Virginia B. Anderson

Maritime Mystic

The Marine Historical Association

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Mystic, Connecticut

No. 39 • Price $2.00

January, 1962

Contents

Foreword

MYSTIC, as one of the busy little seaports that dotted the New England coast a century ago to become ghostly memories for today, differs from the others in that memory has been brought to life in the restoration now known as Mystic Seaport.

From the inspirational qualities of the ships, docks and seaport facilities that reproduce the conditions under which our seafaring forefathers strove to further our Country's development, Mrs. Virginia Anderson has developed a study of Maritime Mystic which does much to illuminate the efforts and traits of those who influenced the evolution of American character.

Maritime Mystic is the story of a typical New England community which had its seafaring glory in the period which climaxed with the peak days of the Age of Sail. The book is the outcome of painstaking research into the life and activities of men and women, families and firms, sloops, schooners and ships which helped create a heritage we must not forget. Historic data has been woven into a fabric that gives new insight into the seaport life of the past, supplemented by fresh information concerning some of the happenings recounted in earlier studies of the area.

It is a happy fact that Mrs. Anderson's concept emanated from her thesis as a student at the Munson Institute of American History which operates as a graduate seminar of the Marine Historical Association. Much of her source material came from the Stillman Library of Mystic Seaport.

As a resident of Stonington Township for many years, she is an avid student of the shipping and ship-building activities of the region. She now teaches at the Groton Heights School, Groton, Connecticut.

Because the Marine Historical Association, through the Munson Institute, is endeavoring to bring the history of American shipping into proper focus within the realm of American history, Mrs. Anderson's book is peculiarly appropriate as an addition to our list of publications. It offers significant interpretation of the enterprise and courage, the sagacity and hardihood which distinguished the area and furnishes a text for the physical

picture of Mystic in the Mid-Nineteenth Century, now shown in the Association's newest exhibit, the comprehensive scale model "Mystic River Diorama" housed in its own building on the Mystic Seaport grounds.

Edouard A. Stackpole

CHAPTER I

The Mystic River Area

Location

LANDWARD from the eastern tip of Long Island, immediately north of Montauk Point lies a diminutive island called Fishers Island, New York. It is roughly similar in shape, parallel to Long Island, and lies about three miles off the Connecticut shore. Between this elongated sandbar and Connecticut is Fishers Island Sound opening into Long Island Sound to the west and into Block Island Sound to the east. On the mainland across Fishers Island Sound and directly north of Clay Point and East Point on Fishers Island is a small portion of the southern shore of Connecticut, which together with the adjacent water, is the subject of this study. It is the Mystic River area.

The first name by which white men knew the river was Siccanemos, or River of the Sachem. De Laet, a Dutch geographer, drew it on a map of the area in 1616 for Captain Adrian Block, a Dutch explorer who sailed the New England coast in the early seventeenth century.[1]

Geographic Description and Natural Resources

Barely five miles in length, the river really was an arm of the sea. It was navigable for about two miles from its mouth by vessels drawing as much as sixteen feet of water. Two miles upriver from Fishers Island Sound there was a bar of hard sand about fifteen rods in width that allowed only thirteen feet draft at high water. Above the bar the channel continued at a sixteen foot depth nearly to the head of the river. The entire channel was crooked and required alert attention on the part of friend or foe, native or immigrant.

In the century of the area's settlement most people traveled by foot or by canoe or small sailing vessel. One who arrived by water passed several small islands covered by scrubby growth. These came to be called Mouse, Penny, Sixpenny, Mason's, Abigail, Andrews, and Dodge Islands. Sixpenny Island was wooded and valuable enough to become a property grant in itself. The largest island at the mouth of the river later belonged to one John Mason and his name was given to it.

Proceeding upriver beyond the sheltered harbor, the newly-arrived white man observed high, rocky cliffs at intervals on both sides. Heavy woods of white oak, ash, cedar, pine and spruce were nearby. The meandering channel with its strong tides and currents, sunken rocks, and hidden mudbanks, claimed his attention, but so did the numbers of points of land extending into the river. Some were wooded and some were covered with marsh grasses which looked like good prospective hay for cattle. These promontories were to become ideal sites for building and launching vessels, but the early settlers first looked for farm and pasture lands.

On the west bank and running approximately parallel with it was a high steep ridge for about half the length of the river. A brook joined the river from the west, then the land rose again steeply in a transverse, rolling ridge, one of several at the base of a highland that was observable far at sea and which came to be known as Lantern Hill. At the head of the river, another stream, powerful little Mystic, or Mystick Brook poured in its deposits of silt carried from the highlands to the north. Here lay some good farm land.

At the beginning of colonization in 1650 the settlers did not select landholdings around a common. Most immigrants came by water and many chose parcels of land "laid out a hundred poles in breadth" along the river which brought them to their settling place. Theirs were scattered holdings and each was removed from any neighbor's claim for a number of years. As late as the Revolution less than two dozen houses dotted the length of the Mystic River.

Links with Other Communities

Until 1660 there was no way to cross the river except by traveling around the head of the river or crossing in one's own boat. In 1660 the General Court of Connecticut appointed Robert Burrows as ferryman. He was empowered to charge a groat, four pence, to carry a man and a horse from his Halfway House under the "mountain of rock" on the west bank to a point on the east bank halfway down the river's length. Thus the sparse settlements on each side of the river were linked and this was the beginning of the commercial transportation by water that was to figure so prominently in the area's later economic history.

Although transportation in and out of the area was at first most easily and most frequently accomplished by water, land links with other communities began in 1652. In that year a road twelve miles long was opened to connect the Mystic River settlers with their mother settlement, Nameaug, or Pequot, later called New London. The road ran from "Groton Bank" on the east side of the Thames River through Poquonnock to Fort Hill and

then dwindled into a mere pathway leading three miles down to the valley of the Mystic. It followed old Indian trails and was laid out to be eight rods or one hundred and sixteen feet wide. It became the basis for U.S. Route One through the area in succeeding centuries.

Little more roadbuilding was done until 1669. Undoubtedly the ease and availability of water transportation were more appealing than the difficulties of hewing highways through an area heavily covered with timber and stone. But in 1669 a road was laid out between the head of the Mystic River and Kitchamaug Ford on the Pawcatuck River ten miles to the east. It, too, followed the old Pequot Indian trail and it was laid out to be four rods wide. In the same year another road was built that linked the head of the Mystic with a settlement at Norwich twelve miles north of Nameaug on the Thames River.

These land connections obviously were of vital concern to the colonists, for in September, 1674, the General Court of Connecticut ruled that all men between sixteen and sixty were liable for public highway maintenance work during the fall and winter months. With the use of this conscripted labor, a second road to the east was laid out in March, 1680. It connected what was by that time known as Head of Mystic with Wequetequock about eight miles away. Mail service was inaugurated along all these roads by post riders in 1693. By 1740, stagecoaches, running on their fourteen-day journeys between Boston and New York, were making regular stops at the Mystic settlement. Subsidiary roads built in 1709 and 1729 leading to the west and southwest portions of the area helped feed traffic to the coach lines.

Between 1790 and 1820 there was an extraordinary amount of roadbuilding in the country at large, and in New England itself one hundred and twenty highways were built during that period.[2] The Mystic area lay in the paths of several of these roads. At the advent of the nineteenth century when the New London–Providence Turnpike opened, the way was open for a stream of settlers to come into the valley by land. This, coupled with the always available water transportation, meant that the natural resources of the area, its arable land, hay fields, shipbuilding sites, offshore fishing grounds, and timber supplies surely would be developed.

CHAPTER II

Political Development of the Area

THE MATURING of the economy of the Mystic River area was accompanied by a political history that began as early as 1631. In that year the area was included in the Warwick Patent. This document granted the land between the Connecticut and Narragansett Rivers, westward to the Pacific Ocean, to Lord Say and Sele, Lord Brooke, and other Englishmen interested in the New World. They commissioned John Winthrop, Jr., son of the Massachusetts governor, to build a fort near the mouth of the Connecticut River, in order to forestall the Dutch, who already had a trading post near Hartford. By 1635 the fort had been built at Saybrook. This was the fourth settlement on the Connecticut River. The three earlier ones were Wethersfield, Windsor, and Hartford.

Early Occupancy

At the time the white men came, the Pequot Indians were in possession of all the land between the Connecticut River and Weekapaug Creek, a span of shoreline approximately forty-five miles long and including the Mystic River area. Fifty years earlier they had crossed from the Hudson River area and had conquered the peaceful Connecticut Mohegans, Nameaugs, and Nahanticks.[1] As conquerors they extorted tribute in the form of wampum, or beads made from clam shells, in use as money.

Between 1630 and 1633 the Pequots and Rhode Island Narragansetts clashed. The latter were equally haughty and courageous warriors, but the Pequots were able to extend their boundaries ten miles to the east beyond the Pawcatuck River. Thus white settlers arrived in an atmosphere of Indian warfare that was to plague them for many years.

The Indian tribes did not confine themselves to fighting each other. In 1637 they laid siege to the fort at Saybrook. Because the settlers in the area had migrated from Massachusetts, they turned to the older plantation for help. When assistance was delayed, the Assembly of the three Connecticut River towns of Wethersfield, Windsor, and Hartford raised a force of ninety men under Major John Mason. The little army sailed down the Con-

necticut River and raised the siege of the fort at Saybrook. They then wisely passed by the Thames River where there was a gathering of unfriendly Pequots, and proceeded eastward to try to enlist aid from Canonicus and Ninigret, chiefs of the Narragansetts.

Some Narragansetts and Uncas, a friendly Mohegan, together with a band of warriors agreed to attack the Pequots. They headed west, but most of the Narragansetts halted at Kitchamaug Ford. The rest of the army moved along Pequot Trail to the head of the Mystic and camped at Porter's Rocks, on the west bank of the river.

In the night of June 5, 1637, Mason and Uncas attacked the Pequots in their palisaded fort on the heights above Porter's Rocks and destroyed it with a terrible slaughter. They proceeded to a second stronghold atop Fort Hill further to the west, and took it also. Next day the victors marched to Pequot, on the Thames River, where they were met by a hundred and sixty Massachusetts men who had finally arrived by ship to help. This force moved westward along the coast as far as Fairfield, and within a month all but exterminated the Pequots.

There were three results of this war: the territory between the Pawcatuck and the Thames rivers was opened to white settlement; Uncas became a recognized friend of the English, a fact which concomitantly aroused the ire of the Narragansetts; and Massachusetts and Connecticut both claimed rights to the territory.[2]

In 1644 the Massachusetts claim to the area was made formal when John Winthrop, Jr. obtained a grant from the Massachusetts General Court, and the right was given him to make a settlement at Pequot, which became Nameaug. The town was officially settled by Massachusetts men in 1646. However, it soon was transferred to Connecticut by the Commissioners of the United Colonies. This official group was made up of two delegates each from Plymouth Plantation, Massachusetts Bay, Connecticut Colony, and New Haven Colony.[3]

The settlers at Nameaug, having had their claim to the lands lying east of the Mystic River confirmed by the General Court of Connecticut, made their first grant on that side in November, 1651. It comprised one hundred acres, and was granted to Captain John Mason. The September session had already granted him Chippachaug, the largest island at the mouth of the Mystic River. Thereafter it bore his name. An additional one hundred acres adjoining on the mainland was also conferred on Mason.

In 1651 the Captain failed to persuade a remnant of defeated Pequots to remove from land along the Mystic that was close to his island. He did extract a one-sided promise that they would hold the English blameless of

damage to their crops by English cattle, but be responsible for damage to English corn by their cattle.[4]

Subsequently Mason's boundary was set still further to the east, so that his property was washed on three sides by salt water. Pequotsepos Brook, on the fourth side, became a well-known boundary between his land and that granted to Cavalry Captain George Denison.[5, 6]

The latter was captain of the local trainband, or militia, at Nameaug. In 1651 he was granted two hundred acres in Pequotsepos Valley, north and east of Mason's property. On the property was a great quantity of marsh hay for his horses.

Robert Burrows, another grantee, had come to New England with the Pilgrims. He had been driven out of Manchester, England, with his two brothers because they were Baptists. About 1643 he had settled at Nameaug. When lands vacated by the Pequots on the Mystic River were distributed in 1651, he settled on the west bank, and was to run the first ferry on the river. John Packer and Robert Park received grants at the same time on the west bank and Packer chose a tract to the south of Burrows.

Nameaug made a series of land grants the next year. Reverend Richard Blinman received 260 acres east of the Head of Mystic, which he later sold to his brother-in-law Thomas Park. John Gallup, Jr. received 200 acres on the east bank south of Blinman and west of Denison. Denison and Gallup had come together from Roxbury to Nameaug. The latter was a son of a ship captain and trader. Two hundred acres each were granted to James Morgan, Mrs. Margaret Lake, a widow, and to Robert Park, brother of Thomas Park.[7] Sixpenny Island was granted to Robert Hempstead, John Stebbins, and John Gallup; Ram Island went to John Winthrop, Jr., and a little bushy island over against Captain Mason's island went to Thomas Miner.[8]

Meanwhile in 1651, the Connecticut General Court granted a trade monopoly to Thomas Stanton on the Pawcatuck River, and it is believed that his link with Massachusetts, Nameaug, and Barbados was the deciding factor in bringing the first Massachusetts settlers to lands east of the Mystic.

Miner and William Chesebrough had taken up a tract of land in Wequetequock, and Miner had erected a house. Walter Palmer joined Chesebrough, bought Governor Haynes' grant there, embracing Miner's, but allowed Miner to build his new home at Mistuxet the same year.

It is not probable that houses were built and actual settlements made on the east bank of the river before 1653. Nathaniel Beebe probably moved to his farm in 1654. Three other Beebe brothers also received grants.[9] Cap-

tain Denison moved from Nameaug to a lean-to surrounded by a palisade at Pequotsepos, bringing his second wife and all of his six children.

The next year Mason acquired Sixpenny Island. Aaron Starke and John Fish were said to be of Mystic in 1655. The Fish family settled north of Burrows on the west bank. Their lands extended westward over Pequot Hill.[10] John Bennett came in 1660, Edmund Fanning in 1662, and Edward Culver in 1664.[11] Three years later John Frink, the first carpenter, came from Ipswich, Massachusetts, and bought land at Taugwonk, northeast of the Head of the River.

Although by the late 1660's white settlers were arriving in some numbers, lower Mystic, or Noank Neck, as it was called, and a tract of land west of Lantern Hill were still in the possession of a remnant of straggling Pequots. They were loath to leave the area their forefathers had conquered. In 1675–76 occurred a year of terror for the settlers when Sir Edmund Andros, royal governor of New York and New England, stirred up political trouble involving the Indians. With the death of "King Philip," the Indian leader, trouble quieted, and the settlers were free to pursue their political disputes with one another and with their neighbors.

Connecticut–Massachusetts–Rhode Island Claims

Massachusetts attempted to settle the Pequot country before Connecticut could send in planters, and Connecticut resisted the Massachusetts claims. Both colonies referred the matter to the Commissioners of the United Colonies, who in 1646 decided in favor of Connecticut. John Winthrop, Jr. laid out the township of Nameaug in 1646, four miles wide on each side of the Thames River, and six miles north from the sea. The next year Massachusetts opened the case again and the Commissioners refused to change their findings. In 1648 Winthrop recognized Connecticut authority and was commissioned magistrate by the General Court of this colony.

A friend of Winthrop's, William Chesebrough, supposing he was in Massachusetts territory, settled about five miles east of Mystic River on a part of the shoreline known as Wequetequock. There he found a sheltered cove and a great quantity of marsh hay. The Connecticut General Court haled him into Hartford on at least two occasions. He was suspected of illegal trade in rum and firearms with the Indians. In Hartford he had to give bonds that while he was outside the lawful limits of any settlement, in the wilderness, he would engage in no unlawful trade, and would submit the names of new settlers in his area.

Nameaug was unhappy at this situation and offered to confirm his title

if he would submit to their authority. This was actually outside the power of Nameaug to offer, for its boundaries extended only four miles beyond the "Groton Bank," or the east side of the Thames River, and not the seventeen miles to the east where Chesebrough had settled.

Sometime about 1649, the General Court conveniently extended the bounds of Nameaug as far east as the Pawcatuck River, and all land titles were confirmed as far as that stream. William Chesebrough's and Thomas Miner's lands at Wequetequock, Thomas Stanton's trading post on the Pawcatuck, Walter Palmer's three hundred acres between, Miner's new home at Mistuxet, George Denison's property at Pequotsepos, John Gallup's and Robert Park's holdings half way up the Mystic, and all of Mason's lands were given title under Connecticut.

In 1654 the first local name of Mystic was applied to the area along the shore between the Mystic River and Stony Brook to the east. Pawcatuck was designated as the name for the shore area between Stony Brook and the Pawcatuck River. The naming was opposed by Nameaug and Groton Bank, but the opponents were defeated.[12]

The first petition, September 1, 1654, by the settlers east of the Mystic for a separate town and church was refused by the Connecticut General Court. Nevertheless, the settlers were of an independent Puritan stamp. Situated twelve to fifteen miles from Nameaug, with two rivers to cross and no ferries, they could hardly attend church, and they objected to paying taxes to support Mr. Blinman at Nameaug. The Congregational church was supported by the colony in those days.[13]

The matter was not resolved, and on May 9, 1657, a second petition was likewise refused. A committee was appointed to "issue matters betwene the inhabitants of Mystik & Pawcatuck & Pequett."[14] Pequot and Nameaug were used interchangeably as early names for the community which became the city of New London. At the same General Court it was ordered that the inhabitants continue to pay Mr. Blinman his dues.

