-water Marks, except Ships and Veſſels bringing perſons who intend to ſettle and reſide in the United Colonies, or bringing Arms, Ammunition or warlike Stores to the ſaid Colonies, for the Uſe of ſuch Inhabitants thereof as are Friends to the American Cauſe, which you ſhall ſuffer to paſs unmoleſted, the Commanders thereof permitting a peaceable Search, and giving ſatisfactory Information of the Contents of the Ladings, and Deſtinations of the Voyages.

II.

You may, by Force of Arms, attack, ſubdue, and take all Ships and other Veſſels whatſoever, carrying Soldiers, Arms, Gun-powder, Ammunition, Proviſions, or any other contraband Goods, to any of the Britiſh Armies or Ships of War, employed againſt theſe Colonies.

III.

You ſhall bring ſuch Ships and Veſſels as you ſhall take, with their Guns, Rigging, Tackle, Apparel, Furniture and Ladings, to ſome convenient Port or Ports of the United Colonies, that Proceedings may thereupon be had in due Form, before the Courts which are or ſhall be there appointed to hear and determine Cauſes civil and maritime.

IV.

You or one of your Chief Officers ſhall bring or ſend the Maſter and Pilot, and one or more principal Perſon or Perſons of the Company of every Ship or Veſſel by you taken, as ſoon after the Capture as may be, to the Judge or Judges of ſuch Court as aforeſaid, to be examined upon Oath, and make Anſwer to the Interrogatories which may be propounded, touching the Intereſt or Property of the Ship or Veſſel and her Lading; and at the ſame Time you ſhall deliver or cauſe to be delivered to the Judge or Judges, all Paſſes, Sea Briefs, Charter Parties, Bills of Lading, Cockets, Letters, and other Documents and Writings found on Board, proving the ſaid Papers, by the Affidavit of yourſelf or of ſome other Perſon preſent at the Capture, to be produced as they were received, without Fraud, Addition, Subduction or Embezzlement.

V.

You ſhall keep and preſerve every Ship or Veſſel and Cargo by you taken until they ſhall, by Sentence of a Court properly authoriſed, be adjudged lawful Prize, or acquitted—not ſelling, ſpoiling, waſting, or diminiſhing the ſame, or breaking the Bulk thereof, nor ſuffering any ſuch Thing to be done.

VI.

If you, or any of your Officers or Crew, ſhall, in cold Blood, kill or maim, or, by Torture or otherwiſe, cruelly, inhumanly, and contrary to common Uſage and the Practice of civiliſed Nations in War, treat any perſon or Perſons ſurprized in the Ship or Veſſel you ſhall take, the Offender ſhall be ſeverely puniſhed.

VII.

You ſhall, by all convenient Opportunities, ſend to Congreſs written Accounts of the Captures you ſhall make, with the Number and Names of the Captives, Copies of your Journal from Time to Time, and Intelligence of what may occur or be diſcovered concerning the Deſigns of the Enemy, and the Deſtinations, Motions and Operations of their Fleets and Armies.

VIII.

One Third, at the leaſt, of your whole Company ſhall be Land-men

IX.

You ſhall not ranſome any Priſoners or Captives, but ſhall diſpoſe of them in ſuch Manner as the Congreſs, or if that be not ſitting in the Colony whither they ſhall be brought, as the General Aſſembly, Convention, or Council or Committee of Safety of ſuch Colony ſhall direct.

X.

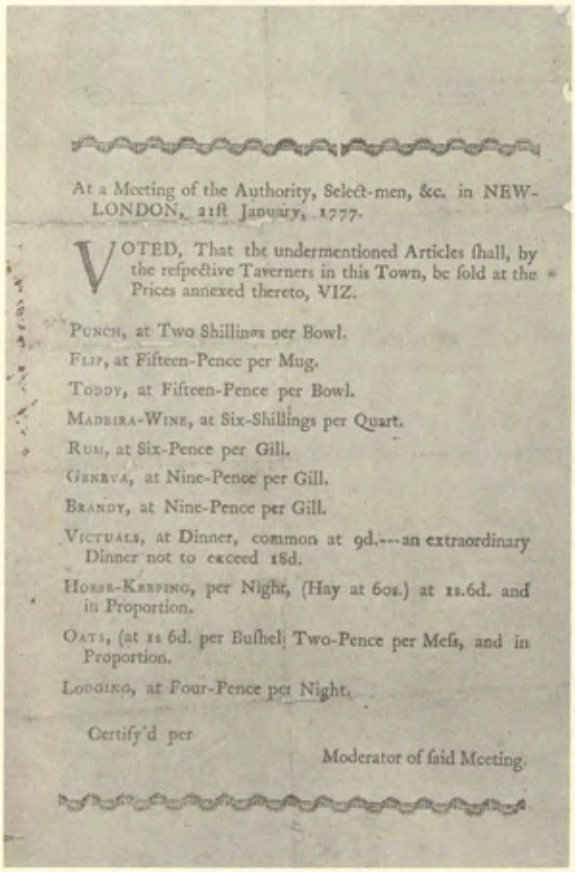
You ſhall obſerve all ſuch further Inſtructions as Congreſs ſhall hereafter give in the Premiſes, when you ſhall have Notice thereof.

XI.

If you ſhall do any Thing contrary to theſe Inſtructions, or to others hereafter to be given, or willingly ſuffer ſuch Thing to be done, you ſhall not only forfeit your Commiſſion, and be liable to an Action for Breach of the Condition of your Bond, but be reſponſible to the Party grieved for Damages ſuſtained by ſuch Malverſation.

By Congreſs,

John Jay — PRESIDENT.



At a Meeting of the Authority, Select-men, &c. in NEW-LONDON, 21ſt January, 1777.

VOTED, That the undermentioned Articles ſhall, by the reſpective Taverners in this Town, be ſold at the Prices annexed thereto, VIZ.

PUNCH, at Two Shillings per Bowl.

FLIP, at Fifteen-Pence per Mug.

TODDY, at Fifteen-Pence per Bowl.

MADEIRA-WINE, at Six-Shillings per Quart.

RUM, at Six-Pence per Gill.

GENEVA, at Nine-Pence per Gill.

BRANDY, at Nine-Pence per Gill.

VICTUALS, at Dinner, common at 9d.---an extraordinary Dinner not to exceed 18d.

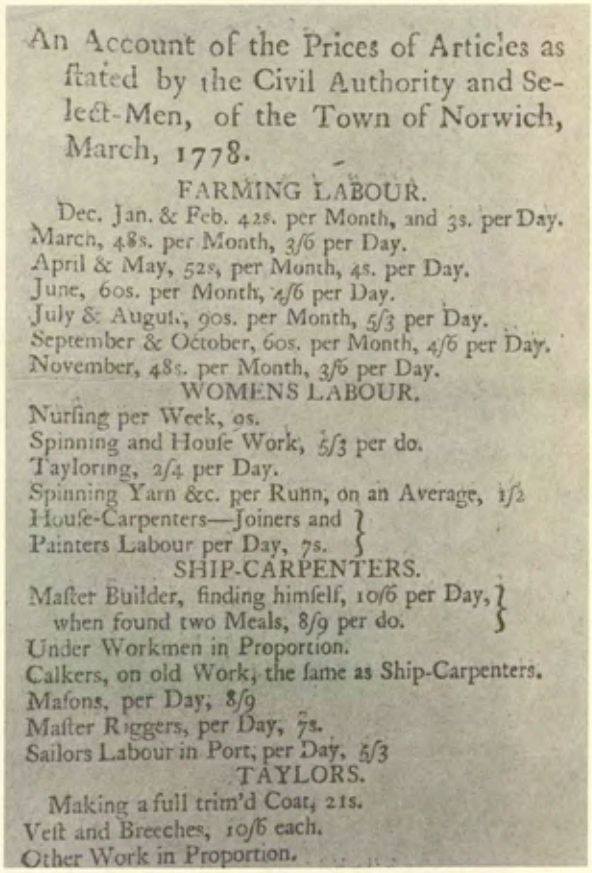
HORSE-KEEPING, per Night, (Hay at 6os.) at 1s.6d. and in Proportion.

OATS, (at 1s 6d. per Buſhel) Two-Pence per Meſs, and in Proportion.

LODGING, at Four-Pence per Night.

Certify'd per

Moderator of ſaid Meeting.



An Account of the Prices of Articles as ſtated by the Civil Authority and Select-Men, of the Town of Norwich, March, 1778.

FARMING LABOUR.

Dec. Jan. & Feb. 42s. per Month, and 3s. per Day.
March, 48s. per Month, 3/6 per Day.
April & May, 52s. per Month, 4s. per Day.
June, 60s. per Month, 4/6 per Day.
July & Auguſt, 90s. per Month, 5/3 per Day.
September & October, 60s. per Month, 4/6 per Day.
November, 48s. per Month, 3/6 per Day.

WOMENS LABOUR.

Nurſing per Week, 9s.
Spinning and Houſe Work, 5/3 per do.
Tayloring, 2/4 per Day.
Spinning Yarn &c. per Runn, on an Average, 1/2
Houſe-Carpenters—Joiners and Painters Labour per Day, 7s.

SHIP-CARPENTERS.

Maſter Builder, finding himſelf, 10/6 per Day, when found two Meals, 8/9 per do.
Under Workmen in Proportion.
Calkers, on old Work, the ſame as Ship-Carpenters.
Maſons, per Day, 8/9
Maſter Riggers, per Day, 7s.
Sailors Labour in Port, per Day, 5/3

TAYLORS.

Making a full trim'd Coat, 21s.
Veſt and Breeches, 10/6 each.
Other Work in Proportion.

An early version of wartime controls was broadcast in New London in January 1777 (*left, above*). In Norwich, a year later, wage controls shed interesting light on the situation of women in colonial times.

Facing page: In April 1776 Congress broadcast instructions to would-be privateers concerning their right to search and seize British ships on the high seas. Paragraph VI is an interesting forerunner of the modern Geneva Convention.





GREAT ENCOURAGEMENT FOR SEAMEN.



ALL GENTLEMEN SEAMEN and able-bodied LANDSMEN who have a Mind to diſtinguiſh themſelves in the GLORIOUS CAUSE of their COUNTRY, and make their Fortunes, an Opportunity now offers on board the Ship RANGER, of Twenty Guns, (for FRANCE) now laying in PORTSMOUTH, in the State of NEW-HAMPSHIRE, commanded by JOHN PAUL JONES Eſq; let them repair to the Ship's Rendezvous in PORTSMOUTH, or at the Sign of Commodore MANLEY, in SALEM, where they will be kindly entertained, and receive the greateſt Encouragement.---The Ship RANGER, in the Opinion of every Perſon who has ſeen her is looked upon to be one of the beſt Cruizers in AMERICA.---She will be always able to Fight her Guns under a moſt excellent Cover; and no Veſſel yet built was ever calculated for ſailing faſter, and making good Weather.

Any GENTLEMEN VOLUNTEERS who have a Mind to take an agreable Voyage in this pleaſant Seaſon of the Year, may, by entering on board the above Ship RANGER, meet with every Civility they can poſſibly expect, and for a further Encouragement depend on the firſt Opportunity being embraced to reward each one agreable to his Merit.

All reaſonable Travelling Expences will be allowed, and the Advance-Money be paid on their Appearance on Board.

IN CONGRESS, MARCH 29, 1777.

RESOLVED,

THAT the MARINE COMMITTEE be authoriſed to advance to every able Seaman, that enters into the CONTINENTAL SERVICE, any Sum not exceeding FORTY DOLLARS, and to every ordinary Seaman or Landſman, any Sum not exceeding TWENTY DOLLARS, to be deducted from their future Prize-Money.

By Order of CONGRESS,

JOHN HANCOCK, PRESIDENT.

DANVERS: Printed by E. RUSSELL, at the Houſe late the Bell-Tavern.

Infant America's earliest known recruiting poster calls for volunteers for the ship *Ranger*, John Paul Jones commanding. Vessels like this, operating under letters of marque, were sent out by merchant entrepreneurs like the Harts of Saybrook, Connecticut (*opposite*) and successfully harassed British shipping through much of the war.