At this time George Denison's brother-in-law, Rev. William Thompson of the London Missionary Society, came to this area to preach to the settlers and the Indians, and services were held in one of the homes.

On October 15, 1657, George Denison, John Gallup, and three other local leaders in the "name of the rest of the inhabitants and with their consent" petitioned the Massachusetts Governor and Magistrates "that you would please to accept us under your Government and grant unto us the liberty and privileges of a township."[15] This petition was taken to Boston by Denison on horseback, and in less than a week Massachusetts made a formal claim at Hartford to land east of the Pequot, or Thames, River.

The medium clipper *David Crockett* ready for launching at the Greenman Shipyard. Scene from the Mystic River Diorama at Mystic Seaport.

Gravel Street, on the west bank of Mystic River, where ship masters built their homes a century ago.

At the spring session of the Massachusetts General Court in May, 1658, the petition was renewed, and repeated in June, crying that the settlers were "deprived of protection by either Massachusetts or Connecticut." This answer was received:

> The Court thinks meete to forbear further acting till there is a meeting of Commissioners, and do expect and require Inhabitants to carry themselves and order their affairs peaceably and by common agreement in the meanwhile and till other provision be made in their behalf.[16]

Thereupon the Association of Pawcatuck People was drawn up and agreed to, a local declaration of independence in miniature. (See Appendix A.)

By September, 1658, the United Commissioners effected a compromise by declaring all former Pequot territory west of the Mystic River as belonging to Connecticut, all east of the Mystic River as belonging to Massachusetts.

In the following month the Massachusetts General Court designated the land between the Pawcatuck and Mystic Rivers by the name of Southertown in the county of Suffolk, and made appointments accordingly. There were three commissioners to try cases, a constable, and a clerk of writs empowered to solemnize marriages. The bounds of the new town extended eight miles to the north from the mouth of the Mystic River.

For the next three years the inhabitants met frequently to choose the location for their own church and finally named the site Agreement Hill, the permanent home of the "Road Church." This road, originally the Pequot Trail, had been widened by the settlers traveling from the Head of the River to Kitchamaug Ford on the Pawcatuck River.

Meanwhile the Connecticut General Court resolved to reopen the Mystic-Pawcatuck case before the United Commissioners. Major Mason was chosen commissioner to act for the colony. Caulkins dates this part of her story in September, 1658; Haynes dates his in 1659. He goes on to relate that in September, 1660, and 1661, Major Mason twice more pleaded the case with the same result.

During the winter of 1660–61 an old Pequot captain by the name of Socho complicated the situation further by claiming lands east of Pawcatuck, as far as Misquamicut, selling them to planters from Newport, Middletown, and Portsmouth, Rhode Island. They, in turn, held their new possessions as part of the Rhode Island plantations.

The settlers here were vexed by this development, and litigations over conflicting claims went on for years. The conflict in jurisdiction meant in

some cases that each of the three colonies granted land in the same area.

In January, 1662 the Selectmen of Southertown petitioned the Massachusetts General Court for protection against encroachments of both Connecticut and Rhode Island settlers.

> On April 22 of that year, in England, John Winthrop, as agent for Connecticut, received a charter for the Colony from Charles II, which was characterized as the most liberal colonial charter ever granted. It gave exceptional rights of self government which the colony cherished and later had to defend with vigor. This famous charter set the Pawcatuck River as the eastern boundary of Connecticut, automatically restoring "Southertown" to Connecticut from Massachusetts.[17]

That land lying east of the Pawcatuck River became Rhode Island, and Massachusetts yielded obedience to the new charter.[18]

The October session of the General Assembly read the charter publicly to assembled freemen of Connecticut and it became the recognized law of the land. The Assembly ordered the inhabitants of "Mystic and Pawcatuck, not Southertown, to forbear to exercise authority by virtue of any other colonies."[19] It further ordered the inhabitants to pay £20 as their share of the expense of obtaining the charter. Two-thirds could be paid in wheat, at four shillings a bushel, and one-third in peas, at three shillings six pence.

While the title was not disputed, Caulkins points out that it was not wholly accepted until about 1665.[20] Haynes records that the town officially surrendered to Connecticut at Norwich on June 8, 1664.[21] He tells a little more of the story. In October the Connecticut General Court "forgave and buried in perpetual oblivion all irregularities except Captain Denison's." Next day the Court ordered the inhabitants to present true lists of their estates and inventories of all their cattle. In November the people protested that their taxes had been doubled in excess of the £20 levied for the expenses in securing the new charter. Captain Denison remained defiant, and was haled into the local court for marrying a couple under his Massachusetts commission.[22] It was 1666 before Denison was granted an individual pardon by Connecticut.

In 1665 the name Southertown had officially been changed back to Mystic, only to be superseded in 1666 by the name of Stonington. Boundaries were set from the Mystic to the Pawcatuck Rivers, and extended to ten miles inland from Fishers Island Sound.

The boundary dispute with Rhode Island flared up, and although commissioners of both colonies met, no compromise came of their deliberations. Even when Governor Winthrop arrived the town meetings were unproductive.

A treaty with the Narragansetts in 1678 opened territory to the east of the Pawcatuck River to settlers. Connecticut protested Governor John Cranston's usurpation of his authority by sending Rhode Islanders into the disputed lands.[23]

King Charles II appointed a royal commission in 1683 to settle the Narragansett land dispute. The commissioners met in August and held hearings, reporting in October that the head of Little Narragansett Bay was the eastern limit of Connecticut.[24]

The Duke of York was crowned James II in 1685 and he lost no time being disagreeable. On July 9 he ordered the Governor and Company of Connecticut to appear before him and show by what right they exercised their authority. Communications were such that the warrant was delivered in Hartford the day after the appointed day of appearance in London. Accordingly the colony sent William Whiting to London as its agent. In October a second royal warrant was issued against the colony ordering appearance in eight days on penalty of forfeiture of its charter. The warrant was delivered considerably longer than eight days hence, on December twenty-eighth. Meanwhile, James had revoked all New England charters, appointing Joseph Dudley to govern in his name.[25]

By May of 1686 James proclaimed Rhode Island a royal colony and discharged all inhabitants from any allegiance to Connecticut. In December Sir Edmund Andros arrived in Boston with two companies of soldiers to support his authority as Governor of New England. Among his first acts was a demand on Connecticut to surrender its charter.

Whiting had suggested that Governor Treat come to London, but when it appeared that the charter would not be saved, the Assembly did not send him. During a meeting of Andros and the Governor and the Council on October 31, 1687, the Charter was whisked away at an opportune moment and hidden in an oak tree. The furious Andros recorded that he "took into his hands the government of the colony of Connecticut, it being by His Majesty annexed to Massachusetts and the other colonies under His Excellency's government—FINIS."[26]

The turbulence in Connecticut died down late in 1688 when Prince William of Orange, and Mary, daughter of Charles I, landed in England, and James II fled to France. When this news reached Boston, the former colony officers were restored and Andros and his group were seized. Connecticut government also resumed under Governor Treat.[27] The charter was restored and the new sovereigns proved friendly toward the colonies.

At long last, in 1703, a joint committee fixed the Connecticut–Rhode Island boundary at the Pawcatuck River.

Meanwhile, in 1664, the town of Stonington assumed its permanent east and west boundaries. In 1705 the town of Groton was separated from the town of New London. Groton's east and west boundaries became the Mystic and Thames Rivers. Where, previously, the Mystic River had been a boundary between colonies, it now became a dividing line between towns, but it will become evident that the division was geographic only.

By this time the planters were electing town and colony officers, levying and collecting taxes for their churches, towns, and colony. And they were furnishing their quotas of men to resist the French and Indians from the north.

Revolution, War of 1812, and the Privateers

Boundary and land title disputes of the seventeenth and early eighteenth centuries paled in significance beside the large-scale differences dividing Connecticut and her sister colonies from the mother country. Open revolution broke in 1776. To understand some of the affairs which led the colonists to become rebellious, one should carefully review the provocations which led to the acts of rebellion.

As early as 1708 the colony had issued £8,000 in paper money in order to meet the expenses of the war with the French and the Indians. By 1726 a royal order was issued forbidding any colony to issue paper money. It appears the order was circumvented in places, for in 1733 the New London Society for Trade and Commerce was dissolved for issuing bills of exchange, a form of paper money.

For her rapid succession of wars England enacted high import duties on goods from the colonies in order to raise war revenues. By 1738 there was a real financial distress throughout New England arising from the inflation of paper currency, which had depreciated at this time to only one-fifth of its gold value. The next year England was at war with Spain. The New England colonies planned an expedition against the Spanish West Indies, for which the Connecticut Assembly issued £30,000 in bills of credit. Of that amount £8,000 was to pay the public debt, and the balance was sold to the inhabitants.[28]

The wars drained the colonies of hard cash and ten years hence Connecticut counted her cost for support of the French War in terms of £250,000 Sterling. In 1749 England reimbursed the New England colonies and they were enabled to redeem most of their paper money.

Colonial commerce was hampered by the English mercantile policy and the continuing shortage of currency. The Spanish and Portuguese coins

which came in by way of the West Indies trade, in terms of pounds, shillings, and pence, always exchanged with the balance against the colonies.[29]

The relationships with the mother country were strong politically, but loose economically and sentimentally. Where the Tudors had been remembered for organizing law and order, the Stuarts began to emphasize the importance of the permanent settlements, influenced doubtless by Richard Hakluyt, an early propagandizer and patriot. He was the one who foresaw the colonies as a great market, a source of a merchant marine, a source of valuable raw materials, and a source of income from customs.[30]

Parliament, under Cromwell, enacted the first of a long series of Navigation Laws in 1651. Inspired by the economic and political theory that colonies exist for the benefit of the mother country, the laws required that all goods imported into England from Asia, Africa, or America must be carried only in ships of which the proprietor, master, and major portion of the crew were English. The purpose of the laws was threefold: to cripple Holland; to punish the tobacco planters in Virginia; and to build up British shipping.[31, 32] Goods from Europe were to be imported only in English ships or in foreign vessels belonging to the country of origin.

A second Navigation Act in 1660 provided goods must thereafter be carried to and from England only in vessels built and manned in Great Britain or her colonies. Certain enumerated articles could be shipped only to England, and the list was enlarged from time to time.

By 1663 an effort was made to force most imports from Europe to the colonies to proceed via England.[33] Customs were then to be collected at each transshipment, further enhancing the British treasury.

The colonies began to look elsewhere for markets, and the results of the high tariffs in England helped to substitute markets in southern Europe and in the West Indies that were not British. Lumber and slaves were added to the tropical trade. With each of the hardships the Navigation Acts added, the grumblings of the colonial mercantilists accumulated, and as early as 1754 Benjamin Franklin openly proposed a plan of federated government for the colonies.[35]

After the end of the French and Indian War in 1763, the political and economic policies toward the colonies began to tighten. Parliament began to debate the laws which were enacted in London and which were being ignored or evaded over here. In an effort to enforce the Sugar Act of 1764, the former duties were cut in half, with the intent that enforcement would be strengthened, and the duties would be paid.

In 1765 the Stamp Act followed, requiring that from one-half pence up

to £10 be affixed to newspapers, almanacs, pamphlets, and legal papers. Along with this tax came the belief that the colonists should pay for their protection, and the Quartering Act of 1765 made the colonists responsible for "light, lodging, and fuel" of the British garrisons.[36]

The result was a boycott of English goods, and strong opposition in both England and America brought the repeal of the Stamp Act and a downward revision of the Sugar Act. The Quartering Act was followed in 1767 by the Townshend Acts placing duties on glass, paper, painters' colors, lead and tea. A third Navigation Law added custom duties in the American colonies and appointed Crown revenue officers to collect them.

Another boycott proved more effective. The duties were repealed except three pence on a pound of tea. The well-known incident in Boston Harbor December 16, 1773 brought in retaliation several consequences: the port of Boston was closed; the Massachusetts Charter suffered some deletions of powers; colonial agents were brought to trial in England; the Quartering Act was renewed; and the land between the Ohio and the Great Lakes was annexed to Quebec.[37]

All these facts might seem somewhat removed from the history of the Mystic River area, except for the fact that communications from Massachusetts to New York and Baltimore and Williamsburg by coach or rider passed along the Head of the River. Vessels touched in via the Sound route. The area was always aware of major events in the outside world.

> The mercantile policy produced a "disorganization of trade and an economic depression contributing to unrest. It uncovered: (1) a hatred to taxation; (2) no ready money, and legislation prevented issuing any paper money; (3) hostility of British government to efforts of Virginia to end the importation of slaves; (4) frontiersmen opposed the regulation and control of the westward movement of the population; (5) fear of Anglican episcopacy by the Dutch, German, Irish, and Negroes of the Middle Colonies; (6) aloofness of New Englanders to the distant kingdom which had a century before persecuted and banished their ancestors to the woods."[38]

The colonies enjoyed a social and economic independence as well as an intellectual independence, evident in their schools, colleges, and printing establishments. Besides these general results, some domestic industries were locally initiated. Before and during the Revolution the Shaws ran a mill for the manufacture of potash at Taugwonk, and Deacon Joseph Denison erected a sugar mill, operated by horsepower, where sweet-corn stalks were ground and the juice pressed out and boiled down for molasses and sugar.[39]

In 1773 England and Holland were again at war. The Dutch recaptured Manhattan and their fleet, cruising in Long Island Sound blockaded the

coast, greatly interfering with the trade of Connecticut ports. In November a Connecticut militia under Major Robert Treat was engaged, and John Denison of Mystic was appointed ensign of a company of one hundred dragoons.[40]

This same John Denison, with John Brown, Jr., and Simeon Rhodes, was a member of the Committee of Correspondence, from the Stonington side of the river. These men were active in gathering corn and money for besieged Boston in 1774, and in collecting ammunition, clothes, and food for soldiers.[41] Groton men on the Committee of Correspondence were Captain William Ledyard, Thomas Mumford, Ben Adam Gallup, Dr. Amos Prentice, Charles Eldredge, Jr., Deacon John Hurbut, and Amos Gere. Thomas Mumford was one of the foremost and most efficient Sons of Liberty, and an agent of the Secret Committee of the Continental Congress, which met in September, 1774, in Philadelphia. (See Appendix B.)

It was with the greatest difficulty that men could be properly armed and equipped, because of the scarcity of munitions of war. The fort at Stonington never did receive the cannons designed for it; they were used at New London and Groton.

On May 10, 1775, the Assembly appointed a man from the Head of the River, Stonington Representative William Williams, to the Colony Council of Safety. This day the second Continental Congress met.

With the tension mounting as the Long Island Sound blockade tightened, privateering became a patriotic, profitable enterprise, the only alternative for men whose ships otherwise would be idle. Selfish interests were involved as well as patriotic motives; rich loot and winning a share of the prizes added to the adventure. Shortly, recruiting for the Continental Navy was relatively easy. Five hundred prizes were brought into Connecticut alone, according to Van Dusen. The other side of the picture shows, of course, that many also were caught. Captains had to show their vessels' commissions, and officials were posted in the ports to inspect them. Confiscation followed when goods were taken, and rewards to informers became common.[42] When the ports were most heavily blockaded, trade was rerouted inland to the Hudson, and some of the inland towns experienced boom times.

In July, 1775, the brig *Nancy,* owned by a Boston Tory, Josiah Winslow, with a cargo of 19,000 gallons of molasses, was forced into Stonington in a storm. She was captured by volunteers under Captain Robert Niles from Mason's Island, and taken to Norwich to prevent her recapture by the British.

The year of '76 the British frigates *Amazon* and *Niger* patrolled Fishers Island Sound. In January, Fort Griswold at Groton was completed. The

first naval expedition of the new Continental Congress was fitted out at New London. The ships *Alfred, Columbus, Andria Doria,* and *Cabot* came back after three months, having captured eighty-eight cannons, seventy prisoners, and a wealth of supplies. Thereafter local vessels mounting odd mortars and field pieces on their decks became privateers to worry the British.

The most lively activity during the Revolution was the performance of the whaleboats. From twelve to twenty youths banded together in informal companies. They used forty craft, like sloops, designed for easy maneuverability. Equipped with eight long oars, these boats were not dependent on wind or tide. Formerly they had been used to capture off-shore whales, or for fishing, or for freighting short haul ventures. These small "companies" were natural units to volunteer as task forces, and for four years they worked on surreptitious missions across Long Island Sound, scavenging, abducting, reprising, pillaging. They became proficient at disrupting traffic in and out of New York harbor.

In October the schooner *Fortune,* Captain Andrew Palmer, two guns, ten men, was commissioned a privateer. She was captured off New London by the *Amazon.*

Early in December a fleet of eleven British warships sailed inside Montauk Point, Long Island, and were joined by a fleet of transports next day. Within a week Newport was captured and it became the British base of operations.

There were many efforts to relieve the drastic shortage of supplies. Stephen Wilcox operated a salt works a couple of miles up the Mystic River, another salt works was located above that one, and a third in Stonington. Salt was produced by evaporating sea water in great iron kettles.[43]

In March, 1777, Nathaniel Miner was ordered to purchase or seize 10,000 pounds of cheese, and Captain Nathan Palmer had to buy twenty thousand-weight of cheese to supply the state's troops. They were authorized to seize and take more than was sufficient for family use, and pay the price fixed by law, which was six pence per pound, and to make a report.[44]

Captain James Sheffield in the privateer *Revenge* captured the *Thames* and took his prize to Boston.

> "In March the British frigates *Amazon, Greyhound,* and *Lark,* with seven transports, anchored off Mystic. The men raided Fishers Island for provisions for the army in New York City, then proceded thither, leaving the *Amazon* to patrol between Block Island and Watch Hill."[45]

In April Captain Asa Palmer in the privateer *America* captured the *Britannia,* 45 tons, *Generous Friend,* 80 tons, *Success,* 40 tons, and *Polly,*

40 tons. Three months later the British captured the *America* and took her to Newport.

The schooner *Sally,* two guns, ten men, Captain Joseph Dodge, Wait Rathbun, owner, was commandeered as a victualler ship for the Continental Army in August.

On January 1, 1778 the Articles of Confederation, adopted by the Continental Congress, were read to a Stonington town meeting. Peleg Chesebrough was appointed solicitor for subscriptions to the Connecticut War Loan Fund. On March 6, Captain Joseph Dodge commissioned the sloop *Beaver* as a privateer. She boasted twelve guns.

Captain James Eldredge was appointed in August, 1779, to a committee to cooperate in a colony-wide effort to stop currency deflation. Stonington voted a bonus of "sixty dollars in coin" for men enlisting for three years or the duration, and to double the soldier's pay of forty shillings a month. In July, 1780, an additional bonus was approved. Authority was given the committee to borrow on the credit of the town the "hard money" for the payments.[46] The collector of moneys was directed to receive "no more paper money."[47]

The first Groton expenditures, after the town separated from New London, were for clothing supplied for non-commissioned officers and soldiers who had enlisted in the Continental Army. Committees were appointed to gather supplies, to help dependents of soldiers, and to receive the town's proportion of salt and other provisions such as grain and flour for the troops.

The snow, *Block Princess,* Captain Humphrey Crary, twelve guns and twelve men, Dudley Woodbridge owner, was commissioned as a privateer in 1781.

On September 6, 1781 the particularly vicious attack at Fort Griswold took place. Thirty-two British fleet vessels with twenty-four transports poured eight hundred men into Groton Bank, and a thousand more into New London. Thomas Williams and Sgt. Daniel Stanton, defenders from Mystic, were killed in that assault. Williams had engaged in the West Indies trade before the war and had more recently been privateering. Stanton had presented his fiancée only a few days before the battle a "pattern of splendid brocaded silk" which he had taken from the prize ship *Hannah* as a part of his share of her cargo.

In October Captain Amos Denison carried provisions to the army in his sloop *Right Hand.* Captain Joseph Dodge in the sloop *Centurion,* John Waldron owner, captured the Tory whaleboat off Fishers Island in April, 1782. The same month the British sloop *Hussey* was brought into Stoning-

ton as a prize, and in May the schooner *Count de Grasse,* Captain Ebenezer Stanton, two guns, and a crew of thirty, was commissioned as a privateer. Early in August Captain Jacob Riley arrived in Stonington. He was of the privateer *Hero,* had been captured and exchanged by the British. Before that he had gained fame when he commanded the *Abigail,* privateer.[48]

The cessation of hostilities was proclaimed to the army April 19, 1783.

Further British Navigation Acts between 1783–87 closed the British West Indies to American merchantmen, and placed our traders under the same disadvantages which confronted other foreign nations. By her high tariffs England had made it unprofitable to transport anything to her but naval stores. Her manufactured goods were needed here, but there was no specie and no product to trade with profit.

France, Holland, and Spain refused the United States reciprocal commercial treaties. The Tripolitan pirates made the Mediterranean unbearable. But the privateersmen were resourceful and carried on a clandestine trade. Fishermen and whalers were going farther afloat. Slaves, tea, and silks became trade items.[49]

Under the Articles of Confederation, the infant government could not levy taxes or regulate commerce. Leaders in the demand for a more practicable government were: (1) the holders of federal and state securities, (2) speculators in western lands, and (3) owners of capital.[50] Their will prevailed and a new form of constitutional government was ratified and began to function in 1789. Under the new constitution, Congress was given power to levy custom duties and excises. Duties were passed on thirty items, and these moneys produced some revenue. To establish credit, the government agreed to assume in full the foreign and domestic debt. A national bank was established.

The first tariff act of Congress on July 4, 1789, placed a reduction of ten per centum of the duties on goods imported into the United States in ships owned and built in America. Less than half the duty was charged on tea imported directly from the Far East in American ships. A subsequent act levied six cents a ton on American-built ships owned by Americans entering our ports; thirty cents a ton on American-built ships owned by foreigners, and fifty cents a ton on foreign-built and owned ships. The stiffer discriminations threw coastwise traffic into American hands.

Besides the levies, a code of laws on the regulation of seamen, enlightened for the time, made clear the legal rights of master and seamen, and were a real aid in commercial expansion. By 1798 the merchantmen found the federal government quite ready to dispatch its diminutive navy to make reprisals upon the French privateers and Tripolitan pirates.[51] The latter were

not subdued until 1815, but when they were, it was a recognized victory for the young American Navy.

By the end of 1793 England was at war with France, and by 1797 America had her own undeclared war with France, stemming from her refusal to become France's open ally. American and other neutral traffic was in jeopardy on the high seas. In spite of threats and difficulties, however, the American merchant marine expanded.

Great Britain attempted to enforce the Rule of 1756 which held that trade not open to neutrals in time of peace should not be open in time of war. Our trade with the French West Indies and France was chiefly in provisions, which England held to be contraband. Britain claimed the right to stop and search American ships for deserters, who joined American crews because of the higher wages and better seamen's code. Her high-handedness made for increasing friction between 1789 and 1812.[52]

John Munson's Stonington weekly, *America's Friend* of July 29, 1807, carried this news item:

> "There were several American-born seamen aboard a British squadron which lately blockaded Norfolk who were impressed, and who for a long time have been compelled by the blood-thirsty commanders to wear out their days in these detested floating Bastilles. Among a number of names who have signified to the Collector at Norfolk that this is the case we have noticed that of Jeremiah Holmes of Stonington [side of Mystic]. It is long since known that he was impressed and every measure prescribed by law and customs to procure his release have been adopted but in vain; he yet is a slave to tyranny and it is impossible to predict with any degree of certainty how long he will remain in the power of the enemies to our country, to humanity, and to the law of nations."[53]

Jefferson's Embargo Act of 1807 prohibited American vessels from sailing to foreign ports. Great dissatisfaction was expressed in New England, and the Act was repealed in 1809. In its place the Non Intercourse Act prohibited trade only with Great Britain, France, and their possessions, and this also was repealed in a year. Mason's Second Bill annulled all restrictions on commerce, with this qualification:

> "If either France or England withdrew their decrees against our shipping, the Non Intercourse Act would be revived against the other belligerent. Napoleon repealed his prohibition, and the Act was revived against England. The economic boycott was sound, but England did not yield soon enough to avoid another war."[54]

In 1812 Madison declared war for these causes: (1) violations of the Americans' flag on the high seas, (2) confiscation of American ships, (3) illegal impressment of American seamen, (4) blockade of American ports,

(5) flagrantly illegal Orders in Council, and (6) inciting Indians against American borders.[55]

It did not take long for the maritime interests to find a vent for their energies and capital in privateering. The war served as a temporary setback to the merchant marine, but also served as an impetus to manufacturing and the introduction of the Industrial Revolution here.[56]

Little had been done by the general government for the defense of the coast. At the time of the declaration of war on June 18, 1812, Mystic was but a small village, composed largely of enterprising seafaring men. During the war, and especially after the spring of 1813, the Connecticut seacoast was blockaded by a British squadron. Notwithstanding, there were a few runners who managed to carry on some business with New York. On the west bank of the Mystic River, south of the ferry, a rampart was thrown up on a rise, named Fort Rachel.

During the spring of 1813, the sloop *Fox,* Captain Jesse Crary, Mystic, was captured by the British squadron off Block Island. Crary managed to escape and returned to Mystic. There he fitted out the sloop *Hero,* armed her with a four-pounder, and enlisted volunteers to recapture the *Fox.* They sailed in convoy to Point Judith, then to Block Island, where the *Fox* was discovered. She was taken after a hand-to-hand battle lasting thirty minutes.[57]

Blockade-runner Nat Palmer began sailing on coastal vessels in 1813, helping to keep the supply line open between Portland and New York. He maintained that his crew on stormy nights and in the coastal fog could bypass the enemy "smelling their way blindfolded."

In June of this year Jeremiah Haley and twenty men drove off a barge attempting to recapture the sloop *Victory* ashore in the Mystic River. In October British marines in a rowing barge attempted to burn Mystic. Mistaking the channel in the dark, they moved into a loop in the channel at Williams Cove instead, and were repulsed south of the ferry.

Fishers Island Sound was being patrolled by Commodore Thomas Hardy's fleet. Patrolling warships were the *Ramilles,* 74 guns, *Pactolus,* 44 guns, *Dispatch,* 22 guns, the bombship *Terror,* and the *Orpheus.* A British officer is credited with having said, "That is a cursed little hornet's nest, the worst place I ever had anything to do with. I've never heard of more daring fellows than the Mystickers. They get up their devilish torpedoes to blow up our ships. We meant to blow up their place and came well nigh doing it too."[58]

The British having seized and burned several local vessels, the residents bought and fitted out a small privateer, *Yankee,* a double-banked galley

with twelve oars. She captured an English smuggler off Plum Island in Fishers Island Sound. Her cargo of silk, calicoes, cloth, block tin, and medicines was auctioned for $6,000. Later the *Yankee* captured a sloop off the Massachusetts coast. Then followed the capture of a schooner off the eastern end of Fishers Island. The schooner's English cargo was sold in Newport for $30,000. Outside these local activities many Mystic men were to be found in privateers from other ports, or in our tiny navy. For instance, Nathaniel Fanning, brother of Edmund, is credited with throwing from the rigging of the *Bonhomme Richard* the well-directed hand grenade into the magazine of the *Serapis*.[59]

Captain Conkling and a crew of Mystic men in the fast sailing sloop *Eagle* took six prizes in a day. Conkling, however, held too many prisoners and had spared too many for prize crews. The captives, seizing advantage of the *Eagle's* crew, rose and killed all on board except a Negro concealed under a sail. Lieutenant Daniel Eldredge, who was prize master on one of the five prizes, saw from a distance the recapture as it proceeded. Becalmed, he could give no help.[60]

During the winter of 1813–14 a regular guard was posted at Fort Rachel, with headquarters in John Miner's house nearby. Early in 1814 the Treaty of Fontainebleau released a large part of the British army, who were transported and employed against the United States. In May a signal pole with tar barrels was put up near the home of Major Nathan Wheeler. All local troops were alerted, and upon a signal, were to march south as soon as a company had assembled.[61]

In July the British squadron had been largely augmented; their armament was imposing; invasion appeared to be imminent. The blockade grew close and effective. The Americans were divided in sentiment. President Madison called an extra session of Congress on August 8, 1814.

On the ninth, Stonington militiamen were joined by these men from Mystic: Captain Jeremiah Holmes, Simeon Haley, Ebenezer and Isaac Denison, and Nathaniel Clift. Jesse Dean, Dean Gallup, Fred Haley, Jedediah Reed joined them shortly.

Captain Holmes' three years' impressed service on board a British man-o-war, the greater part of which he served as captain of a gun, enabled him to direct the guns in the battery with great precision. He double-shotted the eighteen pounders and sent the shot plunging through the brig *Pactolus* below her water line.[63] In her hurry to get away the brig dumped her load of cannon balls in the harbor.

Two days after Hardy's repulse at Stonington, the British fleet was lying off the Hummocks, near New London. Aware of the enemy's desire for

plunder, a combination of militia and seamen in Mystic planned a ruse to decoy a barge from the fleet. Simeon Haley, Paul Burrows, Henry Hart, Peter Waddington, and Ezekiel Tufts sent out of the Mystic River a large, sharp fishing boat, formidably laden with boxes, bags, barrels. In apparent disregard of the enemy, they were seen crowding all sail westward. The expected enemy barge appeared, endeavoring to head them off and take them prize. In a confusion of irregular rowing, the fishermen landed at Groton Long Point just before being overtaken by their pursuers, who also landed and gave chase.[64] A company of forty Mystic volunteers under Captain John Barber rose and fired and the enemy surrendered.[65]

After this engagement the war moved toward Baltimore and Washington, D.C. The end of hostilities was celebrated the next February. Mystic residents turned back to their daily occupations. Sealing and shipbuilding revived, mills were built, and the economy of the region quickened pace.

CHAPTER III

Industries and Trade Ashore

Farming

THE SETTLERS contrived to make their living by alternately farming, fishing, and shipbuilding, depending on the season and necessity. Early in their residence they discovered that the sea was more generous than the soil. From it they garnered not only sustenance but also an important and seemingly inexhaustible commodity for trade. The trading itself was more easily accomplished via water routes than by land trails.

Faced with the desirability of food other than fish, the settlers learned that, in the brief growing season caused by the stony fields, the only staples were such crops as Indian corn, peas, and wheat. Shortly, after a great deal of hard work, a surplus of foodstuffs began to appear as trade items, particularly on voyages to the West Indies.

By 1660 these were common rates of "country pay" for articles in every day use: wheat, four shillings per bushel; peas, three shillings per bushel; Indian corn, two shillings six pence; beef, fifty shillings per barrel; pork, seventy shillings per barrel.

In the absence of coin of the realm, the common currency continued to be the Pequots' wampum. On March 23, 1656, Thomas Miner paid twelve shillings, three pence for his colony taxes; and on May 23 he paid one firkin of butter and twelve pence worth of wampum for his year's due to the minister, Mr. Blinman, in Nameaug. Barter was an acceptable means of trading. In 1677 another record showed Miner's exchange of butter for fourteen pounds of cotton wool and a quart of rum, worth $6.25.

Seldom, at first, was cash necessary, although taxes and duties required cash. Wines and liquors were the only goods on which duties were imposed. Until 1654 a rum duty had not been laid, as it was a recent product of the West Indies. In that year there was an order by the General Court for the prohibition of the importation of rum, an order subsequently modified to allow the landing of rum for transshipment elsewhere.

In the early days, trade in cattle was an important business. On October 22, 1667, Thomas Miner drove a mixed herd to Boston by way of Narragansett and Providence.

By order of the General Court all Stonington cattle were branded with a "K," for during the 1660's there had been roving bands of cattle rustlers. There were many lawsuits over unbranded young stock.[1]

Never was agriculture easy in the Mystic River area. Stone walls strung along the hilly fields and pastures still stand as mute testimony to the ordeal of the early farmer, struggling to wrest a living from the soil. Rocks and ledges underlay the surface stones. Stands of virgin timber blunted the ax. By the end of the Revolution the local farmer no longer tried to make wheat one of his staple crops; by the end of the Civil War apples from the lush upstate New York orchards outsold the home grown product.

An early cooperative endeavor was dairy-farming. A Taugwonk creamery is listed as organized by local farmers. A second creamery was owned by the Wheeler family.

Poultry-raising, too, was a local means of livelihood. It is safe to say that in the Mystic area farming gave way to these two occupations. It is also safe to say that when the local farmer left his land and turned for his livelihood to shipbuilding or seafaring, he better understood the nature of the area in which he lived, and that he prospered, sometimes beyond his dreams.

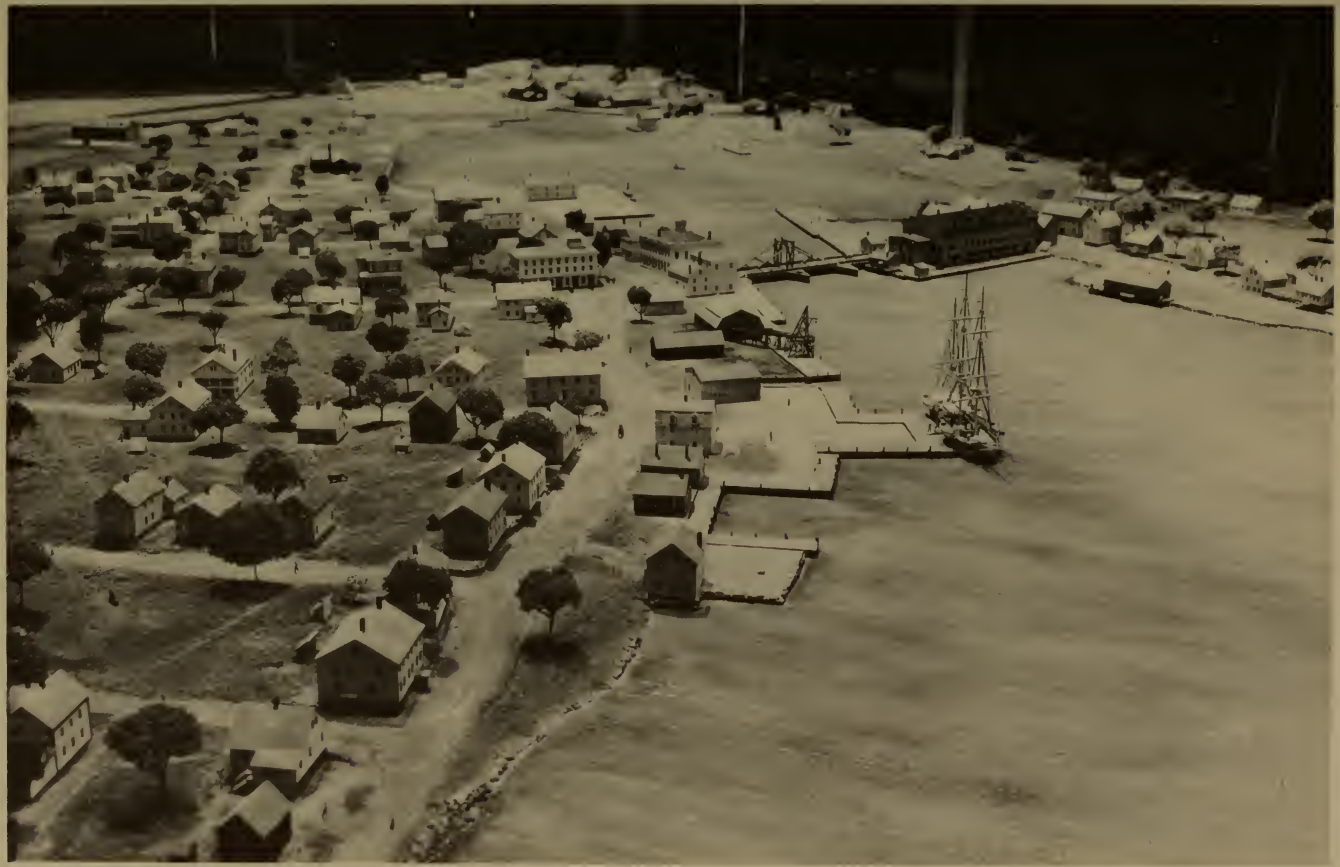
Manufacturing

The steady growth of small manufacturing in the Mystic area began early in its history with the building of grist and saw mills, which used water power from the local brooks. John Lamb leased the grist mill at the Head of the Mystic from Governor John Winthrop, Jr. in 1674. Because of its location and power this property was considered valuable. A new grist mill replaced the old in 1795.