The Hart Brothers of Saybrook, Connecticut

Soldiers and Privateers of the Revolution

By STUART M. FRANK*

The Reverend William Hart, descendant of the man after whom the city of Hartford is alleged to have been named,[1] in his impeccable character, dignified bearing and eclectic interest in secular affairs was the epitome of enlightened spiritual leadership for which the Congregational clergy of colonial Connecticut have long been acclaimed. A scion of one of New England's most ancient and distinguished families, the son of the first graduate of Yale College[2] and himself a graduate of Yale in the class of 1732; a celebrated orator, outspoken egalitarian, and Arminian (anti-Calvinist) theologian of considerable stature, he enjoyed a half-century of immense popularity as pastor and acknowledged leading citizen of Saybrook, Connecticut. There he guided his charges through the periods of colonial warfare with France, the increasing disenchantment with British rule and, finally, the War of the Revolution itself. His even-handedness and republican fervor did much to stabilize the community for the cause of independence; but the tasks of meeting the British legions on the field of battle and of building the new Republic itself afterward, he was obliged to relegate to the generation which followed him.

Nor was his contribution in the latter regard any less significant. His wife, the former Mary Blague of Saybrook, bore him five able sons and four splendid daughters (all nine of whom survived him), upon whom the father lavished such advantages as he was able. These were considerable: a fine education, largely drawn from the Reverend's own extraordinary fund of knowledge and enormous capacity for instruction, and portions of his commodious personal estate, itself a legacy from the lucrative enterprises of his Hart forebears and ably managed in his own lifetime. Equipped with these assets, the daughters were able to lead useful lives and

*Stuart Frank, a research associate at Mystic Seaport, considers himself to be one of the few non-sailors to grow up in Larchmont, N.Y. A graduate (with honors) of Wesleyan University in 1970, he got his M.A. in religion at Yale in 1972 and shortly after inaugurated the chantey program at the Seaport. He plans to resume doctoral studies at Brown University this fall.

[1] There are two principal hypotheses regarding the naming of Hartford (founded in 1635), the one being from the English shire-town "Hertford"; the other, given much credence among Connecticut historians, from the town plot granted to Deacon Stephen Hart in 1635 – i.e., "Hart's Ford." I am partial to the latter theory if only because Hart's home plot was indeed situated on a river ford.

[2] Rev. John Hart (1682–1732) commenced his studies at Harvard ca. 1699. When the Collegiate School (later Yale) was established in his own colony in 1701, Hart transferred there. He received the first Yale B.A. in 1703, the M.A. in 1706, served as Tutor while reading divinity (1703–05) and was pastor at East Guilford from 1707 until his death in 1732.

marry well, and the sons to score a success which, if not a resounding triumph over history's merciless obfuscation, at least contributed to the economic success, political stability and military prowess of the state and nation as a whole.

Today, as we reexamine the fibre of our Republic at its birth, the interest that the five sons holds for us lies not so much in their importance as individuals as in the extent to which their participation in the formative processes and nascent enterprises of the emerging nation contributed to the energy, tenacity and precedent-setting drama of what Professor Robert G. Albion has called "the Heroic Age."

The Revolutionary Army

William Hart (1746–1817), the eldest son and namesake, was naturally expected to occupy a place of distinction in Saybrook affairs befitting his father's venerable station and considerable fortune. As a young man he undertook the management of the family's extensive investments, and in accord with the instincts of good citizenship and social destiny enrolled in the local train-band (militia). In 1772 he was commissioned ensign; in 1774 he was promoted to captain.

Hart was known throughout his life as a superior equestrian, and with the outbreak of armed hostilities in 1775, he was given command of a newly organized company of "light horse" cavalry.[3] His unit had not taken the field when, in May 1776, with the high command still inextricably entangled in the administrative tribulations of building an army, the 24 companies of Connecticut light horse (heretofore attached to regiments of infantry) were reorganized into separate cavalry regiments. Hart was given command of the First Regiment, the largest of five, with the rank of Major. Under him were his brother Joseph, Adjutant; nine captains, three lieutenants, and a battery of quartermasters and petty officers necessary to the management of the six companies of cavalry in his command.

Major Hart's first active service was in response to Washington's general call for troops to reinforce the Hudson against a threatened attack on New York. The diary of Samuel Tully, later Colonel of Militia under Major-General William Hart, contains the following entries: "April 9, 1776: General Washington passed through town... July 7, 1776: Troops this day under command of Majr Hart m'ch'd for New York." In the interim, Congress had adopted the Declaration of Independence, and the rebellious course of the former Colonies had been thereby rendered irreversible.

Tully's diary continues:

> At New York a dispute arose as to whether horsemen could be called upon to do infantry guard duty, as Washington desired, and the company [about 500 men] was dismissed and returned home. many later returned and were thanked by Washington for their services.[4]

It is not clear whether Major Hart was among those who returned to the Hudson that year,[5] but by April 1777, at least, he and his regiment had taken the field in the defense of Danbury against Tryon's raid. In October they marched under General Silliman to reinforce Israel Putnam, entrenched at Fishkill, New York, in anticipation of Burgoyne's

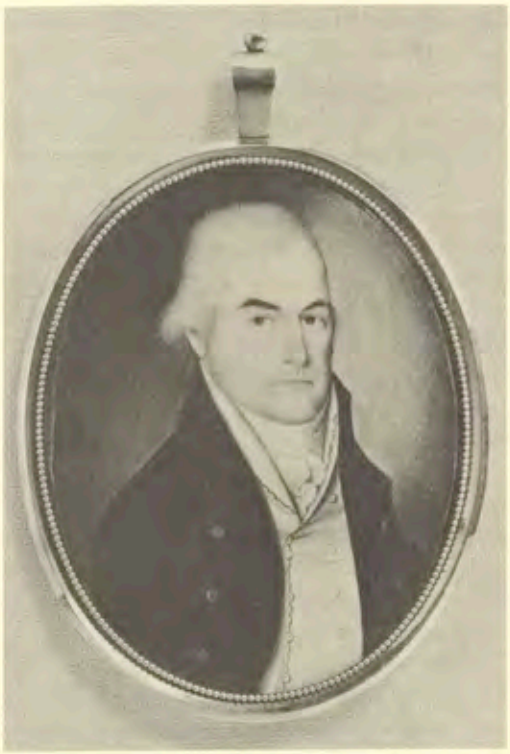
[3] Contrary to the claims of Mabel Cassine Holman in *Old Saybrook Stories* (State Library, Hartford, 1949), William Hart of Saybrook was not the same as he who is listed as quartermaster-sergeant of militia in Captain Woodbridge's company (under General Wooster) and served in that capacity throughout the war. See: Connecticut Historical Society *Collections*, vol. VIII "Revolution Rolls and Lists" (Hartford, 1901); and Henry Johnston, ed., *Records of Connecticut Men ... During the Revolution* (Adjutant General of Connecticut, Hartford, 1889).

[4] *Records of Connecticut Men*, p. 475.

[5] The appointment of John Waterhouse as Captain of Militia in Saybrook was not finalized, for some reason, until March 1777, perhaps because Hart himself was present until assigned to active duty at Danbury at about that time. (Military Papers, 2d Series, XIII:2492.)

southerly march. April of 1778 finds Hart still in the field, this time at Peekskill, but records of his subsequent war service are sketchy and inconclusive. He probably saw other action in New York, and certainly assisted in home-guard operations along the Connecticut coast, retaining his commission throughout the war.[6]

Most of the life of the ordinary Revolutionary War officer and the common foot soldier (like the lives of their counterparts in countless other wars) consisted of foul rations, deplorable living conditions and a plethora of marching this way and that, encamping here or there, without apparent reason. It must be assumed that Hart shared these discomforts in the field and that he cut the proverbial dashing figure in his light horse uniform, brandishing a sword when the occasion demanded, leading charges in battles about which he was never consulted. Communiques survive, letters he wrote to this officer or that requesting or responding to requests for the usual equipment and provisions of war. His record is substantial and long-tenured, unblemished but undistinguished. We may suppose his career to have been much like others of senior rank: his greatest individual contribution was probably as Washington's surrogate, keeping his men together, discouraging them from discouragement, organizing them behind a single standard. He appears to have marched (or, in this case, ridden) this way and that, according to orders. He was no doubt plagued by a chronic dearth of horses, short rations, lack of uniforms and inadequate ordnance, and he took great pride in his brethren when it was all over, satisfied that republican principles had been justly vindicated and the Nation's course securely established.



Major-General William Hart of the Continental Army is portrayed in this miniature by the artist William Verstille.

The service record of Samuel Hart (1748–1823), the Reverend's second son, is woefully

[6] The sale to Major Hart of twelve four-pound cannon, manufactured at the furnace in Salisbury, Conn., to be purchased "at the usual rate," was approved by the Governor and Council of Safety in January 1778 (*Public Records of the State of Ct.*, Vol. I, p. 575), but it is unclear whether these were intended for military use or installation on a privateer. The first Hart privateer of record was not put into service until nearly a year later.

Regarding the Major's subsequent war service, an interesting petition was submitted to the legislature by a group of Branford and Guilford militiamen assigned to William Hart's regiment, complaining that the place of muster was "so far Distant" from their homes "that their attendance is rendered very Difficult and Burdensome"; and recommending that a separate company of light horse be established in their vicinity, there being "a sufficient number" of willing enlistees locally (Connecticut Archives, document #2969 dated October 1782). The resignation or dismissal of Capt. Enoch Woodruff from Hart's command in October 1783 (in the very twilight of the war) prompted an epistle from the Major ordering Woodruff to convene his company at earliest opportunity "for the purpose of chussing (sic) a Captain," and filling out the complement of troops "according to Law" (Connecticut Archives, document #2961).

vague throughout. He appears to have served as Captain of Militia under his brother William during the "Danbury Alarm" of April 1777, and with brothers John and William under Putnam at Fishkill later the same year. While his name was still on the rolls in December 1779, no other record of his regimental affiliation or subsequent military activities remains.[7]

John Hart (1750–1828), the third son, graduated from Yale in 1771, was commissioned First Lieutenant[8] in a regiment of militia organized in June 1776 to reinforce New York against Burgoyne, and marched shortly thereafter to join the Hudson River campaign in which his brothers William, Samuel and Joseph were also engaged. He saw action at New York and Long Island, but was caught in Washington's retreat of September 1776, after which the regiment disbanded.

Promoted to the captaincy of Continental Line Infantry in January 1777, John was the only one of the five Hart brothers to serve in the Regular Army.[9] He was encamped at Peekskill during the spring of that year and served under Putnam until October, when he was attached to a force under Governor Clinton of New York operating on the west bank of the Hudson. He took part in the expedition against Long Island in December, wintered at West Point, and the following summer, now assigned to Varnum's Brigade, marched to Rhode Island, where his outfit was commended for their conduct in the battle of 29 August 1778. After more than a year of patrol duty there, the command was marched to Morristown, New Jersey, where they passed the winter of 1779–80. It would appear that at this point John Hart tendered his resignation and returned to Saybrook, neither accompanying his former command to the battle of Springfield, New Jersey, in June 1780, nor with them rejoining the main body of the army along the Hudson later that year. His service as a Regular, however, entitled him, unlike his brothers, to receive a Federal pension under the provisions of the Act of 1818, the basic criteria of which were nine months' active duty in a regular army or navy unit—Hart had more than three years.

The military record of the Reverend's fourth son, Joseph Hart (1755–1810), is brief and succinct. A practical man-of-affairs by nature, he was aptly cast in the role of Adjutant for his brother William's regiment of light horse in 1776 and accompanied the Major to New York. After the guard-duty fiasco, Joseph appears to have returned to Saybrook and remained there for the duration, no doubt undertaking the day-to-day supervision of the Harts' extensive wartime business affairs.

The Privateers

Elisha Hart (1758–1842), the fifth and youngest son of the Reverend William Hart, was only seventeen when his brothers marched off to war. By the time Cornwallis delivered up his sword at Yorktown, Elisha, then in his twenty-third year, had been twice captured by the enemy and had established for himself a brilliant reputation as a dauntless seafarer and courageous privateersman.