In 1768 and 1779 two saw mills were set up, the former by Samuel Gallup on Mistuxet Brook, and the latter by Amos Denison.

In 1671 Jeremy Burch refused the town's offer of two lots, or twenty-four acres, three miles east of the Mystic River. He declined to remove from another colony and take up his trade as a blacksmith here. There was no smith until February, 1676, when the town offered the same monopoly to James Dean, of Taunton. Given two lots, his encouragement and support were pledged in money, pork, butter, and wheat. In September one hundred additional acres were granted him. Three men cut thatch, one carted it, two gave a day's work, and another gave three hundred laths to the new resident. A later note says that on June 1, 1682, the Selectmen officially certified that Dean "hath performed his condition made with the town."[2]

In 1698 a son by the same name succeeded to the business. He moved



Looking along Mystic River's eastern waterfront. The Mallory Wharf is in the center, with the whaleship *Coriolanus* tied up. Scene from Mystic River Diorama.

The ship *Frolic*. launched in 1869, with gunboats built for the Spanish Government.

within two years to a location nearer the Head of the River to build a fulling mill for cleaning and dressing woolen cloth on the brook known to this day as Dean's Mills. In 1720 Dean and his son John built a new dam and a larger fulling mill.

In 1772 a sign of manufacturing progress in the Mystic area appeared in the advent of the iron nail which replaced the older wooden peg. Sold in New London, the nails were made by Edmund Darrow from iron hoops.

In 1771, in an effort to encourage local manufactures, a Connecticut tax on retail sales on goods produced in the colonies was lifted.

In 1807 another James Dean installed machinery for weaving woolen and cotton goods. This establishment is now considered the first modern factory in the Mystic area.

By 1810 there was wide-spread opposition here and abroad to the introduction of all sorts of power-driven tools and machinery, on the premise that men would be put out of work by the machine.

In 1830 James Dean, the industrialist, retired at eighty years of age, selling his grist and textile mills to Captain Charles H. Smith, who again raised the dam, improved the millrace, and rented the property.

Of two later Mystic Manufacturing Companies, the first began business in 1814 with a capital of two hundred thousand dollars: "to make cotton and wool fabrics, brass, iron and wood in tools, engines and machines, grind grain into flour and mill." The directors bought Steven Avery's grist mill on Mystic Brook, formerly John Lamb's, adding two factories which were run and eventually bought by John Hyde. By 1865 a partnership of George L., Theophilus, and Charles G. Hyde organized at Mystic and took over the business.

Although the Hyde family's diverse enterprises passed out of their hands in later years, a planing mill and lumber yard built in 1820 by Joseph Cottrell continues a thriving lumber and hardware business in the hands of descendants.

Although the first anthracite coal in the United States had been mined at Mauch Chunk, Pennsylvania, in 1806, it was not until 1844 that it was first brought into Stonington in the sloop *Senate,* by Captain Elisha Wilcox. Three years later Isaac D. Holmes established the first Mystic coalyard. Coal was selling for five dollars a ton in 1876.

In 1848 Isaac, William P. and Silas Randall, William P. Smith, Nathan Chapman, and Leonard W. Moss founded the Reliance Machine Company, at Pistol Point, which in its beginning manufactured cotton gins. The company suffered great losses from Southern accounts during the Civil

War, and, with a large amount of new capital invested, turned to marine engines and boilers for nearly fifty Greenmans' and Mallory's large steamships, gunboats, and transports. In 1864 the founders sold out to the Pequot Machine Company from Norwich, who operated the plant for a year and a half as the Cotton Gin Company. In 1866 it became the Mystic River Hardware Company, with George Greenman president, employing a hundred people. This company made cotton gins, bookbinding machinery, the Mystic Glass Cylinder Pump, People's Coffee Mill, and other products. After various changes as to ownership and management, it was destroyed by fire in 1875.

In 1859 Timothy Watrous opened a brass foundry near Cottrell's planing mill. Early in the war Joseph Cottrell's machine shop was expanded into the Mystic Iron Works by Cottrell and David D. Mallory, and spread over parts of the Irons and Grinnell shipyard at Pistol Point. Simeon and Horatio N. Fish were prominent in this business, making marine engines and boilers, not only for local steamships, but also for a number of other vessels, sloops-of-war, and torpedo boats for the U.S. Navy. Production changed to textiles after the war and the business burned out in the fire of 1875.

Because the Mystic area provided an easy source of both transportation and water power, local manufacturers were interested in the manufacture of textiles.

Stockholders in the Mystic Woolen Company, organized with $75,000 capital, were Charles H. Mallory, Charles Grinnell, Chauncey Gleason, and Amos B. Taylor, $5,000 each; and David D. Mallory, Mystic Iron Works, and F. S. Bidwell $10,000 each. This mill made beaver cloth, a heavy felted material, napped on both sides. A weekly output sometimes amounted to two thousand yards.

In 1848 George Greenman and Company built a steam textile weaving mill at Greenmanville on the riverbank. This mill was the second one known as the Mystic Manufacturing Company. In 1859 the operatives held a festival in the hall over A. H. Simmons' store in Upper Mystic, "in celebration of the arrival of the time to cease evening labor." By 1896, after several changes of name and management, the J. W. Lathrop Company installed new machinery and added braided and twisted twine to the line already manufactured there.

Another flourishing business during the last quarter of the century, granite quarrying, was a natural outgrowth of two topographical facts of Mystic economic life, deep granite ledges, and ease of transportation by both boat and rail. One such company, the Mystic Valley Granite, owned by Allyn Williams, was operating at Quiambaug Cove in 1868.

On July 2, 1870, a five hundred pound powder blast raised one thousand tons of silex (silica) at Lantern Hill and thus inaugurated an open mine operation still profitable today.

An additional Mystic enterprise, located then on the west bank of the river in the 1880's, the Packer Tar Soap Company still manufactures the original product.

Little is recorded of the Fenner Cradle factory south of the West Mystic railroad station, which burned in 1885.

The Mystic Valley Water Company was incorporated in 1887, for $140,000, with Thomas E. Packer president. The company proposed bringing running water into Mystic and Stonington Borough homes, which until then had all depended on wells with hand pumps, and cisterns. Storage tanks in the attics of the "mansions" were filled by child labor in some of the larger families. The next year work began on brick buildings at Dean's Mills to house the pumps and equipment, and a reservoir was started.

Mystic's early interest in the manufacture of textiles continued. The Mystic Industrial Company was incorporated in 1894. Three years later $22,000 was raised by this company to bring a "German velvet mill" to Mystic. J. Stanton Williams gave a four-acre plot near the old Greenmanville store. In 1899 the Ramsden Brothers dyeing firm of Huddersfield, England, started a branch at Greenmanville. Within six years the Mystic Industrial Company had twice increased its capital, first to $90,000, then to $175,000 for an addition to the Rossie Velvet Mill. This doubled the size and gave employment to two hundred and fifty residents.

In 1897 another textile business, the Mystic Garter Company, was formed.

A new product appeared in 1896 when the Dickinson family operated the Mystic Distilling Company, a factory for the manufacture of witch hazel and soap.

James W. Lathrop from Worcester, Massachusetts, who had engaged in twine and witch hazel manufacturing in Mystic previously, in 1897 made a two-cycle gasoline marine engine in his barn. This was the beginning of the Lathrop Engine Company, which moved to its present factory site a year later, and organized as the J. W. Lathrop and Company.

In 1898 the Mystic Electric Light and Gas Company was chartered to provide electric lighting for Stonington Borough and Mystic. It shortly increased its capital to twenty thousand dollars, and purchased from Fred Denison a site for the power house south of the railroad tracks near the depot. The following year a telephone exchange was constructed in Mystic.

A survey of manufacturing shows that the Mystic businessman, like the

farmer, fared best when he most wisely used the salient topographical features of the locale. Abundant water power meant prosperity for the grist and textile manufacturer; ease of shipment by rail or by vessel spelled prosperity for the granite and silica miner as well as for the producer of soap and witch hazel. The manufacturing life of the area sprawled out along both banks of the Mystic River. One of these industries was, in the 1800's, to carry the name of Mystic from the River to the sea, and in time, to almost every busy port in the world.

Shipbuilding

Local boat construction had started very early—boats, sloops, shallops were indispensable. In the absence of any roads large bulky supplies had to be carried by water. The materials for shipbuilding were at hand. Through need and initiative the skill matured. Local tradition holds that a vessel was built for the West Indies trade as early as 1661, but her details have not been uncovered. Fish were abundant for local food supply as well as for trade. With the developing communication, transportation, and commerce by water, shipbuilding had to meet the continually increasing demand for quantity and size of craft.

Master builders went where their services were in demand; at first there were few permanent yards. A site was chosen on a shelving shore, suitable for building and launching a vessel, preferably adjacent to a deep, protected waterway. There were several such sites used near the Head of the River, for which some data can be found. Close proximity to the one essential raw material—lofty white pine and spruce, and tall white ash—was another natural advantage. Added to these local resources was an adequate supply of strong and willing manpower.

Ship designing at first was disarmingly simple; the master carpenter was the designer. Not until the nineteenth century was he to nail pieces of wood together and carve out his half models, take apart the pieces, make his drawings and patterns from them. Rarely were vessels made from drawn, elaborate plans as they are today.

Among the names of shipbuilders in New London between 1660 and 1665 appear those of Joseph Wells of Westerly, and John Leeds. In 1681 Joseph Wells built the forty-one foot sloop *Alexander and Martha* on the Mystic River for Daniel Stanton, Alex Pygan, and Samuel Rogers of New London.[3]

John Leeds was building vessels on the west bank of the Mystic in the 1680's. Before the end of the century, shipwrights John Packer, Joseph

Wells, and John Burrows, Jr. had established themselves on the Mystic River, where good ship timber could be obtained with only a short haul to the building and launching sites. Hurd adds the name of George Denison as an early shipbuilder.[4]

To what extent shipbuilding was carried on along the Mystic from the days of Joseph Wells down to the Revolution is difficult to verify because existing records are few as far as locations are concerned.

In 1724 the colony granted to a New London man, Richard Rogers, a ten-year monopoly for making canvas. Presumably he supplied the local shipbuilders with material for sails.

The first record of shipbuilding at the Head of the River mentions two *yards* in the pastorate of Rev. Timothy Wightman in 1757. This is the more remarkable when it is understood that as late as the Revolution the whole township had perhaps only two dozen homes. Head of the River had less than twelve dwellings, as did the community near the ferry, and at first the entire population lived on scattered sites, farming, fishing, seafaring. However, each in turn—agriculture, lumbering, and manufacturing—were to become secondary to shipping in local importance until the end of the golden age of sail.

In 1769 the Assembly appointed "Surveyors of Shipyards" to inspect ships in stocks and to assure good work and materials.

Eldredge Packer's yard was busy in 1784 and it prospered long after the War of 1812. This yard was on land formerly belonging to John Packer, also a shipwright, and it adjoined Packer's Ferry Landing. Here were built in 1784 the sloop *Polly,* seventy-one tons, and in 1800, the sloop *Hero,* a forty-seven foot privateer which would figure as Captain Nathaniel B. Palmer's famous scouting vessel in the Antarctic.

In 1795 Edward Packer, brother of Eldredge, launched the 51-ton sloop *Revenue.* In 1805 he built the sizable brig *Independence,* following these with a relatively large fleet of sloops, and several schooners, brigs, and brigantines. The brig *Friendship,* 127 tons, in 1804, and the schooner *Prudence Mary,* 150 tons, in 1807, were among his better known vessels. Although small, this yard has never been completely closed down.

In 1790 Benjamin Morrell built a three hundred ton ship at the Narrows on the Mystic, above the ferry. Two sloops, three brigs, a schooner, and two other large ships followed. In 1815 Morrell built the *Volunteer.*

In 1790 Thomas and James Latham were operating a yard in Noank, which would be a going concern for eighty years. Here another sloop *Polly* was built in 1793.

Also at Noank, in the 1790's, Roswell Avery Morgan's shipyard began operations. For three generations Morgans continued to build small craft, fishermen, coasters, and eventually yachts.

John Parks was known to be active building sloops near the mouth of the river soon after the Revolution.

In 1798 the Enoch Burrows yard was located at the Head of the River on the west side. Here the *Leader* was built. A large, fast craft, she was taken over by the infant United States Navy, and considered the fastest vessel in the service.

In the 1790's Christopher and David Leeds, shipwright sons of John Leeds, were busy on the east bank at the Head of the River, across from Enoch Burrows' yard. Prior to the War of 1812 the Leedses had to their credit a number of sizable vessels: their brig *Independence,* 168 tons, 1808; ship *Orris,* 239 tons, 1809; Brig *Almira,* 206 tons, 1810; and the schooner *Mary,* 168 tons, in 1811. This yard operated until the end of the 1830's.

Nathan Williams built the brig *Olive Branch,* 121 tons, in 1801, on a site probably just below the ferry, on the east bank.

In the year Louisiana was purchased from France, Simeon Holmes built the *Hardware,* 374 tons, probably the largest to be launched up to 1803. She was built on the east side of the Mystic.

In 1806 Joseph Sisson built the *Eliza,* 274 tons; Samuel Remington built the *Ann Williams,* 332 tons, and Amasa Miller came from New London to build the *Venus,* 209 tons. All these vessels were constructed on the Mystic. Paul Sheffield, another well known master carpenter, built the *Flora,* 338 tons, on the west bank in 1811.

In 1832, the year that the shipwrights in New England struck for a ten hour day, the Palmer yard began its operations. It adjoined the Morgan yard in Noank, on the southwest. Robert Palmer and his brothers turned out fishermen, coasters, later schooners, square riggers, and large steamers. This yard was to run up a record of 113 years of continuous shipbuilding under the same name. In the last quarter of the nineteenth century the Palmers operated the largest yard between Boston and New York. Nearly six hundred vessels, merchant, naval, sail, steam, and tow, were launched here.

By the time of the War of 1812, a fair number of vessels had been built at the Head of the River. After the blockades, operations were resumed in 1822, when the older vessels needed to be replaced by larger ones. A revival of interest in sealing and whaling gave impetus to renewed activity in the shipyards.

Silas Greenman, Jr., an able ship carpenter, came from Westerly, and occupied part of Leeds' yard on the east side at the Head of the River.

There was even a mill on part of the land run by water power from Mystic Brook. Here Greenman built the brig *Pulaski,* sixty-six tons, early in 1825. Later that year he built the *Bunker Hill,* 144 tons. Both were owned by William A. Fanning. Greenman operated the yard until 1833, laying down sloops, schooners, brigs, and an occasional ship.

Greenman's brother George joined him in 1826. Both Greenmans worked for Silas E. Burrows, but on their own they began to build sloops, schooners, and small fishing smacks. During the winter of 1832–3 they built a whaler, the *Thomas Williams,* 340 tons, in Westerly.

Silas E. Burrows in 1835 had employed two younger Greenman brothers in South America, enlarging his fleet in the Caribbean. The building of the 590-ton *John Baring* for Mr. Burrows required a change in site on the Mystic River to accommodate her dimensions. She was the largest ship yet laid down on the river. The Greenmans moved downstream to the Narrows and established their second yard there on the east side.

After Silas Greenman returned to Westerly in 1833, George formed a partnership with Clark, and with Thomas in 1837, the brothers who had come back from South America. The George Greenman Company continued until their deaths.

With the rapidly expanding whaling industry, the demand for larger vessels continued. The necessity for more land and deeper water forced the brothers to move again, in 1838, to Adams Point, still farther downstream. Joseph S. Williams sold them the land for one thousand seven hundred dollars. George was the head of the firm, responsible for all business contracts, often made orally. Clark was in charge of the yard, and Thomas became the designer of the vessels.[5]

Shortly a community was to grow up around the shipyard, including not only the homes of the owners, and those of their workmen, including the Chipman, Almy, and Rogers families, but also a store which sold "groceries and table necessities," a Seventh Day Baptist Church, and a mill for manufacturing worsted goods. Naturally enough, this self-contained community became known as Greenmanville.

At this new location the three brothers commenced building fishing vessels, schooners, and brigs for the Southern coastal trade. As business increased, with its demand for larger vessels, they built a number for the European trade. When the California trade opened, they built several still larger ships for that traffic. Three times successively they topped for size any vessel previously built in Connecticut.

The apprentice system for training young shipyard workers was standard procedure. One young man who had just completed his term learning to be a

sailmaker set out from New London on Christmas morning, 1816, with the intent of walking to Boston. He saw a fair-sized fleet at Mystic, and stayed to make his fortune on the river here. Charles Mallory, twenty, with but $1.25 in his pocket, found work in the busy little community, and engaged a small, unclapboarded room in one of the sail lofts. He heard that a Mr. Denison at the Head of the River had a small sheet iron stove. On talking with Mr. Denison it appeared that Mallory did not have the necessary $2.50 for its purchase. "How are you planning to get the stove to your room?" queried the owner, and, on the lad's reply, "Carry it on my back," Mr. Denison extended credit, and Mallory trudged back through six-inch snow to his room, twice warmed.

He plied his trade for about twenty years before he set up a shipyard of his own. In the meantime he cannily made small investments in the ventures of whalers whose sails he made or repaired, and branched into larger ventures. At one time he had an interest in thirty vessels.

In the 1836–9 period, John Brown built three schooners for Charles Mallory, the *Mobile, Swallow, Meteor.* Already Mallory was interested in several yards and master builders. Both prior to and during the years he worked his own yard, he financed some master builders who constructed for him on a contractural basis.

In 1853 his son, Charles Henry Mallory, bought Appleman's Point on the west bank, on which was located the Forsyth and Morgan yard. There John A. Forsyth built several schooners, the *Telegraph, Harriet Crocker, Mustang,* and *Josephine,* as well as the *Elizabeth F. Willetts,* an extreme clipper. Others followed until 1904.

Across the river, in the elder Mallory's "old yard" Peter Forsyth built clippers in the early '50's, following the '49 mercantile bark *Fanny.* Mason Crary Hill was the builder of Mallory's second clipper, the *Alboni,* 917 tons. There followed seven more clippers, six registered with Mallory as the managing owner, two in the name of New York owners, and one in the name of Gates and Company. Captain Gurdon Gates was the commander of the *Twilight,* 1,482 tons, from her building in 1857 to her sale in 1863.

Mallory and his contemporaries were open-minded in business enterprises. Mallory, the sailmaker, investor in whaling, experienced with small coasting vessels, branched into deep sea merchandising, then into fast ocean carriers and clippers. During the Civil War he built twenty-two steamers.

Like his father, C. H. Mallory had begun business in the sailmaker's trade. At fifteen he had gone to sea, and by 1839 he had been master of the *Appalachicola,* a brig in the coastal trade. In 1846 he had been selected to look after the elder Mallory's varied interests in New York, and had con-

tinued as his "confidential and competent" manager until he established his own firm in 1869. Eventually this new company was to own three shipping lines: one to Texas and Florida, one to Nassau and Matanzas, Cuba, and one to Brazil which was discontinued after three years.

Dexter Irons had begun building small vessels on the Mystic River in the late 1830's. The *Tortugas,* 55 tons, was built in 1839, following the schooners *Sultan* and *Julian,* and the sloops *Charles Carroll, Welcome,* and *American.* In 1840 Amos Grinnell joined Irons, and their partnership continued until the latter's death in 1858. From that year until 1864 the yard closed down. After the end of the Civil War Mason Crary Hill, the ship designer who had worked for Charles Mallory, joined Grinnell and they resumed operations under their combined names.

Mystic grew to be a self-sufficient shipbuilding community. From 1712 when Samuel Whipple had opened his iron works a few miles north of Head of the River, his forge had turned out anchors and ironwork for local vessels. As the demand continually grew for more and larger vessels, the local sawmills, rope walks, sail and rigging lofts supplied the master carpenters.

There were shops for the ship chandlers, who were dealers in groceries, small wares, and candles; for coopers, who were makers of barrels and casks; for block and trunnel makers, who fashioned the grooved pulleys and compressed wooden pegs made to swell when moistened; for figurehead carvers; for mast hoop makers; for makers of wedges and barrel bungs; spar yards, and the ship smiths.

From all these busy places came the sounds peculiar to each—the clatter of axes and mauls, the incessant scream of saws, the shouts and cries of sailers, riggers, stevedores, the clamor of boiler factories and forges, the ox and horsedrawn timber gears, trucks loaded with casks and crates, and handcarts piled high with coils of rigging or sailor dunnage. By 1850 each shipyard had its own sawmill to supplement the more distant ones established in the eighteenth century.[6]

The two decades between the finding of gold in California and the end of the '60's saw moving in and out of the wharves on the Mystic the blunt bowed old whalers, the clumsy coasters, the carraway boats (the small "carry away" fish ferries plying between the smacks that stayed on the fishing banks and the homeport), the fishing smacks, the packet sloops, and the round-sterned, lofty clippers.[7]

In 1853 Mystic's important shipyard sites were fixed for ninety years to come. They were owned by the Mallorys, the Greenmans, Irons and Grinnell, Maxson and Fish, the Morgans, and the Palmers. A shortlived enter-

prise was to appear in the early 1900's next to the bridge on the Groton side, where the Gilbert Transportation Company built a few multi-masted coasting schooners, but this yard went out of business in less than a decade.

The greatest activity in its three centuries occurred in Mystic between 1850 and 1870. The demand for transportation to California was followed by a demand for war transports and gunboats. The little village produced greater tonnage than any other place of equal size in America. Twenty-two vessels rated as clippers, passenger packets, brigs, schooners, ships, and during the war years, fifty-six steamships from three shipyards took their places in American maritime affairs. Until the war, the population had been about one thousand five hundred, but during that spurt of activity the number of people increased to three thousand six hundred. In those days men worked twelve hours a day at top speed, for the North was working as it never had before.[8] By the 1880 Census, the count had dropped back to 2,407.

Once a well-shaped wooden ship was built in a community, other builders copied it or made the attempt. The original builder also used what he considered a satisfactory basic model for construction of other ships, changing the length by adding the midship body, at times slightly altering the depth, and on rare occasions even "monkeying with the beam."[9]

In shipyards elsewhere, builders of clippers generally sought to copy John W. Griffith's ideas—sharp, hollow end lines, large deadrise, weak midship section. Samuel Harte Pook designed his clippers with a flat floor, but little deadrise, strong midship section, flaring bow, and powerful above-water lines, sharp entrance lines, and a long clean run under water. The Mystic builders were strongly influenced by Pook. It is said Pook:

> supplied the design of a clipper of about 1700 tons, with a flat floor and sharp ends, to have speed and carry well, to New York boat owners who did not want to build in Boston. Instead they contracted to build nearer New York. It is probable, viewing the *David Crockett,* built for Handy and Everett of New York by Greenman and Company, in 1853, and the *Andrew Jackson,* built for J. H. Brower and Company also of New York, by Irons and Grinnell in 1855, that the unusually modelled and excellent clippers turned out at Mystic owed their very evident class to the fact the builders followed model and ideas obtained directly or indirectly from Pook . . . the two ships have identical tonnage.[10]

During the clipper ship era, Mallory built more clippers (nine) that made more Cape Horn westward passages to California than any other builder. Of the twenty-two built on the river, his sizable clippers were outstandingly fast, good, reliable carriers, and profitable to operate, when most

of the sharp-lined, and all of the "extreme" clippers could not pay expenses in competitive trade.[11]

In 1853 a shipyard had begun operations at Oldfield, near the railroad station at West Mystic, slightly downstream from the railroad bridge. William Ellery Maxson, Captain Nathan G. Fish, Captain William Clift, B. F. Hoxie, and William Barber incorporated as Maxson, Fish and Company. This was the last of the important yards to begin operations on the river.

By the time the Civil War broke out, Maxson and Fish were sole partners in their firm. Among fourteen steamers, they built the *Galena,* which was designed by Pook. She was the first sea-going ironclad of the United States Navy. Lyman Dudley was responsible for the ironwork. The vessel was covered with railroad rails, on which inch-thick boiler plate was bolted, a new, revolutionary, critically important vessel.[12]

The sailing craft of this yard had no offsetting points of excellence, and they were outclassed when speed was demanded. But in the 1860's Maxson and Fish developed what Fairburn calls a "Down Easter" type, and Cutler terms "Cape Horners." These "half-clippers" made a history of their own, the *Garibaldi, Seminole,* and *Helicon,* to name three of them. They continued to set record speeds half a decade after the close of the clipper era.

Two Maxson and Fish screw steamers were sold to a Boston firm in 1865; the *Cassandra,* which had been built for Captain Jack Williams and others of Mystic, brought $103,000. The second, the *Augusta,* was purchased for $185,000. Thereafter the vessels were used as freighters between Boston and New Orleans.

The Mallorys early advocated building the fastest possible steamers to protect merchant sailing ships at sea, and to act as enemy commerce destroyers. In 1861 the *Eagle,* 200-ton propeller, was built in the extraordinary record of thirty-seven days. In six months three propellers and one gunboat were launched and a 300-ton propeller followed shortly. At the close of the war, the Mallorys turned to steam, and their early line of wooden steamers was built here. In all, they launched thirty-five.

Shipbuilding of the more capacious "Cape Horners" continued at the four principal yards another five years; several vessels were three deckers. From 1866 until 1874 the yard at Appleman's Point was reopened and produced several fast pilot boats and yachts for the Mallorys.

In 1860 MacKenzie and Haynes were building small ships at Mystic.

Three of the yards had orders in 1869 for gunboats for the Spanish government. Hill and Grinnell were to build five, Greenmans two, and the Mallorys eight. On August 4, 1869, the United States Marshal in the reve-

nue cutter *James Campbell* visited Charles Mallory with an order from President Grant to observe the neutrality law and to stop building the fifteen gunboats intended for use against Peru. After discussion it was decided that the boats could be built but should not leave Mystic.[13]

With the new confidence in steam, the demand for wooden mercantile sailing vessels lessened. Besides, the supply of Mystic timber was becoming rapidly exhausted, and orders were going to Maine. In addition, competition with the West Coast was increasing. Iron steam construction began shifting to the coal and iron centers on the Delaware River: Philadelphia, Chester, and Wilmington.[14]

The Mallorys built their last wooden steamship in 1874, but three years previously had ordered two new vessels from the Roach yard at Chester, Pennsylvania. The wooden steamer lay idle on the Mystic one more year, and finally was sold at a fraction of her cost. The Greenmans launched their last three-masted schooner, *William H. Hopkins,* in 1876. Two years later they built one small wooden steamer, the *G. R. Kelsey*. Hill's last steamer, *Gypsy,* was launched in 1884. *Ocean Spray* appears to be their last schooner, built in 1885.

After that the Palmer yard alone continued to construct steamers on the Mystic. In 1882 this Noank yard built the *Rhode Island,* considered the finest inland water craft afloat. She measured 2,900 tons, was 332 feet long. Before 1906 this yard had built sixteen steamers, including the *Connecticut*. The Palmers rebuilt or repaired others, some of them the largest of the Sound steamers. The loss by fire of the *S. S. Connecticut* at her wharf in Groton just after Christmas, 1865, amounted to one million dollars.

In Mystic, as in any seaport town, one could watch the waters of the world lapping at the docks. But this busy community with its quarries, factories, mills, and general stores lining the riverbanks, never acquired the sophisticated air that sometimes came with intimate connection with foreign ports. In contrast to the hustle and bustle of riverfront activity, Mystic owned a serenity and dignity that graced many of her homes along the waterfront streets. An aggressive small New England town, the truly extraordinary capabilities of the community found their best expression in the residents' achievements in the art of shipbuilding. With impressive regularity, from her earliest history until 1900, down the ugly greased ways of Mystic shipyards slid many of the fastest, best-designed sailing craft and steamships on any ocean.

CHAPTER IV

The Sea-Borne Economy

Coastal Trade

THE GRANTING of monopolies and exclusive privileges was the customary mode of encouraging trade and manufactures in 1647. Such an instance was the license granted in 1651 to Thomas Stanton, official Indian interpreter, by the Connecticut General Court, for the exclusive trade of the Pawcatuck River, for three years. His fur trade with the Indians and with other white settlers laid the foundation for commercial relations of this area, at first with Boston, shortly with the West Indies.

Traders in Nameaug became interested with Stanton and his sons, all of them soon carried on a successful business with the local Indians and the West Indies. There was also trade with Boston and Plymouth Colony. Stanton and two of his sons continued their fur trade after the termination of the monopoly.[1]

Thomas Hewitt of Hingham came to Mystic River in 1656 and bought up the surplus produce of planters in this region. He traded muskets, powder, grindstones, rum, and such goods, for surplus corn, cattle, and sheep. Three years later he built a house on the east bank of Mystic River.

All travel was by foot, snowshoe, horseback, or more comfortably, by canoe or little sailing vessel, to Nameaug, Hartford, or Boston. In 1682 Samuel Miner traveled to Hartford in his canoe and returned in seven days.[2] No road was wide enough for wagon or stage until after 1719.

William Williams had settled near the Head of the River in 1664 after becoming interested in commerce. Deacon Joseph Denison also was interested in commerce, and shortly the Haley family participated.[3]

The early coastal trade with Boston brought into this area woolen clothing, household goods, implements of husbandry, military accouterments, powder and lead, in exchange for pelts and wampum. There was a petty trade with Rhode Island and Long Island by boats and small sloops. Trade even extended to Manhadoes (New York), and occasionally as far south as Virginia. This latter trade was in hides and buckskins.

The basis of exchange in buckskins was as follows: a least buckskin weighed four and a half pounds; one and a half hides were worth one pound

of buckskins; one pound of hides was equal to two pounds of old iron, and two pounds of hides were worth one pound of old pewter.[4]

In May, 1660, the ship *Hope* arrived from Malaga, Spain, with cargo of wine, raisins, almonds, bound for Virginia. Malaga wine lees and molasses were used for distillations. Her captain proposed resheathing the vessel, took provisions for Newfoundland, thence fish for Spain.

There were two trades in New London at this time, undoubtedly shared by Mystic vessels, to the northeast and to the south. The Newfoundland trade lasted until after the turn of the century. Pork, beef, and provisions were carried up and exchanged for dried fish from the banks known to their fishermen forefathers.

It is difficult to find a descriptive record of a Mystic area vessel's making a coastal voyage, but there is such a record of one John Coit in New London who in 1664 went into the business of building shallops and pinnaces (light vessels used as tenders) for trading voyages along the coast to other Connecticut ports, Boston and New York. Coit's experience might be considered to be typical. Branching out, Coit's coastal traders went farther, to Newfoundland, and to Virginia, carrying cargoes of pelts and wampum, country-cured ham, and salted beef. By the end of the seventeenth century Coit had three fine barques.

During this period Mystic continued its maritime and agricultural growth. Traffic with the South was limited in 1681. There was "no need of Virginia trade," as most people were planting here "so much tobacco as they need." Tobacco and wheat were being raised in Connecticut and the harvest satisfied the local demand.[5]

The whole colony was one custom district and in 1659 the first custom master was John Smith, followed by Thomas Marritt in 1668. Daniel Wetherill was appointed after him by the Treasury Board of England. In 1685 Wetherill became deputy collector and searcher. He kept his post into the next century, under William Dyer, Surveyor-General of the Plantations.[6]

Early trading voyages were made in small vessels of only fifteen to thirty tons capacity. Seldom were there more than two men, and, possibly, a boy, aboard a coastwise trader. At the most, the Captain, Mate, Bosun, and a sailor made up the crew. The master was part owner of both the craft and its cargo. Frequently he was his own factor, agent, and tradesman, entirely independent of orders. One or two men frequently bought a venture with him, and each might trade on his own account.

For the purposes of definition; a *boat* was open and oared; a *shallop* was a light, open boat used on rivers, with oars or sails; a *smack* was a fore-and-

aft rigged fishing vessel with a well; and a *sloop* was fore-and-aft rigged, with one mast, a small vessel of under thirty tons. Two-masted vessels were *snows, ketches,* or *brigantines,* and these might have gone to fifty tons. A *barque,* or *bark,* with three masts, would measure from fourteen to about twenty tons. Foremast and mainmast would be square-rigged and the mizzen fore-and-aft rigged. Twenty years later *ships* of seventy tons, always three masts, made their appearance. There were no three-masted vessels owned in port until after 1700.[7]

To protect timber resources and encourage the rapidly developing West Indies trade, the Assembly in 1714 placed an export tax on lumber to New York and Massachusetts. Further to encourage shipping trade, three years later import duties were levied on all goods from other colonies.

Trade south to Virginia, Maryland, and the Carolinas varied with the colony. In Virginia and Maryland, the fur trade continued from the early seventeenth century through the revolutionary years. Theirs was a staple crop system with tobacco, the big money crop, used as a medium of exchange. It was re-exported in Scotland, mainly at Glasgow. The Carolinas traded tar, pitch, and other naval stores.

Trade north included the shipping of timber and masts for the increasing number of English merchantmen, in exchange for dried fish to be carried to the West Indies and southern Europe. Local vegetables and onions were added and traded for Madeira wines and olives, which would re-sell in England. In some instances rum was carried to Newfoundland in exchange for lumber, and fish was exchanged for money.

Scotch-Irish immigrants were introducing potatoes into New England during this period. Tea was first brought to Groton in 1718. Wheat flour was introduced in 1721, but the price was so high that only the rich could afford it. Rye and Indian corn had been used up to this time. "Coffee" was made from roasted rye and water.