Not long after Congress authorized the issue of letters-of-marque, which licensed private vessels to arm themselves and engage enemy shipping, hopefuls from most of New England's coastal and river towns, motivated by patriotism, adventure and the anticipation of rich prizes, set to equipping vessels at private expense to challenge British dominion

[7] A cousin, one Lt. Samuel Hart of Durham, Conn., was a Continental regular in the Northern Campaign against Burgoyne, and was wounded at Saratoga in September 1777. (*Records of Connecticut men*, p. 652; *Connecticut Historical Society Records*, VIII: 192, 221, etc.)

[8] He was Lieutenant of the 8th Company (Capt. Elisha Chapman), 4th Battalion (Col. Samuel Selden), in Wadsworth's Brigade (*Records of Connecticut Men*, p. 403). Chapman later served with William Hart as Saybrook representative in the state legislature.

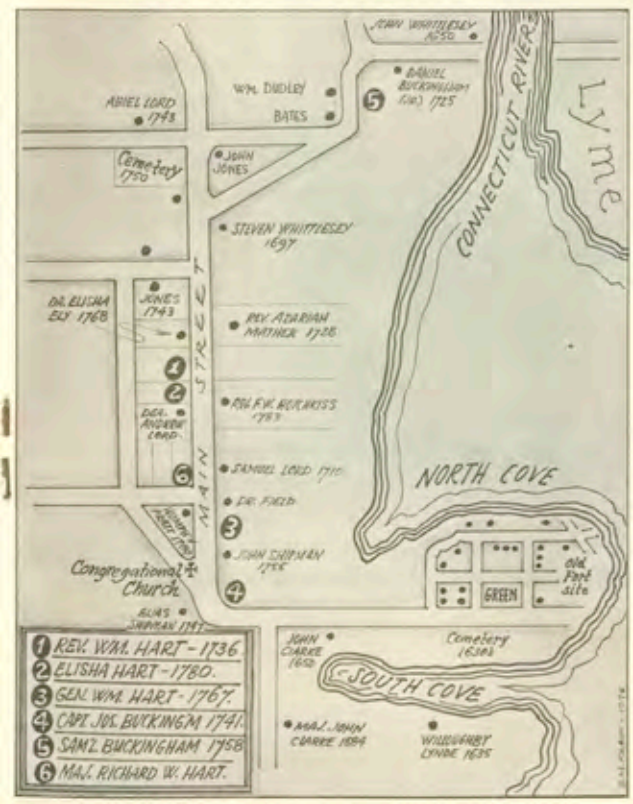
[9] Another John Hart, probably a New Haven cousin, served as Quartermaster Sergeant on General Wadsworth's staff from 1776. (*Ibid.*, 406, etc.)

over the sea lanes. While something of an exaggeration of the original intention of letters-of-marque (which was, ostensibly, simply to provide a means of self-protection for American merchant shipping), and of disputable value to wartime strategy, the privateers were nevertheless able to provide significant tactical assistance through their sporadic interruption of British commerce and their vigilant patrol of the coast, which allowed the more heavily armed government services (and the indispensable French navy) to concentrate upon His Majesty's ships of war.

While New London "ranked clearly as the leading privateer port in Connecticut,"[10] the Connecticut River towns were by no means lax in pursuing this opportunity—a form of legalized piracy eminently suited to the enterprising Yankee freebooter spirit. Saybrook ranked third among these towns, with eleven vessels on her rolls; of these, the Hart brothers owned at least four.

[10] Albert E. Van Dusen, *The Trade of Revolutionary Connecticut*, doctoral dissertation, University of Pennsylvania, Philadelphia, 1948, p. 239.

Map of Saybrook redrawn from "Chesebrough map" of ca. 1815 shows location of colonial homes.



Specific Congressional legislation in April 1776 enumerated the conditions under which privateers were to be licensed by the states:

> Blank commissions were sent to each state, bonds of $5000 or $10,000 (depending on size of vessel) were required, and the division of prizes was left to the individual states to decide. In the case of Connecticut, the state took one half the proceeds. In the other half, the owner(s), officers and crew shared according to a prearranged plan which varied from ship to ship.[11]

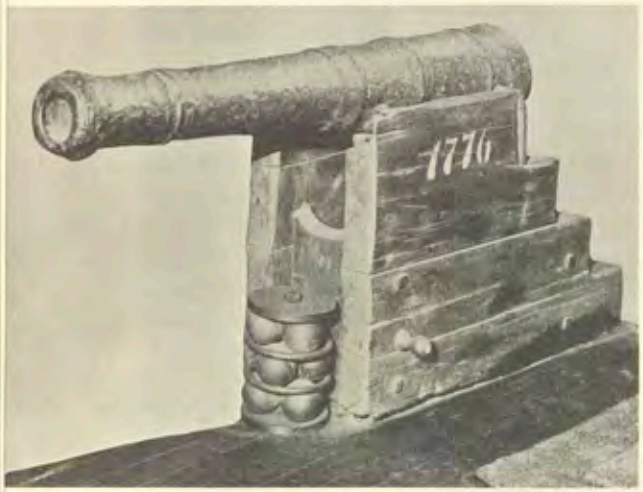
But it was not until more than two years later that the first Hart privateer of record, the brig *Neptune*, armed with four guns and carrying a crew of 15, was placed in service. She received her commission on 31 December 1778, with her ownership listed as "Joseph Hart & Co. of Saybrook." The $5000 bond was posted jointly by Joseph Hart, David Austin of New Haven and Azariah Whittlesey of Saybrook, her master.[12] Captain Whittlesey had earlier (January 1777) been

[11] *Ibid.*, 237.

[12] Joseph seems to have had temporary sole charge of the family's financial affairs while his elder brothers were in the field, but "Joseph Hart & Co." and "William Hart & Co." no doubt refer to the principals in association with all or some of their brothers, Richard W. Hart (William's son), and brother-in-law William Bull. The members of the family, in various combinations, were also later associated in the ownership and management of West Indies vessels.

An unspecified portion of the Hart fortune was invested in the purchase, outfitting, armament and bonding of privateers; however, because of the scarcity of extant records (attributable in part to the burning of New London, together with many local military and maritime papers), there must ever remain some uncertainty as to how many vessels were involved in all. Major Hart's purchase of twelve four-pound cannon from the Salisbury furnace in January 1778, the intended purpose of which is nowhere indicated in the public records (see footnote #6), points to the possibility that he may have been interested in privateering at this earlier date. The five privateers listed herein are the only Hart-connected vessels accounted for by Middlebrook, upon whose excellent research most of my accounting of Hart privateers is based. (Louis F. Middlebrook, *History of Maritime Connecticut During the Revolution 1775–1783*, 2 vols., Essex Institute, Salem, Mass., 1925.)

appointed to succeed Levi Young as master of the Connecticut Navy ship *Oliver Cromwell* (largest of the state's vessels, built in Saybrook in 1776); but together with most of the other officers, he resigned in disgust after only a few weeks, seeking in privateering "relief" from navy "inactivity." He had already taken six prizes as commander of the privateer brig *Fanny* when she was captured by the British and forfeited as a prize (May



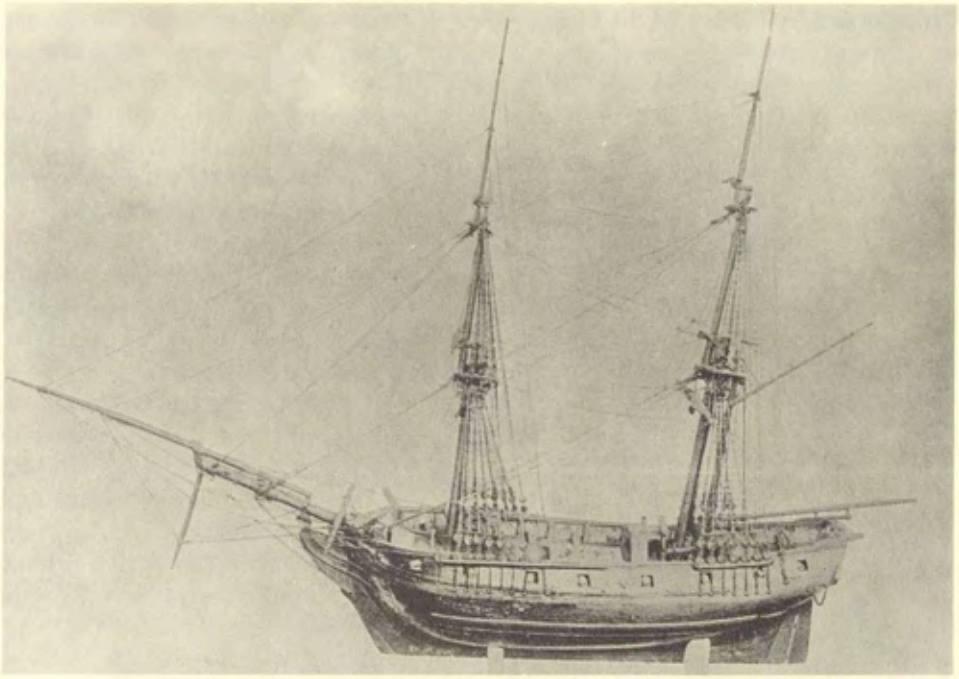
Deck gun from the Connecticut privateer *Nancy* is similar to those purchased by William Hart from the Salisbury iron works in 1778.

1777). Whittlesey himself was exchanged and returned to Saybrook, where he became associated with Joseph Hart in equipping the *Neptune*, his next command. But after scarcely four months at sea, with no record of prizes to her credit, the *Neptune* was driven ashore on Martha's Vineyard by a British privateer, and Whittlesey was again taken prisoner. Thus ended the inglorious career of the brig *Neptune* in April 1779.

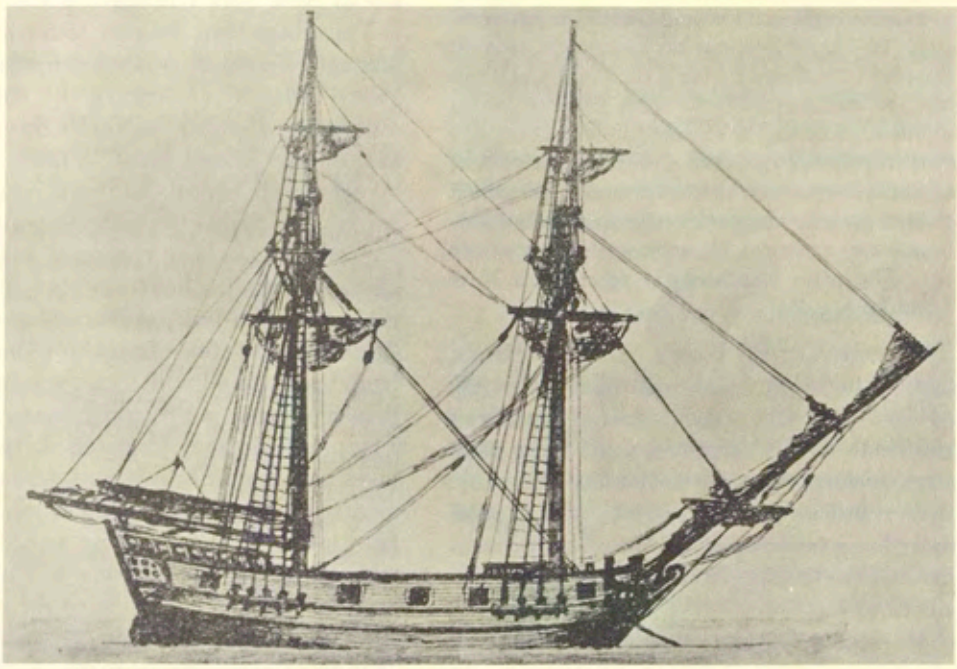
The next Hart privateering venture was the sloop *Retaliation*—more heavily armed (ten guns) and manned (50 men) than her predecessor. She was commissioned in August 1779, with her ownership officially listed as "William Hart & Co. of Saybrook," and bonded for $5000 by Captain Whittlesey, Oliver Huntington and James Clark. This new command brought Whittlesey better luck. At least eight major prizes are credited in whole or part to *Retaliation* before the helm was transferred in May 1780 to Captain William Havens of New London.

Havens had succeeded Joseph Dodge of Stonington as commander of the famous privateer sloop *Beaver* of New London, probably in June 1778. During his 20 months of service in that capacity he captured or assisted in the capture of a veritable armada of heavily laden British shipping. Thus, when he came to the Harts in 1780, he was already much celebrated for his heroic exploits, including at least one narrow escape from enemy clutches. But his career of only about one month aboard *Retaliation*, her armament increased to twelve guns and the bond to 2000 British pounds, was something of a disappointment. He evidently took the vessel to St. Kitts, where he managed to repulse a heavy attack by two British warships, a cutter and a brig, but was forced to flee to a friendly American port. Captain Havens went on from this mild failure to resume his illustrious career under the house flags of other owners; *Retaliation* went on to amass an impressive record of captures under command of Elisha Hart himself.

Neophyte Elisha Hart, who may well have seen previous action aboard a privateer but who had never before been invested with his own command, set sail in *Retaliation* (her bond increased to $20,000) in June 1780. He was apparently unsuccessful in his search for vulnerable prizes until 9 September, when he recaptured the privateer sloop *Patience*, of Providence, which had been taken by the British privateer *Lord Dunsmore*. Later that fall he retook another captured American vessel, this time a Nantucket sloop taken sometime earlier by H. M. Frigate *Richmond*. Hart is also credited with three sloops taken from a British convoy from New York to Fire Island (one of these was armed), and another laden with 47 officers and men of a



This model in the Peabody Museum of Salem shows a privateer snow of 16 guns. Similar to brigs, square-rigged snows carried a trysail mast close abaft the mainmast.



The privateer snow *Black Princess* of Stonington was commissioned in 1781. She carried ten guns and twelve men, similar to several of the Hart privateers.

New Jersey detachment of the King's Army, en route to relieve a guard at Sandy Hook. Of this episode we have a more explicit account, partly in the words of Elisha Hart himself:

> Captain Elisha Hart of the private armed sloop *Retaliation*, ten guns and fifty men, wrote from New London, September 29, 1780, to Governor Trumbull of Connecticut, that he had sailed on the 22d along the south side of Long Island to Sandy Hook and towards the Narrows in New York Harbor. Several sloops were seen coming down from New York. The *Retaliation* chased them and overhauled one that was standing for Staten Island. "I discovered she has no guns," says Hart, "but appeared full of Men Elligantly Dressed. I then Supposed her to be a Pleasure Boat from the Fleet, which I then saw Lying In the Narrows and was within One League of them and in full View of the City and More than a League within the Guard Ships." Captain Hart got out sweeps, came up fast on the chase and hailed her, but her commander was very suspicious and refused to come on board the *Retaliation*. "I then ordered Down my English Colours, Ran out my Bow Guns and Told him if He did not Come on Board I would Sink Him Immediately. He then Hove out his Boat and Come on Board. I Immediately Man'd the Prize and Took out the Prisoners." They were forty-seven in number, including a captain, a lieutenant, and two sergeants; they were a captain's guard sent to relieve guard at the lighthouse. An armed sloop from near the guardhouse approached, but bore away upon the *Retaliation* heaving to for her. The prize was brought safely into New London.[13]

Thus ends Captain Hart's personal account of how he captured a troopship in full view of the Royal fleet in the harbor of America's principal Tory stronghold, employing such ungentlemanly devices as hidden guns, false colors and intimidation of the after-guard, and giving posterity some notion of the rather casual style of privateer bravado and brinkmanship warfare.

During a southern cruise the following winter, *Retaliation* was finally captured off Bermuda (February 1781) and taken to South Carolina as a British prize.

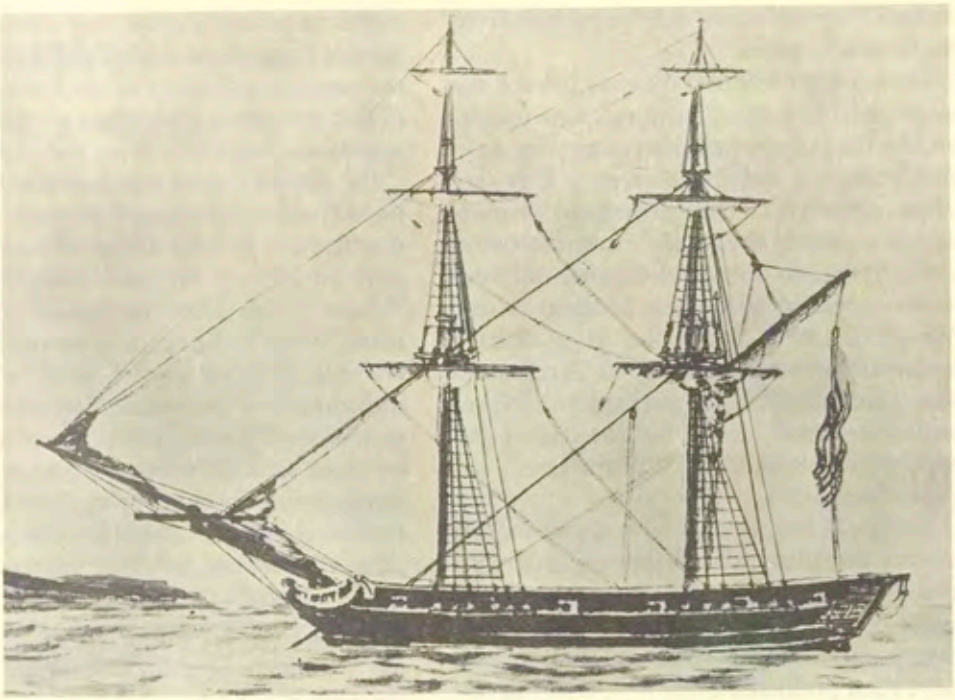
Meanwhile, in March 1780 Joseph Hart had assisted in posting the $3000 bond required by John McThorday to launch his letter-of-marque sloop *Richard* (six guns, 14 men), an armed victualler carrying beef and grain between Wethersfield and New London. This pre-figured Joseph's own subsequent success in commodities transport in peacetime Hartford.

Upon Elisha's return from his enforced Carolinian vacation, the family outfitted their third privateer, the sloop *Restoration* (ten guns, 30 men). Bond in the amount of $20,000 was posted by Elisha Hart, his brother-in-law William Bull of Hartford and Jeremiah Pratt of Saybrook. Elisha was given command, but the entire venture fizzled during her first cruise. On 6 August 1781, she was driven ashore by the enemy at Hempstead, Long Island, and taken as a prize. Captain Hart probably spent much of the next few weeks in one of New York's infamous gaols.

The Harts' last known letter-of-marque was issued 25 May 1782 for the single-gun galley *Ranger* (15 men), of unspecified ownership. Bonded for the then-customary $20,000 by Joseph Hart, William Bull and Worthington Ely of Saybrook, she was the latter's first and only privateer command on record. The *Ranger* recouped some of the losses incurred in the *Restoration* fiasco with the capture, on Independence Day 1782, of a British merchantman bound for Connecticut from Long Island with a cargo valued at 300 British pounds, on which the captors received a favorable decree. After this no record survives, and it must be assumed, without documentation to indicate otherwise, that the Hart interest in privateering waned with the tapering off of privateering in Connecticut between 1781 and the close of the war.

In all, the profitability of Revolutionary War privateering has been much overblown, a condition which Professor Albert E. Van Dusen has endeavored to rectify:

[13] From a Trumbull MS. as reprinted in Gardner W. Allen, *A Naval History of the American Revolution*, 2 vols., New York, 1962, II:517f.



This rare illustration shows the Connecticut privateer *Fair American* of New London, a refitted merchantman of 1781 carrying 14 guns and 90 men in her crew.

By and large, privateering did not bring sound prosperity nor large overall profits. It brought color and excitement, occasional rich prizes, many fruitless cruises, and frequent complete loss of vessel and capture of its crew. No seaport in Connecticut grew wealthy from privateering – not even New London, the center. In fact, New London, in general, languished throughout the war. The vast majority of individuals probably lost money, although an occasional operator had good fortune.[14]

Any forthcoming accusation of Hart war-profiteering is unfounded, both on the basis of Van Dusen's explication of the general case, and in light of the specific evidence available about the Harts. Their social position and family fortune were such that no conceivable windfall-chasing could offset the security and long-term profitability of conservative management (at which both William and Joseph time and again proved themselves expert). The tenacity of their ardent republicanism, inherited from an egalitarian father and carefully nurtured in every phase of their upbringing, was repeatedly to make itself known in future years, reaching its quintessence in the quixotic political career of William Hart.

Capt. John Hart, Latin salutatorian of the Yale class of 1771 and probably intended for the ministry by his eminent father, returned to Saybrook after the war and entered mercantile trade in partnership with his brothers. He married, joined the church, served for a time as local justice of the peace and led a productive, but rather more conventional life than that for which his exceptional education and rearing had prepared him. Greatly overshadowed in Saybrook, he removed for a few years to Hatfield (1793–97) and Amherst (*fl.* 1802), Massachusetts, but later returned to Saybrook, where he resided in the former

[14] *Ibid.*, p. 244.

Samuel Shipman house, only a few rods from his brothers' homes.

Samuel Hart was also inclined toward the more sedentary life of the retail merchant, and by the early nineteenth century his store had become a thriving enterprise that survived (through several generations of management outside the family) into the twentieth. At various times both Samuel and John were associated with their brothers in the West Indies trade, but appear never to have been very active in that regard. But Samuel was prominent in local politics, and represented Saybrook at twelve sessions of the legislature (1810–18) in William Hart's old Assembly seat.

Joseph Hart seems to have thrived upon a more conspicuous existence, colored with just that shade of romantic mystery that inspires curiosity. He retained his militia captaincy after the war (and may subsequently have been promoted to major), and was initially William's partner in Saybrook. By 1785 he had married well[15] and moved to Hartford, where he founded a highly successful downtown wholesale company and maintained close personal and commercial ties with William and the Harts' Saybrook enterprises. He evidently circulated in a rather lofty social echelon, for which he certainly possessed the requisite credentials. He was widely known as a responsible and philanthropic citizen, upon occasion being appointed, in the mode of *amicus curii*, to administer various matters for the legislature, and assisting Jeremiah Wadsworth in founding the Hartford Library (1799), of which Hart was an original trustee. His petition to the legislature (May 1800) requesting improvement of the road from Hartford north to the Massachusetts line led to an appointment to the Hartford and New London Turnpike Company, organized by the legislature in the next session to oversee the construction, maintenance, improvement and financing of a thoroughfare connecting the two cities. He was an avid Republican leader, and a member of the prestigious Society of the Cincinnati until that organization became a tool of the Federalists, ca. 1803.

Of Joseph's ultimate disgrace and final flight from the clutches of the genteel society that had for so long nurtured him we have only an inkling. He was undoubtedly the "Major Joseph Hart" mentioned among the Harts' West Indies papers in 1809 as their commercial agent on the island of St. Bartholomew, but there is nothing more specific than genealogist Alfred Andrews' polite assurances that "He became connected, by marriage and business, with the most noted families in Hartford, but for some reason became embarrassed, left the country, and was lost overboard at sea about 1810."[16]

[15] Joseph Hart married Eunice Ellery, daughter of John and Eunice (Hooker) Ellery of Hartford.

[16] Alfred Andrews, *Genealogical History of Deacon Stephen Hart and His Descendants 1632–1875*, Hartford, 1875, p. 405.

Acknowledgments

Special thanks are due to Admiral A. C. Husband and Mrs. John Ingersoll of the Old Saybrook Historical Society for their help with this and other projects; the ever-helpful staffs of the Acton Public Library in Old Saybrook, the G. W. Blunt White Library at Mystic Seaport and the Connecticut State Library in Hartford; to the Wadsworth Atheneum; and especially to Joan Vermilya, who provided great help in tracking down illustrations, and my wife Lydia, who helped me plough through and transcribe mountains of manuscripts.

NOTE: Limited space has precluded publication of the full range of footnotes to have been included with this article. Complete documentation, including all footnotes, research notes and supplementary materials, is available for consultation in the manuscript section of the G. W. Blunt White Library at Mystic Seaport.

Whaleboat Warfare On the Sound

By JOHN GARDNER*

One of the little-known sidelights of the Revolutionary War is the part played in the conflict by whaleboats, those slim, light but sturdy craft which were so completely a product of their function in the whale hunt. Before the United States even had a navy, whaleboats were used in a manner similar to that of PT boats a century and a half later: a hit-and-run strike force which was considerably effective against the British on numerous occasions.