About 1730 Philadelphia overtook Boston in volume of shipping. Connecticut continued to trade with the other mainland colonies. Prior to 1700 Connecticut traders had relied on the port of Boston, but after 1700 New York became the focus of trade.

After 1750 colonial commerce began to be increasingly hampered by England's mercantile policy and the shortage of currency. In reckoning the value of Spanish and Portuguese coins in terms of pounds, shillings, and pence, the balance was always against the colonies.[8]

After mid-century the colony's exports were of four classifications: livestock—cattle, horses, hogs, mules, poultry, and sheep; wood—clapboards, staves, headings; clothing—flax, hemp, and wool; victuals—fish (shad),

vegetables, peas, beans, dairy products, cheese; and grains—wheat flour, barley, corn, flaxseed. Miscellaneous items included tallow and tobacco. Imports were still molasses, sugar, rum, coffee, salt, fruit, and bills of exchange. These latter became increasingly more important, for most coastal trade was by barter, and money was a scarce commodity.[9]

In 1774 few merchants took the risks of Atlantic trade with London. The blockades of New England ports during the two wars with England sharply curtailed coastal voyages and trade with coastal ports, in spite of a handful of runners' successful ventures. Custom records have disappeared, and except for copies of boat registers, little seems to be on record of a period from the 1760's into the first quarter of the nineteenth century. The shipyards were continually building sloops, schooners, and brigs, sometimes used as traders, sometimes armed and used for both attack and defense.

After the Peace of Ghent a revival of interest in shipbuilding to replace outworn and outmoded vessels provided the means to a far greater and speedier trade to all American ports.

Until 1816 Mystic's vessels were small coasting and fishing vessels working between Hatteras and Nova Scotia. There were some winter voyages to the West Indies and occasionally across the Atlantic.[10]

Maritime commerce picked up before the end of the second decade of the new century in response to these three factors: the revival of sealing and whaling, the development of the South after the War of 1812, and the purchase of Florida in 1819. Prolonged winter voyages were made to southern waters. Because of the nature of the currents and prevailing winds, the Mystic fishermen profited handsomely from salvaging wrecks as well as from fishing and trading. Two fishermen from Mystic founded Key West[11] in 1819 as a salvage depot.

As the cotton crop increased in production and value, New Orleans expanded as a terminal. Some Mystic men settled in interior Texas, meeting others who had gone overland fifty years before by way of New York, Ohio, Tennessee, and Mississippi. By the 1830's regular voyages were being made by the Palmers to New Orleans and by the Mallorys to Galveston. Direct trade with the South boomed. There were representatives of Mystic shipowners all the way from Baltimore to Galveston.

In 1824 the new schooner *Harriet,* Captain Stanton, owned by Peleg Denison of Mystic, was destroyed by fire in New York Bay on her maiden voyage. She was returning from Plymouth, North Carolina, with a cargo of naval stores.

In 1838 Captain Benjamin Burrows, Jr., was captain of the schooner *Talma,* in the southern and coastal trade. He continued in that traffic until

The Mystic River Bridge in the 1850's, when it was "drawn" by oxen upon occasion for opening for passage of the ships. Scene from Mystic River Diorama.

Looking up the river to the steamboat wharf. The sidewheeler *Escort* was built in 1862 and was 184 feet long. Note the "sheer-legs," for masting ships, at the left.

1872, when he retired from the sea and entered the coal trade at Mystic River.

When Silas E. Burrows was building his steamboat *Cadet* at the Head of the River in 1825, the steamboat *Washington,* Captain E. S. Bunker, made its first trip on the New York–Stonington run. It was welcomed by a salute from Captain Stanton's artillery and acclaimed the most elegant steamship on American waters.

With the coming of the Sound Steamers and the terminal of the railroad at Stonington in 1834, that community built a hotel and two very large docks to accommodate the amount of freight, and the excursion business mushroomed. There still were no bridges at Saybrook and New London.

On January 19, 1852 Long Island Sound was blocked with ice; no steamers could get through until February second. When the Sound froze, steamer traffic was halted, for as long as two weeks at a time. Another such instance occurred in 1857.

Mallory relates the difficulty of transportation in May of 1858 this way:

> A wood-burning side-wheeler, *Young America,* made her voyage from Mystic Bridge to the Head of the River, a distance of two and a half miles, each day at high tide, with stops at eight intermediate points, four on each side of the river. The second landing above the bridge was the Greenman yard. The fare was six and a quarter cents, but in case of a head tide, three cents additional was charged.[12]

During the War Between the States, Mystic launched fifty-six steamers, and at its close the worn and battered transports were turned back to the Mystic owners by the government. Some were sold to make up the great general fleet of coastal steamships which were beginning to replace sailing craft. Others were reconditioned and put on regular coastal lines after the Mallorys' plan.

Gurdon Gates took charge of the converted steamboat transport *United States* and ran her between New York and New Orleans as a packet until 1872, when she was cast away on the east Florida coast. That year he retired after forty years in the southern, California, and foreign trades. He had commanded the schooner *Emeline,* the brigs *Republic* and *Metamora,* the bark *Montauk,* and the ship *William H. Wharton.*

Early in January, 1866, when the Stonington steamers returned to the Borough from Groton after six months' absence, a salute from the eighteen-pounders and a collation at Steamboat Hotel marked the occasion. John Gallup of Mystic River built a larger terminus at the landing to accommodate the increased number of passengers.

The *S. S. Loyalist* began weekly service from Mystic to New York, but discontinued after two seasons.

An 1871 record of ship transactions reveals the cost of shares in several vessels, as follows: 1/32 share in the brig *Hail Columbia* for $300; 1/8 of the schooner smack *Montell* to Lemuel Burrows for $135; 1/6 of the bark *Silas Fish* to P. T. Brown and others for $1,000; and 1/64 share in the ship *Dauntless* to C. P. Williams for $650.[13]

On June 28, 1870 Hill and Grinnell launched the schooner *Raven's Wing,* which sailed for Philadelphia July 17, less than three weeks later. This same year the schooner *Antecedent,* Captain Benjamin G. Pendleton, reported the best run of the season when he brought her from Boston to Stonington in twenty-one hours.

During the 1870's the steamer *Belle* plied between Stonington and Watch Hill, connecting with the *Ella* for Block Island on Mondays and Fridays. A charge of twenty-five cents was levied. At this time also Charles H. Crandall's sail loft was booming; nine sailmakers were working sixteen hours a day.

Traveling through the Sound in 1891 were the scows built by the Government on Mason's Island for the purpose of building the breakwaters at Stonington and Point Judith. The first scow, one hundred and fifteen feet long, another, an eight hundred-ton barge, carried two hundred seventy-five tons of stone daily. When the appropriations were exhausted, the men were discharged and the government plant moved to South Carolina.

As late as 1898 grain was brought by the schooner *Dreadnought* to the Campbell Whitmarsh and Company grist mill in Westerly. The grain carrier had been especially built by the Greenman yard there.

From Mystic's earliest history, coastal trade was a vital factor in the economic growth of the area. Here the interests of agriculture and industry met, for fluctuations in the maritime economic barometer affected not only the shipbuilder and fisherman but also the farmer, the mill owner, and store keeper. An economic fact of life in Mystic was that he who had anything to to buy or sell along the coast kept a weather eye on taxes, embargoes, and storms, and on all the many factors influencing coastal trade.

West Indies and Caribbean Trade

Disturbances in England in the 1640's broke off trade with the colonies. In the previous section it was observed that the ensuing coastal trade early led quite naturally into trade with the British West Indies, and somewhat later with other ports around the Caribbean. This trade was destined to be important for over a century.

Thomas Stanton began his trade with Boston and other coastal ports, eventually stationing his third son, Daniel, in Barbados, where he lived out

his life as agent for his father's business firm. Salt fish, corn, and flour were carried to various Caribbean islands. These items were necessary food for the increasing number of slaves on the developing sugar plantations. The vessels returned north with sugar, molasses, and rum.

By mid-century England's colonial policy, together with the shortage of currency, hampered both exports and imports. In need of a market with a favorable balance of trade New England looked to the Catholic Caribbean to trade commodities at hand, mainly foodstuffs. England's stringent trade laws forced the trade further outside the law if there were to be any exchange of coin. The trader captains' reply to the Board of Trade was to exchange with non-British islands in the West Indies, and for a number of years the close-mouthed Yankees managed to evade answering British inquiries. Trade continued in wheat, peas, rye, barley, corn, pork, beef, wool, hemp, flax, cider, boards, staves, and horses, in exchange for sugar, rum, and money. By 1676 smuggling and wholesale disobedience was a natural consequence. By 1678 the Lords of Trade began to work for the revocation of the laws.

Captain Joseph Saxton in 1680 was active in West Indies trade, and Captain John Mason bought a sloop in 1711 to engage in shipping horses and cattle to the West Indies.

Sailors did not always return from their ventures into foreign ports. Thomas Hewitt, the Hingham trader, outward bound for the West Indies in 1661 was lost at sea, with his ship.

By 1711 and 1712 two voyages to the Indies could be made in a year. Passage to Barbados took from eighteen to thirty days, with stops at Madeira, Saltertudas, Bermudas, and Turks Islands. Martinique, Antigua, Barbados, Jamaica, and Paramaribo became the principal early ports of trade. Cargoes consisted of sacks of wheat and dried peas, barrels of kiln-dried corn, tierces of ham, casks of pickled pork and beef, tubs of butter, round cheeses; wagonloads of spruce pipe staves, and hickory hoops shaped and steamed in hinterland workshops; herds of steers and strings of colts. The return cargoes were Barbados liquors, sugar, molasses, rum, and some hard money. I note "Plush were the years 1715–20, and this trade lasted fifty years, until the threat of war with Great Britain and a bloody European conquest of Caribbean real estate brought its abrupt end."[14]

In the 1730's and '40's our merchant marine was expanding. Our exports continued to be tallow, pork, cheese, horses, lumber, and some tobacco, in return for sugar, salt, molasses, and rum.

Drastic changes in the West Indies maritime economy came in the last quarter of the eighteenth century. There was the ever-increasing danger of

seizure. There was no longer trade with the formerly important islands of Barbados and Antigua, but there existed in the foreign islands a shortage of New England products. So, French Guadaloupe and Martinique, Spanish Hispaniola (Haiti), Dutch St. Eustatia, and Danish St. Thomas and St. Croix became important in their turn as trading points.

The New London Customs District recorded that in 1791 7,403 horses, mules, and cattle were exported to the islands.

Immediately upon cessation of hostilities at the end of the Revolutionary War, Edmund Fanning of Mystic, at the age of fourteen, sailed as a cabin boy on a ship trading between Stonington and the West Indies.

In 1793, firsthand vivid accounts of bitter internal fighting in San Domingo were brought home by Captain John Fanning in the brig *Union.* These were early manifestations of unrest in the Caribbean that would continue for years. By the end of the year, England and France were at war, and American ships were being victimized by both combatants.

In 1795 Edmund Fanning commanded the *Dolly* in Caracas trade. Between 1795 and 1805 some ocean traffic was renewed, but neutral traffic was in jeopardy on the high seas. Before the Embargo of 1807 the foreign trade of the town of Stonington, including a portion of Mystic, was almost entirely with the West Indies, and generally productive of large gains.

However, the second war with Great Britain put a quietus on plans to trade in the Caribbean. Renewed blockades of Atlantic ports stifled all but limited coastal activity. One of the young men who brought cartridges from New London to the men defending Stonington Point near the close of the war was Silas Enoch Burrows, who lived at the Head of the River. After the war he went to New York to help his father in "mercantile pursuits," and shortly became owner, with Enoch and Ambrose Burrows, of the brig *Frederick.* About 1820 he engaged his contemporary, young Silas Greenman, to come to the Head of the River to the elder Burrows' shipyard to build vessels for their merchant line. In 1823 the Burrows' New York–Vera Cruz lines carried silver and cochineal, cargo which enticed the Caribbean pirates; hence the ships sailed well armed and manned.

When there were scarcely half a dozen steamers built outside New York, the Mystic River was to see her first vessels of this type constructed in the Burrows' yard in 1825. Captain Nathaniel B. Palmer was master of the *Cadet,* and she was owned by Silas E. Burrows, with Baldwin and Spooner, of New York. On her second voyage to Cartagena and the Chagres River, a younger brother, Alex Palmer, went as mate. These voyages involved shuttling troops and arms for General Simon Bolivar between Panama and Colombia, during the exciting political turmoil there. Prisoners were car-

ried up to Santiago de Cuba, or "St. Jago." Palmer made seven voyages in the *Tampico* to the Spanish Main, two in 1826. He was later employed on a New Orleans packet.

In 1829 Silas E. Burrows had organized a new line of packets to Cartagena from New York, with three brigs. Arrangements were made in conjunction with Burrows' line for mail service to the Pacific side of the Isthmus of Panama for the use of the American whalers operating in the Pacific. He withdrew from the venture in 1835, and soon afterwards the line was discontinued.

Burrows employed the Greenmans to build his *John Baring* in 1834, a valuable addition to his growing fleet. This vessel had a long record as a Mobile Packet before being sold foreign. With his profits Burrows became extensively engaged in the building and fitting out of sealers and whalers in Mystic and Stonington. He himself went on a sealing expedition in 1836 from Rio de Janeiro to the South Seas.

He had first visited Brazil and the river La Plata in 1835. This was the year he had sent Clark and Thomas Greenman and Welcome B. Lewis to South America to build a steamer for use on the Magdalena River in Burrows' Amazon trade. The venture was unsuccessful; Burrows relinquished his contract, and the brothers returned to Mystic.

Burrows moved his eight children to Montevideo in 1842 and set up a commercial house with two of his sons. There he stayed six years before returning to the States.

At the age of ten, Benjamin Burrows, Jr., had gone to Havana with his father, and at seventeen he went to sea as a sailor before the mast. The following year he became mate of the schooner *Bolivar,* and was mate of several others. In 1838 he became captain of the schooner *Talma* in the Southern and Coastal trades.

All voyages were not profitable, and occasionally a record of treachery can be found. On May 10, 1848 the *Herald,* owned by C. P. Williams, was stolen by Captain Samuel Barker, who sold her as a slave ship at Rio de Janeiro. The ship was not recaptured until 1850.

In 1854–56 two clippers, the *B. F. Hoxie,* and the *Asphasia,* were put into service. Captain Nathan Gallup Fish was for twenty years a shipmaster, owner, and agent, trading in the Southern ports, West Indies, Mexico, and South America. Upon retiring from the sea he was several times elected to the Lower House of the Assembly, and three times Senator, Town Clerk, and Judge of Probate, in turn.

Unlike the humdrum, rather prosaic account of coastal trade, the history of the West Indies and Caribbean trade glows with color. If the risks were

greater than in the coastal trade, the profits and losses often corresponded. Here the child's dream of seafaring life, complete with pirates, hurricanes, smuggling, and the ring of names like "Hispaniola" are woven for a time into the extraordinary fabric of the economic history of the Mystic area. It is interesting to note, too, that the weavers of these glittering threads owned such solidly uncompromising New England names as Silas Enoch Burrows and Nathan Gallup Fish.

Trade with Our Northwest and the Far East

After America's independence, the one market first sought in 1783 was Canton. Atlantic seaport vessels could no longer carry American dried fish and other products to Spain and Africa, bring back slaves to the West Indies, and from there import rum, sugar, and molasses. England had no intention of allowing an independent America to monopolize so lucrative a commerce with her still faithful colonies.[15]

The first to go around the Cape of Good Hope knew virtually nothing of the waters beyond. Without charts or proper nautical instruments, in ships so small it is a wonder they survived the gales at all, but with men of iron wills, two trades, furs, and tea, were to come to support this new national independence. American ships were to become the common carriers of the world during the Napoleonic wars. This commerce gave the United States new confidence in its destiny.

The trade in sea otters from the Indians of the Northwest Coast strengthened the U. S. claims to that territory. Captain James Cook, the English explorer, also had an interest in this part of the world. John Ledyard, an American who had deserted from the British Navy, published in his journal in 1783, "Skins which did not cost the purchaser six pence Sterling, sold in China for $100." News like this was not long reserved, and New York, Boston, Paris, London all tried to get a voyage between the Northwest and Canton.[16]

The Northwest Indian trade included stops at Mauritius, Batavia, Calcutta, Bombay, and all the Pacific belonged to these adventurers. By 1800 America was freighting Asiatic and Australian goods to Europe as well as to America. On the side she enjoyed a contraband trade in the Spanish ports of South America.

The year George Washington was elected President of the new nation saw fifteen American vessels lading teas and silks from musty go-downs at Canton, cutting boldly into the trade monopoly of the East India Company.

Java Head was the important landmark for all voyages to the Far East. Macao was the outpost for Canton, where all foreign ships had to obtain

permission of the mandarins, or government officials, to proceed up river to the Chinese port. There, Whampoa was the Canton anchorage.

Macao was approached from the south in the fall of the year. The captain of the vessel needed to secure a "chop" or official permit to enter Chinese territory and take on a Chinese pilot. All ships were examined at the mouth of the Pearl River. One could then proceed to Whampoa, twelve miles below Canton. "Fast boats" were then taken up river. Tiny sampans served as carriers; river junks and sea-going junks housed the population of the floating city. Two Chinese forts, Dutch Folly, and French Folly, were on Jackass Point.