When the British armies took the field early in 1777, they did so in the confident certainty that resistance by the rebellious American colonies would soon collapse. One of their first moves was to send General Tryon to take the military stores which the Continentals had collected at Danbury, Connecticut. Landing near the mouth of the Saugatuck River (where Westport is today), the British rapidly penetrated the interior as far as Danbury, despite resistance from hastily assembled units of militia, and after destroying the magazines there and burning part of the town, they returned to the coast and their ships, setting fire to Ridgefield on the way.

Washington's tattered army could ill-spare the loss of the considerable stores of materiel destroyed at Danbury, but far more damaging to the American cause was this show by the British of their apparent ability to strike deep and at will within the American lines. The French at that time were deliberating whether or not to come to the assistance of the Americans, and following the sacking of Danbury, General Washington himself felt it necessary to address a long letter to Chevalier D'Anmours, the French military observer, in an attempt to reassure him that the Danbury raid was not to be taken seriously as a demonstration of American military weakness.

What was needed, however, were deeds, not words. Providentially an opportunity soon presented itself for turning the tables on the British with a daring and damaging counter-raid. Less than a month after the sacking of Danbury, the British, who had assembled large stores of provisions, grain and fodder at Sag Harbor on the eastern end of Long Island, for some reason withdrew to New York a part of their forces which had been stationed in that area. Apparently intelligence of this removal, no doubt supplied by patriot refugees from the region, almost immediately reached General Samuel Holden Parsons, commander of the Continental forces in western Connecticut, for he directly ordered an attack on Sag Harbor by a detachment of 234 officers and men under Lieutenant-Colonel Return Jonathan Meigs, who had recently come home after a year in a Canadian prison.

On 21 May Col. Meigs embarked his men at New Haven in 13 whaleboats, proceeding up the coast to Guilford. Here, because of high winds and rough seas, he was obliged to wait until the 23rd before crossing the Sound.

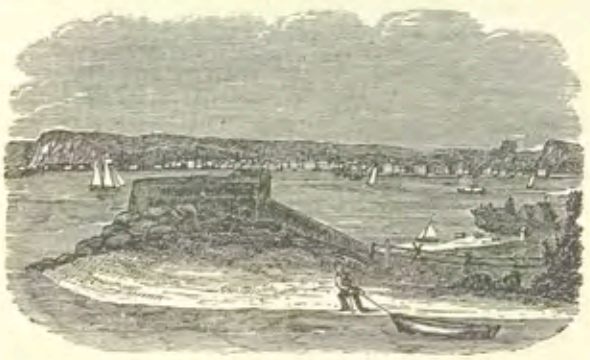
*John Gardner received his Master's Degree as a teacher of English from Columbia University in 1930. Since then, he has become an internationally known expert in the field of small wooden vessels. He contributes a regular monthly column on this subject to the *National Fisherman*, and when he is not writing he runs Mystic Seaport's Small Boat Shop.

He finally departed from Sachem's Head at one o'clock in the afternoon with 170 of his detachment, accompanied by two armed sloops and one unarmed vessel which was to be used to bring off prisoners.

Five hours later and about 15 miles from its final destination, the whaleboat flotilla landed on the eastern end of Long Island near Southold, at a spot where the North Fork narrowed to hardly more than 50 rods of sand and meadow. Here the boats were portaged from the Sound into Peconic Bay. Leaving 40 of his force behind, Col. Meigs reembarked the remaining 130, rowing southward and skirting the western side of Shelter Island. At about midnight the South Fork was reached at a point three miles from Sag Harbor. Here the boats were pulled ashore and concealed in heavy cover, and after posting a guard, the raiders moved on through the woods and the darkness, emerging noiselessly and with fixed bayonets about an hour later at the garrison outposts.

Surprise was complete. There was little resistance as the raiders proceeded systematically to carry out their mission of destruction. By the time the work was finished, twelve brigs and sloops, of which ten were transports ladened with provisions for the British army in New York, were burning at their moorings, and in addition, one armed vessel was in flames. Some 120 tons of provisions had been destroyed, along with hay, oats, corn and other forage stored ashore, ten hogsheads of rum, and a large quantity of merchandise. Ninety soldiers and sailors, the entire British force except for six who escaped in the darkness, were prisoners.

Fort Hale in New Haven harbor was departure point for several of the whaleboat raids across the Sound.



What was particularly notable about this operation was its blitzkrieg nature, which would not have been possible without whaleboats. In his report to General Washington, General Parsons stated that altogether the distance covered in the raid was 90 miles. When the time spent in portaging the boats, in skirmishing at the Harbor, and in marching overland to and from the boats, is deducted from the total elapsed time of 25 hours, it becomes apparent that the speed of these boats on the water was quite respectable—less than that of modern motorized craft, it is true, but unmatched by any other naval small craft of the time.

The speed and maneuverability of these eighteenth-century whaleboats, their independence of wind direction or force, their ability to operate stealthily at night with muffled oars, their light construction which allowed them to be carried overland from one point of embarkation to another or to be concealed at a distance from the water when strategy required—all of these features combined to give the eighteenth-century whaleboat a unique commando character as a fast, stealthy, hard-hitting raider in the naval warfare of the American Revolution. Like the mobile, wide-ranging dragoon cavalry of that day on land, the naval whaleboats of the Revolution carried out in much the same style their sea-based operations on and from the waters around Long Island, and along the shores of Rhode Island, Connecticut, New York and New Jersey.

It was therefore quite natural for Col. Benjamin Tallmadge, then a brilliant young cavalry major, to lead a series of whaleboat raids across the Sound against the British on Long Island, every bit as audacious and successful as Col. Meigs' strike against Sag Harbor. Born in Setauket, L.I., in 1754, Benjamin Tallmadge graduated from Yale at 19 and was teaching school in Wethersfield, Connecticut, when the first volleys were exchanged at Lexington and Concord. Joining as a lieutenant the regiment commanded by his friend Colonel John Chester, Tallmadge took part in the battle of

Long Island, and at the age of 22 was commissioned a captain in the 2nd Regiment of Light Dragoons in December 1776, advancing to the rank of major the following year.

His first foray across the Sound was directed against a strongly fortified enemy post manned by 500 troops and situated on elevated ground between Huntington Harbor and Oyster Bay. Behind the fortifications was encamped a large guerrilla force of marauding whaleboat men, many of whom were Tory refugees from Connecticut. This band's continuing depredations on the Sound and the Connecticut shore had become intolerable, and the object was to break up their camp and take as many prisoners as possible.

At 8:00 p.m. on 5 September 1779, Major Tallmadge embarked his detachment of 130 men in whaleboats from Shippan Point near Stamford. Within two hours they had landed on the other shore, proceeding immediately to attack the freebooters' camp and capturing all but a handful who escaped into the bushes. Some shots were fired and the patriots prudently withdrew to avoid further action. After destroying all the enemy boats they could find on the shore, they embarked with their prisoners, returning safely to Connecticut without the loss of a man.

The complete success of this initial venture undoubtedly whetted Major Tallmadge's appetite for more ambitious undertakings. At Smith's Point near Mastic on Long Island's South Shore, the British had erected a formidable fortification which they called Fort St. George. Here they had assembled arms, stores and supplies for their forces in Suffolk County, and under the protection of the garrison a corps of woodchoppers was engaged in cutting fire wood for the British army in New York. Major Tallmadge proposed to break this up by demolishing the fort, but General Washington deemed the risk too great. Still not deterred, Tallmadge himself crossed the Sound to gain more precise and accurate intelligence, and on the basis of what he found was able to convince his Commander-In-Chief.



Col. Benjamin Tallmadge was an early hero of hit-and-run whaleboat raids on the British.

Later in the year, on 21 November 1790, Major Tallmadge embarked with two companies of dismounted dragoons numbering just short of 100 picked men, leaving from Fairfield instead of from Stamford to avoid a large body of enemy reported encamped at Huntington. Five hours later he landed at a place called the Old Man's, now Mount Sinai. The boats were dragged ashore and concealed in a thick cover of undergrowth. Heavy rain forced the detachment to remain under the shelter of their boats that night and the following day until about seven in the evening, when they set out. An all-night march across the Island brought them within striking distance of the fort by 4:00 a.m. Dividing the attacking force into three platoons, Major Tallmadge ordered immediate assault from three separate quarters simultaneously. Axemen led by Lieutenant Calib Brewster chopped through the stockade, opening the way for Major Tallmadge's col-

umn to advance with fixed bayonets. Inside, resistance flared fiercely, but in less than ten minutes it was all over, with seven of the garrison killed or wounded and the rest prisoners. One of the attackers was wounded, their only casualty.

Destruction of the fort followed without delay. Garrison buildings, stockade and abatis were ignited, as well as large quantities of stores, including arms and ammunition which the troops were too fatigued to carry back. A vessel loaded with rum, wine, provisions and the like which lay aground nearby was also burned. The sun rose on smoking ruins, and by 8 o'clock, with the demolition completed, the return march started. The main column with the prisoners went on ahead, while Major Tallmadge, Lieut. Brewster and a patrol of ten men mounted on horses taken at the Fort filed off to Coram, where they put to the torch 300 tons of the King's forage, rejoining the main column within two hours. Although alarms had gone out and the Loyalist militia had begun to muster, no serious harassment developed, and the column with its prisoners reached the boats at four in the afternoon. By eleven that evening all were safe ashore in Fairfield, having in the course of approximately 38 hours marched 40 miles altogether, captured and destroyed Fort St. George, and crossed over Long Island Sound. Their only casualty they were able to bring off with them. Prisoners taken amounted to four officers, 50 rank and file, and one garrison civilian. In recognition of their remarkable exploit, Major Tallmadge and his troops were honored with commendations by both General Washington and the Continental Congress.

In October 1781, the capture and destruction of Fort Slongo on Treadwell's Neck near Smithtown, Long Island, followed closely the pattern of previous whaleboat raids. Major Tallmadge, with a command of his own assigned by General Washington, sent over a detachment of light infantry in whaleboats from the mouth of the Saugatuck River. They accomplished their mission with ease and without casualties, burning the blockhouse and other combustibles and bringing back 21 prisoners, including three officers, as well as considerable quantities of small arms, ammunition and clothing.

Major Tallmadge was to attempt yet another whaleboat raid, but one which came to naught. The following year on 5 December he assembled a select force of 700 infantry and dismounted dragoons on Shippan Point near Stamford with the intention of "beating up the quarters" of a large encampment of British Light Horse and infantry at Huntington, Long Island. However, a severe winter storm with winds of gale force prevented embarkation and the raid was finally called off. On the third day, as the troops waited on the beach, three enemy whaleboats were discerned, apparently on a course for Huntington. According to one account: "Tallmadge ordered several of his boats to pursue, under the command of the intrepid Capt. Calib Brewster. By the time the boats of the enemy had reached the middle of the Sound, Brewster was upon them. Two of them were easily captured; but the third escaped. Brewster received a ball in the breast, which passed through his body. Although, apparently, Brewster had had his death wound, yet he recovered and lived to the age of about 80."

Whaleboat activity during the Revolution took many diverse forms other than the transportation of troops. Numbers of whaleboats were commissioned as privateers. Some patrolled the coast, others carried dispatches and were used by spies. Refugees escaped in them, and later slipped back to bring off goods and property left behind and sometimes their families and relatives. Much smuggling and illicit trade by both sides were carried on in them. Brigands and pirates, of which not a few turned up in those troubled days, found whaleboats ideal for their nefarious errands.

On one occasion General Washington indicated to the Governor of Connecticut and his Council that he was desirous of having them collect enough whaleboats to transport

a thousand men, for what purpose we do not know. This is but one indication of the numbers in use at the time. There had to have been hundreds, and as they were frequently being smashed, burned and shot to pieces by both sides, replacements must continually have been built during the seven-year period of the war, although no record of whaleboat construction has survived. No lines, models, detailed dimensions or specifications have survived either, only the most general descriptions, so that we are obliged to infer what these craft were like mainly from random references as to how they were used and what they carried.

According to one contemporary account: "Whaleboats were sharp at each end, the sheathing not over half an inch thick, and so light as to be easily carried on men's shoulders, either to be hid in the bushes or relaunched in the South Bay. Some were thirty-two feet long, and impelled by from eight to twenty oars, and would shoot ahead of an ordinary boat with great velocity, and leave their pursuers far behind."

Twenty oars for a 32-foot boat is hard to accept. If there were whaleboats that rowed with 20 oars, they must have been considerably longer than 32 feet. Rivington's *New York Gazette* for 1 August 1781 advertised a new whaleboat to be sold at auction at Hick's Tavern, Far Rockaway, on 8 August. "She is upwards of thirty-five feet long, rows eight oars, has two good sails and a large swivel." It is evident that this boat had been captured from patriots, for Onderdonk notes that the authorities forbade the sale because the captors had not reported to them "in a proper and official manner."

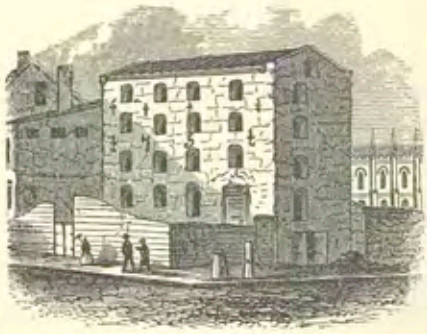
Many of the whaleboats mounted swivels, two-pounders, or other small ordnance in the bows, which would have increased their weight and decreased their portability considerably. It appears also that most carried sails which were set when the wind favored. However, no sail plans or rig details are known. Henry Hall's *Tenth Census Report* on the *Ship-Building Industry Of The United States*, published in 1884, contains a profile view of what purports to be a whaleboat of 1789. This sketch shows a double-ended hull, but one with a considerable amount of solid deadwood aft to which is attached a narrow vertical rudder typical of those found on eighteenth-century naval gigs. Although desirable for sailing, this arrangement would have increased the weight considerably.

It seems likely that the term "whale-boat" as used at that time was inclusive of a class of boats which varied considerably within the general type, and there are no grounds for assuming that these Revolutionary War whaleboats are identical to the standardized boat employed a hundred years later in the nineteenth-century deep-water whale fishery.

Boats rowed by six and eight oars seem to have predominated. With a steersman and only one extra hand, this would have meant crews of from eight to ten, and in this connection it will be recalled that Col. Meigs' boats, after reaching Peconic Bay, reembarked with an average of ten men each. Likewise the boats figuring in the following incident also averaged crews of ten men, as reported 2 July 1781 in Gaine's *New York Mercury*, a Loyalist sheet:

> On Wednesday night last, a party of rebels from New England, with 5 whale-boats and about 50 men, landed at Crane Neck, Setauket, and early the next morning went to the house of Capt. Nathan Woodhull, which, after they had plundered, with three others adjoining, of considerable value, carried Capt. W. and his son along with them; fortunately the boats were discovered by two brigs and a sloop lying in the Sound, who immediately gave them chase, which obliged the rebels to run their boats ashore, and make their escape into the woods, leaving their boats and plunder behind. . . .

Previously, on 23 May of the same year, Rivington's *Gazette* had reported an incident occurring on the southern side of the Island involving the same number of boats and men. It was not the same party which raided Setauket in July, because these raiders were sur-



Van Cortlandt sugar house, a British prison.

prised and captured while resting before portaging over at Canoe Place, and were taken in their boats under guard to New York where they were imprisoned in the notorious Sugar House.

Five whale-boats, containing about 50 men, made their appearance in the South Bay, where they attacked and took a sloop loaded with lumber belonging to Messrs. Keteltas & Nicoll of N.Y., which they dispatched with one of their boats to N. Haven. A few evenings after, the remaining crews, 38 in no., landed at Blue Pt., and plundered several of the inhabitants of provisions, clothing, and money, to a considerable amount; and carried off another small vessel of K. & N.

As for the carrying capacity of these armed whaleboats in addition to their crews, we find that they often bore heavy loads, and sometimes quite unusual ones. On one occasion, so the story goes, two men from the Great Neck shore of New London put off in a whaleboat one dark night with a large, fat ox which they intended to sell to the enemy. The ox grew fractious, loosed his bonds, and thrashed about so unmanageably that, in fear of imminent sinking, the pair made haste to reach a nearby patriot sloop where they meekly surrendered themselves and their cargo.

It was not unusual for livestock to be transported on the Sound in whaleboats. Mention of cattle, sheep and swine being so carried from early in the century is to be found in the diary of Joshua Hempstead of New London. How many oxen could be loaded into a whaleboat for the trip across the Sound, and how they were stowed is not explained, yet apparently this was done, according to the following official communication from Governor Jonathan Trumbull of Connecticut:

Lebanon, Aug^{t} 11th, 1778

Gent^{n}: It being represented and complained to me, that sundry persons belonging to your or one of your armed boats commissioned to cruise in the Sound have, contrary to the tenor of your commission and bond, made descent upon the island of Long Island and plundered the inhabitants of their stock and effects, and that without distinction, and in particular have lately violently taken six oxen from Colo. Phinehas Fanning, and brought over to this State—this conduct, you must be sensible, is unwarrantable and renders you liable on your bonds &c. I would, with the advice of my Council, advise you, or either of you, so far as you may be respectively concerned, to settle—compound the matter with Colo. Fanning, and restore him his property, least you be exposed to further consequences. I am, your humble Servant Jonth Trumbull
To Capt. Peter Hallack
Jonth Solomons, or their owners, as they may be respectively concerned.

It should be noted, in connection with the foregoing letter, that despite all efforts to control the whaleboat privateers commissioned early in the war by Connecticut, their abuses and depredations continued to increase to such a scandalous extent that finally toward the end, the Governor and his Council were obliged to revoke all such commissions. Action was taken at a meeting of the Council at Lebanon, Tuesday, 23 January 1781:

On consideration of the many evils committed by the armed boats in this State commissioned to cruize on their own account for the pretended purpose of making captures on the enemy and preventing and intercepting illicit trade and traders &c.: It is resolved that the commission of all such boats be and the same are hereby revoked, cancelled and disannulled. . . .

During much of the war, both sides engaged in an illicit trade in contraband, known at the time as the "London Trade." Although both sides opposed it for reasons of their own, it continued to flourish. In extent it was car-

ried on in coastal waters extending from the Thames River in Connecticut to the Shrewsbury River in New Jersey.

The British, who occupied New York City and its environs from the summer of 1776 (following their expulsion of Washington's army from Long Island) until the war finally came to an end seven years later, required meat, grain and country produce to feed their thousands of troops. They also were in need of fodder for their regiments of light horse and firewood for heat in the winter. In the beginning they were able to obtain most of what they needed from Long Island farms by seizure from "rebels," as they called them, and by purchase from Tories loyal to the King. Long Island, the largest island in the continental United States, has an area of over 1600 square miles, much of it rich farmland and considerable of it under cultivation even at that time. Some measure of its productivity prior to the war can be deduced from the fact that in August 1776, the Continental Congress appealed to several Connecticut towns for assistance in removing from Long Island to the mainland 80,000 to 100,000 head of cattle and a like number of sheep. But following its occupation by the British, agricultural productivity fell off precipitately. At the outset several thousand patriot refugees, most of them farmers, escaped to the mainland leaving their farms untended. Troops of Hessian mercenaries ravaged the fields and chopped down the orchards. Raiders from across the Sound harried the coast and pillaged the interior. Tory refugees from the mainland came over by the hundreds to live off the land and join the bands of Tory livestock rustlers, known at the time as "cowboys."

In consequence, the British forces quartered in New York were eventually obliged to look elsewhere and farther afield for provisions and country produce, and a large class of fair-weather patriots within the American lines, whose love of gain outweighed their love of country, did not hesitate to supply them at inflated prices.

But that was only half of it. On the other side of the coin, New York City was well supplied with British imports—tea, pepper and sundry other luxuries, also silks, corduroy and other fabrics and finery. Merchandise of this sort would leave New York City ostensibly to be sold to loyal Long Island Tories, but its intended and actual destination was across the Sound. Some idea of what was going on at that time may be had from the following letter printed in Gaine's *New York Mercury* for 28 July 1779.

Huntington. The friends of the Government here have been greatly distressed ever since the King's troops left the E. end of L.I.; the rebellious part of the inhabitants in this town, who were kept in awe while the troops were stationed E. of us, are now become more insolent than ever, and publicly threaten to have all the loyalists carried off to Con't. The principal of these miscreants are Nath'l Williams, Stephen Kelsey, Eliphalet Chichester, John Brush, Jonas Rogers, Marlboro Burtis, and Israel Wood: several of whom smuggled goods out of N.Y. to this place for the sole purpose of supplying the rebels in Con't.

A 19th-century view of New London harbor shows monument at Fort Griswold in background at right.



These scoundrels live in perfect safety, when scarcely a night passes but some of their loyal neighbors are plundered by the sons and other relations of those rebels who fled to Con't when the King's troops landed on the Island. I hope you will keep a good lookout for these traitors, if they should have the assurance to return again to your city to buy goods; and if we should be so happy to have any troops quartered in this part of the country again, I hope in God these perjured villians will be made to rue the day they entered into rebellion against the best of kings.

Sometimes contraband merchandise obtained in New York City would be smuggled into New England directly. At other times such goods would be exchanged for provisions and produce brought over in whaleboats from the mainland, and carried back across the Sound in the same manner. Frequently such shipments were brought in surreptitiously. Just as frequently they were entered openly and declared as having been captured from the enemy. Ordinarily there was no means of telling otherwise. Even the most ardent patriots could with good conscience, and certainly with satisfaction, accept the legitimate spoils of war, especially when they were badly needed. The "London trade" so despised toward the end of the War, and the equally despised "Long Island traders" flourished under the cover of the legitimate operations of duly commissioned whaleboat privateers.

Unfortunately, as we have seen, whaleboat privateering in time, and all too frequently, succumbed to the temptations of easy plunder and lucrative spoils. The fatal flaw was that because of its essential nature whaleboat privateering could not be supervised and controlled. Nevertheless, at least at the beginning and during the middle years of the war, it served the patriot cause well, and harried the invaders and their shipping to an extent not generally realized.

Middlebrook includes accounts of 36 "armed-boats," that is to say whaleboats, commissioned for privateering by Connecticut's governor and his Council of Safety, and this is probably not a complete list. But there were many more who were "warranted" by local judges in the various towns along the coast and by the military. Boats so "warranted" were especially numerous in Fairfield County, where they were needed for patrols to guard against nocturnal incursions of the enemy from across the Sound, which is quite narrow there.

Middlebrook's summary of the character and achievements of these armed boats and their crews pays tribute to the probity and effectiveness of the bulk of them and deserves to be quoted as giving the better side of whaleboat privateering.

Their services were almost constant, their crews loyal, energetic and alert, and the State received a bountiful remuneration as the result of their operations and skillful strategy. Their captures included the British vessels *Robinhood, Defiance, William, Tryon, Peggy, Crane, General Howe, Friendship, Margaret, Elizabeth, Polly, Success, Delight, Exchange, Sally, Titus, Spicer, Hancock Rose, Betsey,* and many "Vinyard" boats, pettiaugres, whaleboats, etc., besides illicit merchandise, Hessian hostages, and unnamed sloops and schooners of various tonnages. The ports of Fairfield, Norwalk and Stamford were the scenes of almost daily excitement, and the arrivals of captive British victuallers, forage and fuel craft for libel, made necessary the permanent military garrisons at those places to guard not only the prizes, but also the quantities of contraband and prisoners that were constantly coming in.

Although the armed boats based on the New Jersey coast were less numerous than those from New England and the Connecticut shore, they were nonetheless effective and just as troublesome to the British. Second to none in courage and audacity, Captain Adam Hyler operated out of New Brunswick under a New Jersey commission. Gardner W. Allen, in his *Naval History Of The American Revolution,* calls Hyler "the most famous of American flotillamen," which may be something of an overstatement, although there are few who can match Hyler's exploits.