Foreign factories, or hongs, were the residences and business places of the factors or agents of various East India companies. These factories stood two or three stories high, with sloping roofs, neatly whitewashed. The godowns were buildings where the chests of tea and bales of silks took up the first floor, Chinese living quarters the second and third floors. Covered galleries ran through the open courtyards which separated the hongs. The East India Company had an imposing, wide veranda. In an open square in front, enclosed by a rail fence, the company–hong trade took place. The comprador, or native agent, was there too, in touch with ships and supplies. A third group supplied sampans to the local ships, a kind of taxi service.

The trade was characterized by facility and regularity, ease and expedition, and agreeable transactions. The hong merchants were intelligent, exact accountants, very punctual as to engagements. They maintained a fair character, being honorable, reliable, faithful to their contracts, large-minded, and of a traditional integrity.[17]

The Canton hong merchants trafficked in Bohea, Souchong, and Hyson teas, sold the finest silks of the East for Spanish dollars, exchanged nankeens and chinaware for furs and ginseng, the ultimate goal of the first traders. The luxury-loving mandarins wanted furs of Nootka Sound or the Seal Islands, or sandalwood and *"bêche-de-mer"* of the South Sea Islands. This trade was to furnish the impetus which overcame the economic stagnation of the Revolutionary period.[18]

The first voyage had been that of the *Empress of China,* in February 1784, carrying a cargo which may have included breadstuffs, tobacco, rice, wood, and fish. The first-sought products would naturally be English duty-free articles, such as wine and spirits, molasses, sugar, tea, coffee, and cotton and wool manufactures. The silks, nankeens, and chinaware were thrown in. Curiously, chinaware was used for ballast where moisture would ruin the teas, in the bottom of the holds.[19] The Americans sought to escape further tribute to England on tea. The exchange in ginseng was lucrative, for the

eastern merchants believed it to have miraculous healing qualities, worth its weight in gold. This was purely a psychic value. The Chinese hundredweight, or picul, weighed 133 1/3 American pounds; 473 piculs equalled about thirty tons.[20]

In 1800 Canton was the one Chinese port open to the western world. The Portuguese had visited it in 1516; the Dutch came in 1624 and became the Lords of the East Indies; the English arrived in 1637 and controlled the dying Empire of the Moguls. They were followed by French, Danes, Swedes, Spanish, and Austrians. The Americans, the "New People," arrived in 1784, and joined the submissive foreign settlement outside the city walls.[21]

Edmund Fanning was one of the early sailors who found and used the route to Asia via the Horn. In 1833 he published an account of his voyages through 1829. A few high lights of his story follow: he had gone to sea at fourteen, been twice captured by the British, and exceptionally well treated and returned to his vessel with all hands. He had visited islands no white man had seen. Once, sleepwalking unaccountably, he had awakened to save his vessel before it struck uncharted breakers on an atoll unseen ahead. He had made friends in Canton and the islands and had driven off piratical proas south of Sumatra. He had conquered fire a thousand miles from land. He had also been instrumental in having stationed on the Chilean coast a special envoy of the United States government. Other seamen gave him the name "Pathfinder of the Pacific."

A number of years later, in 1855, Silas E. Burrows, a pioneer merchant at Hong Kong, befriended the crew of the Russian frigate *Diana,* wrecked on a Japanese island in an earthquake. Czar Alexander had replaced Nicholas, and with war between England, France, and Russia, Burrows was warned that his case over the *Rob Roy,* worth $100,000 in Admiralty Court, would be adversely affected because of his act. However, he persisted in his aid. Having offered $10,000, he advanced 42,673 Mexican dollars in 1856, taking the Russian bills on Messrs. Baring and Company, payable without letters of credit.

This man, who made and lost fortunes repeatedly, tells of another instance when he made a neat profit, probably in the early fifties. He relates having "six sail of my ships at one time in front of the King's palace at Bankok." Rice cost in Siam ninety cents a picul, or about three-fourths of a cent per pound, and sold in San Francisco for three and a half cents per pound. This represented a profit in ninety days of sixty thousand Mexican dollars.

Another incident in Burrows' eventful life happened in 1852. The American schooner *Emma Parker,* bound for San Francisco, overtook a dismasted Japanese junk north of the Sandwich Islands. Aboard was one barely living person, who later related having sailed in September, 1851, with fifteen persons. A hurricane dismasted the junk and destroyed the rudder. Mr. Burrows, having purchased "ten sail" to connect his commercial business with Peru, Chili, Australia, China, Japan, and the northwest coast of America, bought a new American clipper, the *Lady Pierce,* and fitted her out as an "American gentleman's ocean home . . . without a dollar of credit." His intent was to return the Japanese lad, "Dee yee noos kee," and present the yacht to the Emperor of Japan as a friendly American gesture. The commercial advantage would be both personal and national. The vessel took on stores for two years, but no article of trade or traffic was included. Aboard was a variety of presents for the Japanese, and Mr. Burrows had two thousand gold dollars coined for him by the mint at San Francisco for the purpose.

Lady Pierce reached Jeddo Bay in safety. Commodore Perry had left Japan just fifteen days before. Dee yee noos kee was the first Japanese to return to Japan from Christian lands. The welcome accorded the vessel rivals a contemporary screen production. An order came from the Emperor that Mr. Burrows' kindness "was not to be taxed," and that all his gifts were to be returned, even the gold pieces. The word "Liberty" on the coins had alarmed His Highness. The Emperor further ordered that all the American seamen required was to be furnished free of charge; Simoda, the treaty port, extended great hospitality and many remembrances were given the Westerners. In a speech in their honor, the comparison was made that Commodore Perry had come with too many large ships, guns, and fighting men, and here came one with flowers and gifts, fresh oysters, peaches in cans, and champagne, to be received with pleasure. The Emperor directed that two more vessels like the *Lady* be built.

There was another incident, somewhat anticlimactic, but out of the ordinary, which should not be left out of this man's story. He participated in the partial purchase, with the Grinnells of New York, of two little brigs, by act of Congress manned and provisioned at government expense, to search the Arctic Sea for Sir John Franklin's expedition, lost looking for the Northwest Passage.

In 1869 a report reached Stonington that the bark *Benefactress,* Captain Edwin C. Eldred, was at Hong Kong awaiting freight; the bark *Henry Tabor,* John R. Stivers, First Mate, was at Sandwich Islands with seven

hundred fifty barrels of oil and fifteen thousand pounds of bone; the ship *Mary Whitridge,* Captain Benjamin F. Cutler, was at Foo Chow, China, loading with tea for New York.

In 1871 Captain Cutler sailed for China aboard the same vessel, taking a cake made by a local baker for Captain James Pendleton, who had been absent for over two years. The *Benefactress,* with 514,327 pounds of tea aboard, bound from Yokohama to New York, was wrecked near the Cape of Good Hope, but her crew was saved. The *Samuel Russell,* Foo Chow to New York also sank, with 19,700 half chests of tea.

A final note of interest in the Oriental trade history mentions that in 1871 Captain E. C. Packer of the *Annie M. Smull,* Mallory's last sailing ship, owned by Captain Mallory, received thanks and one hundred dollars from the Japanese government for saving the lives of four Japanese fishermen. It was the custom in the last century that awards for rescue took the form of gifts of money, or inscribed silver trophies ornately decorated.

Captain Gurdon Gates was another of the Mystic men who drove his clippers to record runs around the Horn as well as around the world. It is said that he owned a monetary interest in every vessel he commanded.

To realize the magnitude of the navigator's task in making voyages from the east coast of North America to Hong Kong or Canton, it is helpful to trace on a map the vast reaches of open water, to recall words like "monsoon," "typhoon," "dismasted," "doldrums," and "dysentery." The safety of all aboard depended on the Captain's knowledge of prevailing winds, ocean currents, storms, and uncharted waters. The economic future of many a Mystic merchant rested solely on the skill and judgment of the Iron Men in Wooden Ships.

Fishing, Sealing, Whaling

The General Court enacted this monopoly in 1647:

> If Mr. Whiting, with any others, shall make trial, and prosecute a design for the taking of whales within these liberties, and if upon trial within the term of two years, they shall like to go on, no others shall be suffered to interrupt them for the term of seven years.[22]

As early as 1701, and for several years thereafter, whales were "taken" and brought on shore at Wadawanuck, near Stonington. The oil was tried out and sold in Boston and in the West Indies.

Caulkins found mention of a whaleboat which had been hired January 13, 1717 or 1718. She explains that such a vessel would not have gone farther seaward than Montauk, Long Island. There was only small business in

whale oil prior to the Revolution. At first whales were killed on or near the coast. Sometime later small sloops were fitted out for a cruise of five or six weeks, and might hunt as far north as the Great Bank of Newfoundland. This was a natural route to follow, being that used by the fishermen. Still later—and dates are not given by this authority—longer voyages of a few months to the Western Islands, Cape Verde, West Indies, and the Gulf of Mexico laid the foundations for a more lucrative trade after 1745 as far south as Guinea, and north to Davis Straits and Baffin's Bay. After 1770 voyages were made to the Brazil Banks, and before 1775 vessels from Nantucket and Newport had been to the Falklands.[23]

The Revolution totally destroyed the whale fishery, and the following depression prevented its ready resumption, until, by way of encouragement a law was passed exempting all vessels engaged in fishing and whaling from taxation. In addition, the poll taxes of men employed four months on board a fishing or whaling vessel were exempted. After 1790, the tax on vessels was resumed, but exemption of the poll tax continued.

Between 1797 and 1799 Edmund Fanning made his first sealing expedition, as First Mate in the brig *Betsey*. This voyage was also his first circumnavigation, which brought back a profit of $52,300 for the owners. The duties paid into the infant national treasury on the return China cargo amounted to more than three times the cost of the ship and her outfits. On June 14, 1798 Captain Fanning charted islands which came to be known as Fanning and Palmyra in the South Pacific. A year later he went around again on a ten-month voyage as master of the *Aspasia,* and contributed handsomely to the national custom duties a second time. He was the first skipper to have circumnavigated the globe with an all-American crew in an American vessel, sailing under the American flag.

In 1813 Benjamin Frank Pendleton went to sea as mate on the *Volunteer* with Captain Fanning on a voyage for James Byers of New York. The association of Fanning and Byers was discontinued after the discovery of the South Shetlands in 1819.

In 1815 Captain Fanning resumed sealing after having carried flour to France during her revolution. He had also traded beaver hats and butter at Curaçao, returning from the West Indies with coffee and hides. This sealing voyage was made in the westward direction, in his ship *Volunteer,* built for him by Benjamin Morrell on the Mystic River. In 1817 he returned to New York. It was on this voyage that, while the crew were sleeping in bog and grass huts at New Island, one of the western Falklands, a spark from the cook's pipe presumably lighted a grass fire, in which a fifteen-year old Stonington lad was trapped. His garments, oily from his work, ignited

while he ran and he was "completely roasted" before he plunged into the nearby water. The captain's ingenious remedy was to wrap the injured boy in penguin skins, stripped off with half an inch of fat attached. Binding these skins over the raw flesh of the lad, and changing the dressing twice a day, within a month produced a new skin "like an infant's" and Ben Cutler, the previously mentioned Captain Ben, was back at work soon afterwards.

After twenty-two months' successful sealing, the *Volunteer* docked at New York in April of 1817. On Fanning's second voyage that year on the schooner *Sea Fox,* he was accompanied by Benjamin F. Pendleton as master of the *Jane Marie.* They used the Falklands as a base the following year when Captain Pendleton was in charge of the brig *Frederick,* and Captain James Sheffield was master of the *Jane Marie.* Fanning commanded the brig *Hersilia,* 131 tons, built for him and coppered by Leeds at the Head of the River.

Captain James Sheffield's extremely profitable sealing voyage in 1819 gave further local impetus to the lagging trade. Captain Fanning's Oriental trade had opened the much coveted market for American export goods and an exchange in favor of New England.

In Stonington a fleet of eight vessels was hastily gathered: five brigs, *Frederick, Catherine, Emeline, Clothier, Hersilia;* two schooners, *Express, Free Gift,* and the sloop *Hero.* Nineteen owners took shares in the *Frederick,* and almost as many in some of the other craft. Some sailed August 1, 1820, and returned the following summer. All had remunerative voyages. This was the time of the discovery of the Antarctic Continent. Unabated activity continued for several years, sporadic voyages for another fifty years.

Young Alex Palmer sailed in 1821 to the South Shetlands, Chile, and Peru, on Fanning's *Alabama Packet,* hunting seals.

One finds Edmund Fanning, agent, shuttling back and forth between New York and Stonington securing backing for no less than seventy sealing and exploring expeditions into the Southern Hemisphere. In 1824 he announced a seventy-four per cent dividend to shareholders in the South Sea voyage of the sloop *Only Son,* Captain Benjamin S. Cutler.

> Between the years 1820–1830 . . . the privations of the men show the danger and uncomfortable nature of the business. No fire was known on the vessels, only that used for cooking food. The cabins were cold and cheerless, and after returning to the vessel from the labor of the day, the men would retire to their bunks, as the only means of getting warm.
>
> Often a boat's crew were left on an island for the capture of seals, and obliged to subsist almost entirely on penguin eggs gathered on the island . . .

> Formerly skins were captured by getting between the seals and shore and knocking them down with clubs . . . After a vessel arrived in the vicinity of a rookery, the boats' crews landed at convenient points for capture of the coveted animals and the vessel was taken to safe anchorage to await the result. The crews ashore had tents in which to live while in quest of the game. After this is secured, the skins are taken aboard the vessel and packed down in sufficient quantity of salt to preserve them until they are thoroughly cured so they can be shipped without danger of spoiling before they arrive at their destination.[24]

It was on this 1819 voyage that the South Shetlands were found, and twenty thousand skins were taken. On Low Island in the same group there were so many penguins that it was necessary to use a five-foot club to walk through them. Here there was no seaweed, kelp, or vegetation. The men never wore furs, as it was not necessary in the Southern Hemisphere summer. The weather was much like "Mystic in March" although the weather could drop from 27°C. to 0° in a day. From a glacier bergs broke off every few hours with a report like heavy cannon, fell into the water with a crash that would make a vessel tremble. There were sudden drifts of ice.

In August, 1820, the sloop *Hero* was making her second voyage to the South Shetlands. In November steam-heated Deception Island was discovered, a partly submerged crater of a volcano. By following a whale between two large islands, a channel was found deep enough to float a vessel, although the islands were surrounded by breakers and rocks, and a fierce tide. Landlocked Yankee Harbor became a haven in a storm, and here the famous meeting between Captain F. G. von Bellingshausen and young Captain Nathaniel B. Palmer took place.

Hurd gives this undated "incomplete list of vessels employed by Stonington and Mystic men in the sealing business":

Brig	Frederick	(built Guilford)	Cpt. Benj. Pendleton
Brig	Hersilia	(" Leeds Yard)	Cpt. P. Sheffield
Brig	Bogatar	( )	Cpt. E. Fanning
Brig	Sarah	( )	" " "
Schooner	Free Gift	(built Pawcatuck)	Charles P. Williams
Schooner	Express	(" Hudson, N.Y.)	" " "
Brig	Enterprise	( )	Stiles Stanton and Joseph E. Smith
Schooner	Evaline	( )	Joshua Pendleton
Schooner	Courier	( )	Edward Phelps
Schooner	Carolina	( )	" "
Schooner	Summerset	(sea elephant oil)	Pendelton & Faxon
Schooner	Thomas Hunt	(built Kennebunk)	Joseph N. Hancox
Schooner	Express	(" Hudson)	" " "

Schooner	Charles Shearer	(Lost at sea with all crew)	
Brig	Henry Trowbridge	( )	
Schooner	Montgomery	( )	Joseph Cottrell, agent
Schooner	Plutarch	( )	" " " [25]

Sealing was a hard, dangerous business, but it afforded the means to build more vessels and to engage in new ventures. It enabled the owners to enter the whaling industry, which was destined to become the principal activity of the Mystic seaport from 1830 to 1850.[26]

Whaling was more expensive, both in cost of vessel and outfitting. It entailed a longer apprenticeship to acquire the indispensable skill and knowledge of grounds and habits of whales.[27]

The high price of whale oil brought back to life the shipping interests of the seaport towns. As the demand for spermacetti, sperm oil, whalebone, and ambergris increased, the industry became as profitable as fishing. New England towns were the center of this trade.

The fever spread as suddenly and contagiously as the Caribbean fever had a hundred years before. Brigs, barks, merchantmen, schooners, every vessel of a stout frame and capacious hold were pressed into service. For a two-year voyage these might be the supplies stowed: 250 barrels of pork, 200 barrels of beef, 50 barrels of flour, and biscuits, corn, vinegar, codfish, peas, and molasses in proportion.[28]

The Brazil Banks, Patagonia, and islands of the Pacific, Kamchatka, Baffin Bay, and the Arctic had all been explored by this time. A favored two-year voyage would be around the Cape of Good Hope, Indian and Pacific Oceans, Sea of Kamchatka, Hawaiian Islands, Society Islands, Chilean Coast, around Cape Horn, Brazil Banks, West Indies, and home, making use of the prevailing winds.

Between 1700 and 1900 the whaling "lay system" divided the profits of a voyage after this manner: the captain's share might be one-fifteenth of the whole venture; the mate's one-twentieth; the cooper's one-thirtieth; the harpooner's one twenty-fifth or one twenty-eighth; and a foremast hand could look for one ninetieth to one one-hundred-twentieth. A greenhorn might receive one two-hundred-fiftieth.[29]

In 1815 the current price of whale oil was $1.40 a gallon. When the supply caught up to the demand, the price dropped to 48¢ a gallon in 1823. Two years later even greater demands pushed the price up to 81¢ a gallon.[30]

The shipyards of Elnathan Fellows and Benjamin Morrell and Joseph Sisson, master carpenters, were all busy building whaleships. Christopher Leeds built several small vessels at Upper Mystic after the close of the War of 1812, among them the *Hersilia*. It was he who later built the two small

steamers *Cadet* and *New London* for Silas E. Burrows. He had built Mystic's first whaler, the *Hydaspe,* 312 tons. Charles Mallory made her his first shipping investment, becoming one of her thirty-nine shareholders. Captain Paddock came from Nantucket to make her maiden voyage.