On one night Capt. Hyler with two armed boats took a 20-gun corvette lying at anchor

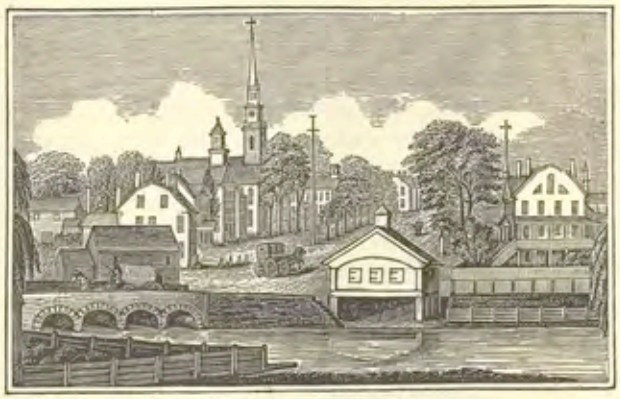
in Coney Island Bay. One of the boats, rowing up in the dark with muffled oars, ascertained that there was no watch on deck and that the captain was in his cabin playing cards. Boarding was speedily accomplished from both sides at once without injury or opposition. The officers were secured in the cabin and the crew below until they could be fettered and transferred to the whaleboats. The ship was then fired, and the two boats left with their prisoners for New Brunswick. It is told that as they crossed the Bay the captain of the corvette wept to think that he had allowed one of his Majesty's ships to be surprised and taken "by two damned eggshells."

In one of his most daring exploits, Capt. Hyler landed one evening on the lower end of Manhattan with his boat crew disguised as a man-of-war press gang. His object was to seize and take back to justice a notorious Loyalist murderer wanted by General Washington. They boldly marched up Broadway, but their man was not at home as expected. On their return they seized a West Indies sloop laden with rum and anchored off the Battery. Sailing her back to Elizabethtown Point, they unloaded 40 hogsheads of rum before daybreak and set fire to the sloop to prevent her recapture.

Despite his many near-to-miraculous escapes, Capt. Hyler did not outlive the war, succumbing in 1782 to an accidentally self-inflicted wound in one of his knees.

Cut from the same cloth as Hyler and associated with him in a number of whaleboat exploits was a Harlem shoemaker and tavern keeper by the name of William Marrener. On one occasion Marrener, with seven men, landed at North Utrecht within the enemy lines, taking Simon and Jacques Cortelyou, two despised Tories who were wanted because they had mistreated American prisoners, and bringing them back to New Brunswick. Unlike Hyler, Marrener survived the war, living to the ripe age of 85 when he was killed by falling out of his wagon.

Of all the privateers who harassed British shipping in the waters around Long Island during the Revolution, none cut a wider swath or brought in more prizes that the one-time school teacher, poet and itinerant peddler Ebenezer Dayton. He has been compared with Robin Hood, but there were rumors abroad in his day, never quite laid to rest, that identified him with far less savory characters, alleging that, spurred on by an inordinate desire for gain, he preyed on friend and foe alike.



Elizabethtown was typical small port during War.

Dayton was born in Coram in 1744. In February 1776 he was commissioned quartermaster in a regiment of Minute Men, serving with distinction. Early in 1778, after acquiring a small schooner, he received a privateering commission from Connecticut's Governor Trumbull. His fame, however, rests mainly on exploits achieved with whaleboats.

A few examples will suffice. He must have set a record for number of prizes taken in the summer of 1778.

New Lon., May 15 1778. Sunday night last, 2 boats under the command of Cap. Dayton and Chester, with 14 men in each, went to L.I. and carrying one of the boats across a narrow part of the island at S. Hampton, they went about 60 miles up the S. side of the island to Fire I. Inlet, and took possession of 5 sail of coasting vessels which lay there, laden with lumber, oysters, household furniture, some dry goods, provisions, &c. The prizes are all safe arrived. More might have been brought off, could they have manned

them. Among the prisoners is a British Sergeant.—*Gaine*, June 1, '78.

N. London, June 12, '78. Capt. E. Dayton, in an armed boat, carried 3 prizes (coasters) into N. Haven, which he took near Fire Island Inlet.

N. London, May 22, '78. Tuesday night 8 whale-boats arrived taken here by Dayton, S. side of L.I.

In Rivington's *Gazette* for 5 December 1778 we read that "Capt. Eben. Dayton, in the sloop Ranger of 45 men, 6 carriage guns, and 12 swivels, blunderbusses, hand grenadoes (to throw on the deck of the vessel attacked as they run her aboard with whaleboats)" was captured in South Bay on 20 November, and taken to New York, presumably to be imprisoned. Whether Dayton escaped or was exchanged we do not know, but in any case, Rivington reports that on the 14th of August 1779 a party of 20 rebels led by Dayton put in an appearance at Coram where they took several Tories prisoner, carrying them off in their boats.

After Yorktown, the war wound down slowly. The urgency and the derring-do went out of it in the two slow years of waiting which followed. "The London Trade" flourished for a bit, but it, too, passed. Whaleboat men found other daring things to do or, like Dayton, went back to their former occupations. And some, seeking to recoup their shattered fortunes, went west, like General Samuel Holden Parsons, native of Lyme, who conceived the idea of the whaleboat fleet in the first place. On 17 November 1789 General Parsons drowned in the rapids of a small Ohio river when his boat overturned.

Sources and Suggested Further Reading

The following sources selected from a much greater store of historical scholarship and commentary are quite sufficient to support the treatment of the subject herein presented, and while they do not always agree in all minor details, the reader is left with some scope for individual judgment. History is as much an art as a science, as much imagination as it is facts. Readers interested in a more detailed summary of source material are referred to the G. W. Blunt White Library, where an annotated copy of this article is on file.

Allen, Gardner W., *A Naval History Of The American Revolution*, New York, 1962, Vol. II, p. 568.

Brown, Richard H., *Whaleboat War & London Trade, Long Island Forum*, June 1975, pp. 106–111.

Caulkins, Francis Manwaring, *History of New London, Connecticut*, New London, 1895.

Connecticut Public Records, Oct. 1776–Feb. 1778, Hartford, 1894.

Connecticut Public Records, May 1778–April 1780, Hartford, 1895.

Connecticut Public Records, May 1780 to Oct. 1781, Hartford, 1922.

East Hampton, L.I., Town Records, pp. 280–283, The Meigs' Expedition.

Horton, H. P., *Meigs' Raid On Sag Harbor, Long Island Forum*, July, 1941, pp. 155–156.

Long Island Forum, A Letter To George Washington, March 1968, pp. 44–45.

Lossing, Benson J., *The Pictorial Field Book Of The Revolution*, New York, 1852, Vol. II.

Mather, F. G., *The Refugees of 1776 From Long Island To Connecticut*, New York, 1913.

McDevitt, Robert F., *Connecticut Attacked: A British Viewpoint*, Pequot Press, Chester, Conn., 1974.

Middlebrook, Louis F., *History Of Maritime Connecticut During The American Revolution, 1775–1793*, Salem, Mass., 1925, Vol. II.

Nelson, Cindy Ellen, *Privateering By Long Islanders In The American Revolution, Journal of Long Island History*, Vol. XI, Autumn 1974.

Onderdonk, Henry, *Revolutionary Incidents Of Queens County*, 1846, Reissued, Port Washington, N.Y., 1970.

Onderdonk, Henry, *Revolutionary Incidents of Suffolk and Kings Counties*, 1849, Reissued, Port Washington, N.Y., 1970.

Schenck, Elizabeth Hubbell, *History Of Fairfield, Fairfield County, Connecticut*, New York, 1905, Vol. II.

Smith, Hervey Garrett, *Patriot Peddler, Long Island Forum*, April, 1975, pp. 66–67.

Smith, Hervey Garrett, *Colonel Benjamin Tallmadge, Long Island Forum*, Jan. 1976, pp. 4–5.

Tallmadge, Colonel Benjamin, *Memoir*, Henry Phelps Johnson, Editor, New York, 1904.

Thompson, Benjamin F., *History Of Long Island*, 3rd Edition, Port Washington, L.I., 1962, Vol. I.

Van Dusen, Albert Edward, *The Trade Of Revolutionary Connecticut*, Ph.D. Dissertation in History Univ. Penna., 1948.

Yeager, Edna Howell, *The Committee Of Safety, Long Island Forum*, July 1975, pp. 136–138.

DIRECTOR'S PAGE

By the time these observations appear in *The Log*, 4 July 1976 will have come and gone and our country will be halfway through its Bicentenary. The Tall Ships will have plied the waters of the ancient towns of Newport and New Amsterdam, the echoes of the welcoming cannon will have dissolved, the stately vessels themselves will have become a memory and New York City will be back to its problems of survival. Elsewhere in the land the Independence Day parades, fireworks, picnics and oratory will have subsided, but the drum beats of the bicentennial celebration will still be heard on mountains, in valleys, across the plains and along the shores of America.

In this year of our Bicentenary it is fitting, as well as a very good thing, that Americans look back to those events which had their beginnings "on the Rude Bridge that arched the flood" in Concord, and in towns and hamlets throughout the Colonies. As we look with pride to this first chapter of our country in festival and celebration, we should not disregard those pages of history and human endeavor that have followed over the past 200 years. For the resolution and courage, idealism and faith, independence and industry that fired the colonists during the Revolution have been emulated generation after generation down through the years, and it is the acts of a people, great acts and small, working in unity and independent spirit that forged this country out of the oratory that produced the Constitution and the courage of ragged militia and homespun farmers.

It is fitting that we recall some of these events and endeavors, and some of the men who brought them about, because I believe the Bicentenary should include not only events to celebrate but men and happenings upon which to ponder and thus learn afresh: Washington, Adams, Jefferson, Lincoln, Oliver Wendell Holmes, Truman; Eli Whitney, Donald McKay, the Wright brothers, Carl Sandburg, Teddy Roosevelt, Charles Lindbergh, Martin Luther King; Saratoga, Gettysburg, Belleau Wood, the beaches of Normandy.

The Bicentenary is but a pause in our history—time to give thanks, to take stock of ourselves, to derive inspiration, and to plan for the third century. As we try to relate our past to the present in contemplation of the future, the words of an American (whose name has sadly been lost since he spoke them more than a century ago) have viable meaning today: "You cannot bring about prosperity by discouraging thrift. You cannot strengthen the weak by weakening the strong. You cannot help the wage-earner by pulling down the wage-payer. You cannot further the brotherhood of man by encouraging class hatred. You cannot help the poor by destroying the rich. You cannot keep out of trouble by spending more than you earn. You cannot grow character and courage by taking away a man's initiative and independence. You cannot help men permanently by doing for them what they could and should do for themselves."

May the Bicentenary be more than a year of celebration; may it also be a year in which to rediscover some lessons that have grown dim, upon which America can rekindle its leadership and strengthen its resolve.

Waldo Chy. Johnston

BOOK REVIEWS

Sensible Cruising Designs. By L. Francis Herreshoff. (Camden, Maine: International Marine Publishing Company, 1973. ix + 393 pp. Illustrations, photographs, tables, and epilogue. $20.00.)

This book contains the nine "how-to-build" articles, complete with drawings, that L. Francis Herreshoff wrote for *Rudder* magazine 20 to 30 years ago. It also contains the plans (not always complete) for some 44 other boats: canoes, sailing dinghies, daysailers, cruising sloops and ketches, and ocean cruising yachts as well. Thus the public now has in one volume the hard-to-find *Rudder* articles and those drawings that were formerly seen only by those who ordered the designs or were intimate to Mr. Herreshoff.

Sensible Cruising Designs is a classic book; no one who cares for pleasure boats should be without it. It is a monument to the man and that monument is the man's work. In yacht designing Francis Herreshoff had the eye of an artist and in his writings you can feel that the touch of the poet was at times upon him. A handful of designs (much more than most designers can lay claim to) are absolutely beautiful: big *Ticonderoga*, lovely *Bounty* and *Tioga*, swift *Ariminta*, and exquisite little *Quiet Tune*. Plans and photographs of these boats are in this book and their beauty is timeless.

Witty, puckish, preachy, Mr. Herreshoff's writings bristle with convictions and ex cathedra pronouncements, which are inbued with the wisdom gained from many paddles, many rows, and many sails in a great many craft of various types and sizes. What the innocent would expect to be a description of the cabin layout of the H28 ketch turns into a dissertation on sensible cruising or on decorous living. Whether expounding on the cedar bucket, the icebox ("a terrible thing") or whatever else, his wit sparkles and crackles, ever trenchant. Of course, our interest is always his interest:

> "My only object is to help you to get more hours under sail out where the mackeral, gulls, and tern wheel in the sunshine."

The core of the book is the designs, drawings of all manner of boats—his range was from dinghies to a J-boat—construction drawings, sail plans, rigging drawings, specifications, drawings of details and fittings—an encyclopedia for those who would study what is here. His construction designs, especially those showing the backbone (keel, deadwood, stem and transom) are models of logic and simplicity. The backbone is a most important part of a boat and the fewer joints and stopwaters in it the stronger it will be and less likely to leak. Mr. Herreshoff's designs in this regard are exemplary. The same thing is true of his rigging and fitting designs.

Although anything but a democrat, Mr. Herreshoff always had concern for the average person, of getting him on the water in a way that was decorous, tasteful, and according to his pocketbook. Thus he designed the double-paddle canoe (design #57) for the amateur builder. For the family of moderate means he designed the H28 cruising ketch. She is a capacious, roomy boat for 28 feet and not a dull sailer. Yet everything about the H28 is designed with the amateur in mind, but marvelously there is no unsuccessful compromise in the boat—a simple keel casting, simple (though typically Herreshoff) backbone construction, a fairly easy shape to plank up, and light rigging fittings, well designed and easily made out of bronze flat stock.

The book is supported by good photographs and a capable commentary by Roger Taylor on most of the designs. The only fault with the book is the binding which is not strong enough and will probably break in most cases.

Barry Thomas
MYSTIC SEAPORT, INC.

BOOK ANNOTATIONS

American Sailing Craft. By Howard I. Chapelle. (Camden, Maine: International Marine Publishing Co., 1975. xiii + 239 pp. Illustrations and index. $13.50)

Reprint of the 1939 Crown Publishing Company edition. This is a golden opportunity for all who have been unable to locate a first or second edition of this standard work. No maritime bookshelf should be without a copy.

The Best of Sail Trim. (Boston: Sail Books, Inc., 1975. vii + 280 pp. Illustrations and photographs. $11.95.)

This anthology from the pages of *Sail* magazine brings together under one cover an excel-

lent series of articles on "the art and theory of sail handling."

This Is Boat Tuning For Speed. By Fred Imhoff and Lex Pranger. (Boston: Sail Books, Inc., 1975. vii + 143 pp. Photographs [mostly color] and illustrations. $12.95.)

For the out and out racing buff. The joint authors have impressive credentials from international and Olympic competition.

Coastal Navigation Step By Step. By Warren Norville. (Camden, Maine: International Marine Publishing Co., 1975. ix + 203 pp. Photographs, illustrations, tables, bibliography and index. $15.00.)

Should prove as successful as the author's *Celestial Navigation Step By Step.* In particular, a must for weekend cruisers.

Four-Masted Schooners of the East Coast. By Paul C. Morris. (Orleans, Mass.: Lower Cape Publishing Co., 1975. xiii + 189 pp. Illustrations, appendix and index. $19.50.)

A complete list of all four-masted schooners built or sailed on the east coast of the United States. Brief history of the type, the builders, and operations of the vessels. Unfortunately, the work is riddled with both typographical and factual errors. A revised edition could become a fine reference work.

Guide To Shells. Text by A. P. H. Oliver and illustrations by James Nicholls. (New York: Quadrangle/The New York Times Book Co., 1975. 320 pp. Color illustrations and index. $9.95.)

A handy, small-sized 19½ x 12 cm. field guide to some 1200 seashells. Most are Gastropoda, but Bivalvia, Lamellibranchia or Pelecypoda, Cephalopoda, Scaphopoda, Amphineura and Monolacophora are represented.

Marine Metals Manual. By Roger Pretzer. (Camden, Maine: International Marine Publishing Co., 1975. xiv + 64 pp. Illustrations, tables, glossary and index. $5.95.)

This volume boils down a great deal of metallurgy source materials into a useful reference for this specific purpose.

The Mariner's Catalog, Volume 3. Edited by George Putz and Peter H. Spectre. (Camden, Maine: International Marine Publishing Co., 1975. 190 pp. Illustrations and index. $5.95.)

Here is Volume 3 and every bit as good as the first two. This series is fast becoming an indispensable source book.

Old Marblehead, A Camera Impression by Samuel Chamberlain. Revised and enlarged by Narcissa G. Chamberlain. (New York: Hastings House, 1975. 89 pp. Photographs. $5.95.)

A small book packed with art photography of this charming New England seaport. Many have expanded caption text.

The Sea Dogs. By Neville Williams. (New York: Macmillan Publishing Co., 1975. 278 pp. Illustrations [come color], further reading list, acknowledgments and index. $15.00.)

The sub-title of *Privateers, Plunder and Piracy in the Elizabethan Age* most aptly describes this excellent overview of an era by an eminent Tudor historian. Prodigious illustrations complement the text.

The Sea Serpent Journal, Hugh McCulloch Gregory's Voyage Around The World In A Clipper Ship, 1854–55. Edited by Robert H. Burgess. (Charlottesville: University Press of Virginia, published for the Maritime Museum, 1975. vii + 142 pp. Photographs, data [chronology], glossary and index. n.p.)

With the thousands of logbooks and journals available to professional scholars willing to travel, it is indeed most gratifying to have an excellent example of one type appear in print. The story is a good one and the final product is of a high standard expected of this editor and a university press. One really hopes that a host of readers will have an opportunity to enjoy this book, particularly those who may never be able to use an original manuscript.

Secrets of The Sea. By Lloyd Mallan. (New York: Arco Publishers, 1976. 112 pp. Photographs and illustrations. $2.00, paper.)

A compendium of 19 subject areas of man's experience with the sea; the atmosphere above the surface, and down to the seabed. Ranging from the pure sciences through warfare, commerce, and myths, it is a very compact overview.

ACQUISITIONS

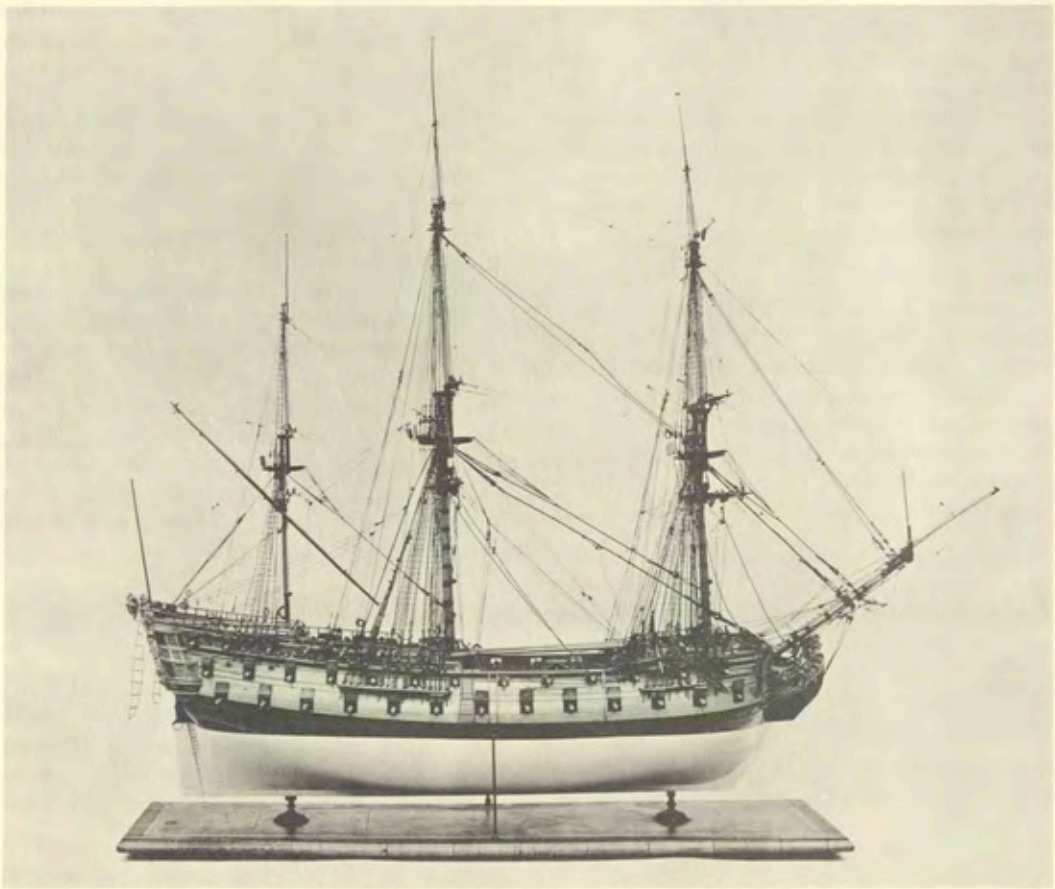
One of the most significant objects to be added to the collections of Mystic Seaport in recent years is the British Admiralty model of H.M.S. *Burford*, a gift from Mr. John P. Morgan II in honor of his father, Junius S. Morgan, who purchased the model in 1929.

While the Seaport emphasizes American maritime history, we feel that we have an obligation to exhibit objects such as this model which exemplify the highest standards of the maritime arts.

H.M.S. *Burford* was built in England in 1722 as a third rate of 70 guns and was Admiral Edward Vernon's flagship at the capture of Puerto Bello in 1739. This model was built at the time of the ship's construction and is documented as having belonged to Admiral Vernon. In 1930, when the *Burford* model was over 200 years old, the acknowledged international authority on such artifacts, G. S. Laird Clowes, wrote, "The importance of the model of the *Burford*, outside the historic associations of the ship, lies in the fact that the detail, rigging, gun-fittings, etc, is unsurpassed in any other contemporary model of the period and that the rigging is contemporary, very perfect and entirely unrestored—its careful preservation is therefore of first importance."

One interesting side light is that George Washington's brother Laurence served in this ship as a mid-shipman under Admiral Vernon and honored his commanding officer by naming his American home, Mount Vernon, after him.

The model is on regular exhibition in the R. J. Schaefer Building at the Seaport.





This fierce-eyed eagle, staring down from among a collection of eagles in the Stillman Building celebrating America's independence in this bicentennial year, commemorates the unhappy career of one of the largest vessels built in the Extreme Clipper period of the latter half of the 19th century. The *Great Republic* was launched in East Boston on 4 October 1853—a Donald McKay design, 335 feet overall, four-masted, displacing 4,555 tons. Before she ever set a sail, she burned in New York harbor with a $300,000 cargo of wheat. Raised and rebuilt by Captain Nathaniel Palmer of Stonington, Connecticut, she plied the seas until 1872 when she was abandoned at sea on a voyage from Rio de Janeiro to St. John, New Brunswick. But her figurehead, kept by Captain Palmer, survived to be handed down through his family as a magnificent example of the dying art of ship decoration. Carved by S. W. Gleason and Sons in Boston, it is now a Mystic Seaport treasure, as big as a man and a monumental tribute to the maritime wood carver's art.

PHOTO CREDITS: p. 35 top, courtesy Bath Marine Museum, Bath, Me.; p. 35 bottom, p. 39 from *Colonial Vessels* by William A. Baker; p. 36 from *Sailing Ships* by Howard I. Chapelle; pp. 41, 42 courtesy Mariners Museum, Newport News, Va.; pp. 44, 45, 46, 47 courtesy Connecticut Historical Society, Hartford, Ct.; p. 48 courtesy Essex Institute, Salem, Mass.; p. 51 courtesy Wadsworth Atheneum, Hartford, Ct.; p. 53 courtesy Acton Library, Old Saybrook Historical Society and Connecticut State Library; p. 54 courtesy New Haven Colony Historical Society; p. 55 top courtesy Peabody Museum of Salem, Mass.; p. 55 bottom, p. 57 from *History of Maritime Connecticut During the Revolution*, Vol. II, by Louis F. Middlebrook; pp. 60 64, 67 from *Pictorial Field Book of New Haven* by J. B. Lossing; p. 65 from *Connecticut Historical Collections* by J. W. Barber.



THE LOG OF MYSTIC SEAPORT

Mystic, Connecticut 06355

Non-Profit Organization
U.S. Postage Paid
Mystic, Connecticut
Permit No. 1