Mallory soon became manager of the *Aeronaut,* 265 tons; by 1833 he had two other whalers, the *Acasta,* 330 tons, and the *Bingham,* 375 tons. In December, 1823 the brig *Frederick,* owned by Mallory and Silas E. Burrows, was captured by pirates off South America, but later escaped.

During the commercial depression of 1837 many owners of whaling vessels, for lack of funds, laid up their vessels. Charles Mallory reckoned on the increased value of a cargo if there was to be any lengthy tying up of the whalers, and hurried off his three vessels, the *Aeronaut, Acasta,* and *Bingham,* as well as two others, the *Atlas* and *Charles Adams.* To do this he gave up his sailmaking business, and concentrated on whaling from 1836 until 1849, when he turned to building merchantmen exclusively.

The peak of whaling in Mystic occurred in 1845 when there were twenty-seven ships and brigs in the industry, and the principal operators were Charles Mallory, Jedediah and William P. Randall, G. W. Ashbey and Company, Joseph Avery, and Holdredge and Company.

Daboll's Almanac of 1847 lists these whalers away from Mystic:

Ship	Atlantic	(built Philadelphia)	C. Mallory et al.
Bark	Aeronaut		"
Bark	Alibree	(" Haverill, Mass.)	Randalls, et al.
	Bingham		
Ship	Coriolanus	(" Portland, Me.)	C. Mallory et al.
Bark	Congress	(" Medford, Mass.)	Randalls
Ship	Eleanor	(" " ")	C. Mallory et al.
Bark	Globe	(" Freeport, Me.)	Packer et al.
Ship	Hellespont	(" Cohassett, Mass.)	Randalls, et al.
Bark	Highlander	(" Topsham, Me.)	Irons, et al.
Bark	Leander	(" Duxbury, Mass.)	Mallory et al.
Schooner	Meteor	(" Mallory Yard)	"
Ship	Robin Hood	(" Boston)	"
Ship	Romulus		"
Bark	Shepherdess	(" Medford, Mass.)	Randalls et al.
Ship	Trescott	(" " ")	Mallory et al.
Bark	Vermont	(" Kennebunk, Me.)	"

The number of ships whaling out of Mystic dropped from eighteen in 1846 to five in 1860. By 1850 whales were getting scarce, and the high price of oil encouraged the use of camphene, or purified turpentine, in lamps. This

fuel was followed by distilled coal oil, and eventually by kerosene. By 1862 the price of petroleum had dropped to ten cents a barrel and now became a competitive domestic commodity.

Little has been written about the fishing industry, and, except for the boat registers, little can be found. There were constantly those who fished for a living, and their sons in turn, from colonial times to the present. "Cod-fishing" is stamped on hundreds of entries in the files, but little detail besides. These were men and vessels not singled out by the historians; fishermen themselves were usually too busy to commit records to paper, and fishermen of foreign extraction often could not write English.

At Noank in 1871, the *Red Wing,* Captain J. Davis, made the champion fishing trip of the season, with a profit of $1,364. Each of the crew made $165.

A Fish Works was established in 1856 for the manufacture of fertilizer, by G. S. Allyn and Company on the southeast hook of Mason's Island. Menhaden, or bonyfish, were used for this purpose. The company was dissolved by Captain John E. Williams, Trustee, and L. P. Allyn in 1883 became a partner in S. S. Brown and Company at the same plant.

In 1865 the Quiambaug Oil and Guano Company on the neck east of Mason's Island was destroyed by fire, with a loss of four thousand dollars to Elnathan Wilcox and B. F. Gallup. Ten years later the Quiambaug Fishing Company burned to the ground. When Leander Wilcox died in 1895, the Wilcox Fertilizer Works was managed by Alfred O. Cobby.

Wars and depressions hampered but never stopped the fishing industry, which slowly became an important economic factor in the community. U.S. Fish Commission statistics for 1893 reveal that for Stonington, Mystic, and Noank, there were 240 Americans, ten Swedes, five Portuguese, and six of other nationalities engaged in fishing. The fishermen sailed forty-seven vessels, worth $96,165. Fishing gear and rigs were worth $50,480. For the period of that report they had brought in 22,453,374 pounds of fish, worth one hundred thirty-nine thousand, three hundred nine dollars.[31]

California Trade

With a growing call for the products of the whale factories, new waters were explored in hunting for new grounds. A secondary product destined to be of even greater importance was the growing body of navigational information which was to prove fruitful shortly in the great rush for gold.

With the lengthened voyages, new islands were being discovered and

Greenmanville's backyards before the turn of the twentieth century.

The *Elizabeth Willetts,* clipper ship built by Charles Mallory in Mystic in 1854.

noted in the log books. At some of them trading took place, where sandalwood and *"bêche-de-mer,"* a kind of sea cucumber, became articles of exchange, valuable to the Asiatics. About 1790 the sandalwood, used for incense in the temples, or for its red dye, had begun to be scarce. By 1818–1820 the whalemen had a thousand square mile area in the Pacific yielding not only its oily wealth but knowledge of islands, winds, and currents of great importance. In various logs Polynesia, Micronesia, the Gilberts, Marshalls, and Sandwich Islands had been noted but not charted. Between 1820 and 1850 every part of the Pacific was visited, adding the Samoans, the Ellices, and the Societies to the navigators' ever-growing list of uncharted islands.

As more and more vessels became involved in the fur sealing and whaling industries, a demand grew for better charts and a pooling of the growing body of information regarding new islands, shoals, ice, rocky obstructions, and coral reefs. Captain Edmund Fanning advocated that in the interests of trade, a broad revision of charts should be made a governmental project.

Mariners and merchants interested in such charts called for a naval expedition to search for lands reported, the location of which was not definitely known, locate some hundreds of islands discovered by sealers and whalers, and search for lands in unvisited waters. Since the British and Russians were so engaged, this local need now became a national necessity. In 1829 such an expedition was authorized, but the administration changed before the funds were also authorized. Captain Fanning, too old to go on such a voyage, nevertheless was willing to help finance a private expedition. With Captain Benjamin Pendleton and Captain Nat Palmer he outfitted two brigs, the *Seraph* and the *Anawan,* and the schooner *Penguin,* under Captain Alex Palmer. They left New York in October 1829.

Jeremiah Reynolds, an energetic Yankee, who had had an influence in Congress and the Navy Department, accompanied Captain Nat, along with a scientist and a naturalist, J. F. Watson, and Dr. James Eights. Sealing was to be engaged in on the side, to help defray the costs of the expedition. Originally, the plans had been to go into the North Pacific after having explored the Atlantic. However, the crews refused to cooperate and it became essential to give up this ambitious program, and the expedition returned in 1831. From this voyage Watson returned with the Stonington men, but Reynolds remained at Valparaiso. Captain Pendleton was firmly convinced that the exploring expedition should be authorized by the government and that the officers and men should be under the regular pay and discipline of the Navy.

By 1841 the Arctic, waters off the Aleutians, Kamchatka, Okhotsk Sea, Bering Straits, and above Point Barrow had all been searched by merchant seamen. The Pacific down to the "crossroads" at Honolulu, and the Atlantic from Hudson Bay in 1846 to Hurd's Island in 1851, and four hundred miles southwest of Desolation Island also had been explored.

After some delay and considerable research, the new science of oceanography was born. Lt. Matthew Fontaine Maury, U.S.N., set to work on his own initiative to study the available logbooks, and David MacKenzie began his attempt to plot ocean currents. In 1847 Maury published his *Wind and Current Charts of the North Atlantic.* With the discovery of gold in 1848, and the consequent traffic to California, the importance of the charts in cutting as much as forty days off the passage between the Atlantic and Pacific coasts of the United States was spelled out in dollars and cents in savings in the account books of both shipowners and merchants.

With the recognition of the value of these charts, the first international conference took place in Brussels in 1853 for systematic studies of the oceans. That year Maury published his *Physical Geography of the Sea,* and a letter advocating the use of lanes for oceanic travel, twenty miles wide, with a broad area between; the southern for westward travel, the northern for eastward. His is the basic concept, method, and principle still in effect. He also advocated a national weather bureau and proposed the establishment of a railroad or canal across the Isthmus of Panama. Another story is his influence on Cyrus Field and the development of the transatlantic cable.[32]

Calvin Burrows, who grew up in Mystic's maritime climate, was born on the Groton side in 1817. At twenty-two he went to sea fishing and followed that occupation until about 1851, when he fitted out the schooner *Edward L. Frost* for a voyage to California, making the run in 117 days to San Francisco. There he remained eight months before returning to Mystic and his former means of livelihood.

Greenmans' *David Crockett,* 1,619 tons, began her thirty-year career around the Horn in 1853. She cost $93,000 when she was built, and by 1876 had returned a net profit of over half a million dollars to her owners, the equivalent of twenty-four per cent on the investment. In her lifetime, she had not cost her insurance underwriters a single dollar. She made twenty-seven round trip voyages on the Cape Horn run, a record never equalled by any other sailing vessel. On twenty of these passages her average time was 113 days, a record also unequalled.[33]

Not all the California vessels turned out to be successes in one degree or

another, however. Greenmans' *Leah,* medium clipper, sailed from New York January 4, 1856, on her maiden voyage. This is her last known account. Her master, Captain John Latham, mates, and most of her crew of twenty-two were men of Mystic.

Rarely was one vessel built just like one lost, but an exception may have been made because the keel had been laid before the tragic voyage of the *Leah.* At any rate, the Greenmans launched the clipper *Atmosphere* in 1856 also, reportedly with the same lines as the *Leah.* She made one round trip to England, then entered the California trade. In 1858 Captain William H. Lunt sailed her from San Francisco, lost most of her masts and rigging in a hurricane, and put back for repairs. Refitted, she sailed for Hong Kong, returning to San Francisco, back to Hong Kong, thence to Calcutta, and arrived back in New York in January 1860. The following November she sailed again for Calcutta, via Liverpool. She was in Bombay in 1861, and in 1863 she was sold to the British.

The Greenmans' last clipper, the *Prima Donna,* 1,529 tons, completed fourteen voyages between New York and San Francisco, between 1858 and 1877, with an average of 137 days passage. Only seven were homeward bound direct; the others included calls at Liverpool and other ports. In 1877 she engaged in trade to the Far East, making China, Japan and the Philippines her principal ports of call.[34] She proved to be Greenmans' second best clipper. In 1883 she was sold to the Austrians.

Greenmans' *Favorita,* built in 1862, entered the New York–San Francisco–Britain route. Of nine round voyages, she averaged 130 days westward, eastbound 113 days to Queenstown. Their *Coldstream,* added in 1866, was a fast sailor "for her inches." In three California trips she averaged 122 days westward, and 126 days to Liverpool. The passages that Greenmans' last full-rigged ship, *Frolic,* made were slower on the same run.

The Mallory vessels, being smaller, proved a handicap on the Horn run west. Six were "tea clipper" in size, 649 to 917 tons only; three were medium-sized, of 1,376 to 1,482 tons. The *Mary L. Sutton,* 1,448 tons, built in 1855, was perhaps the best, the most popular of the late Mallory clippers. Her fastest run to San Francisco was in 103 days, and she averaged 116 days on five consecutive westward voyages. An average of five of her eastward runs direct to New York was ninety-five days. She made a record of seventeen days from 50° South Pacific to the Equator.

The fastest run of any Mallory built clipper from New York to Golden Gate was made by the *Twilight,* 1,482 tons, in one hundred days. Both her runs west in 1858 and 1859 averaged 107 days. *Twilight* seldom experi-

enced favorable weather conditions. Even so, she was popular and made fortunate average passages. Eastbound she made the run in 109 days, and to Liverpool 135 days from San Francisco.

Mallory's *Pampero* drove around the Horn in 111 days, while his *Elizabeth F. Willetts'* record was made from Lahaina, Hawaii, to New Bedford in eighty-nine days. Her master, Captain Joseph Warren Holmes, son of the impressed Jeremiah Holmes, noted earlier, uniquely holds another record. He made eighty-three voyages around Cape Horn, and fourteen around the Cape of Good Hope.

Mallory's *Annie M. Smull,* built in 1868, ran from San Francisco to Hong Kong in thirty-four days. Her best run from New York to California was 125 days, and eastward 111 days. She carried case oil to Queenstown. In the North Atlantic–Far East traffic for many years, she was sold to Norway in 1895.

The European, California, and China trades claimed Captain Gurdon Gates' attention for eight years, aboard the *Twilight* and *Electric.* The latter was one of the fine clippers laid down in the Pistol Point yard of Irons and Grinnell. Their *Andrew Jackson,* 1,679 tons, built in 1855, made a voyage to India, and then settled into the California route. Captain John Williams drove her in 1860 westward around the Horn in eighty-nine days, four hours, outdoing her competitor, the *Flying Cloud,* by nine hours. "Captain Jack" began his long career on a little Mystic sloop. The *Andrew Jackson* kept the best speed record in the California service for four consecutive passages westbound between 1856–60 (102, 102, 103, 89, or an average of ninety-nine days). In 1860 her records included the fifteen-day westbound transatlantic run from Liverpool to Sandy Hook, a thirty-day round voyage from New York–Liverpool–return, and a passage of sixty-one days from Callao to New York. She was a better carrier and money maker than the *Flying Cloud,* never having made a slow passage.[35] No ship that ever sailed in company with her equalled her time to a common destination.[36]

In the post-clipper era Irons and Grinnell launched the *Racer,* 833 tons, in November 1860. Her master was Captain Isaac D. Gates, employed by the William T. Coleman line, in passenger and freight service between New York and San Francisco.

The Maxson and Fish yard's *Seminole* was the fastest American early post Civil War vessel. On her maiden voyage she ran to San Francisco in ninety-six days, the best of her twenty-one westward passages around the Horn. In 1868 she was dismasted in the Gulf Stream. Her average time rounding the Horn, that is from 50° South Atlantic to 50° South Pacific, was only seventeen days. The longest period noted for this same stretch was

when the *Garibaldi* fought her way for sixty-nine days westward in very heavy weather. The *Seminole* made seventeen passages from San Francisco to New York, three of them in ninety-four, ninety-six, ninety-seven days respectively, fast sailing for any vessel of that period. She made one passage from Golden Gate to Queenstown in 101 days, and two to Liverpool in 116 and 112 days.

The *Garibaldi* was a prominent member of the early California grain fleet. Her round voyage from New York to San Francisco to Liverpool to New York was 240 days. Westward around the Horn took 110 days, eastward to Liverpool 111 days, and westbound across the Atlantic nineteen days.

Maxson and Fish's *Cremorne,* built in 1862, entered the Cape Horn trade. Of six westward passages to San Francisco, four were completed to New York, and one carried wheat to Liverpool. Her record run was from San Francisco to the Equator in fourteen days.

Their *Helicon* made no fast passages, but made a consistently good average. Their *Dauntless* ran from New York to San Francisco in 118 days, and she recorded one run from Manila to Boston in ninety-six days. She was Maxson and Fish's last full-rigged vessel. Thereafter a growing emphasis was put on fast sailing, small craft, yachts, pilot boats, and fishermen.

During the ten year extreme clipper era, an overwhelming majority of sailing records that still stand were made. Mystic contributed 115 of the notable passages from the North Atlantic ports to San Francisco, taking 110 days as the criterion. This is remarkable when one realizes that Mystic built a very small proportion of the American clipper fleet, and competed in only nine of the ten years. After this period, Mystic's *Seminole,* on her maiden run, once more matched the best clipper run of ninety-six days.[37]

The Cape Horn route from New York to San Francisco was the toughest course known to the masters of sailing ships. Normally it was a run of seventeen thousand miles, and 130 days was regarded a fair clipper passage. More often the voyage lasted from 140 to 150 days, even for the later California packets, a thousand tons heavier and sixty to seventy feet longer than the average clipper.

"If quality rating of a ship is determined by the cost of carrying a ton per mile per unit period of time, week, month, or year, several Mystic-built ships were in first flight and a few of them led the world."[38]

Mystic's west coast sailing record is remarkable not only in the quantity of fast runs, but is equally impressive in the sturdy construction of her swift vessels, in the ability of local captains and shipmasters, in leadership in pioneering voyages, and in the commercial initiative of her citizens.

European Trade

It has been previously observed that in the early chapters of the community's history some exports consisted of so-called naval stores, i.e., tar, pitch, and turpentine. These were in great demand for the growing British navy. Except for the masts and lumber cut here and shipped to England, these stores were accumulated through coastal traffic with the southern colonies and states.

Products from England were all kinds of tools, cannon and powder, kitchen goods, wines, clothing. Such imports as furniture, books and paper continued to be of paramount importance into the eighteenth century. With each handling of the imports a commission of about two and a half per cent was charged. With freight charges, insurance, unloading charges, and custom, prices increased five or six times their port of embarkation rate. Because of currency imbalances and other economic and political pressures, by 1774 few merchants risked Atlantic trade with London.

During our Revolution France became an ally, and trips for salt were made to Bordeaux. This commodity was necessary as a domestic item as well as for export products of dried fish, beef, pork, and furs.

With the lively expansion of her merchant fleet, the new nation found herself the only remaining neutral during the period of the Napoleonic wars in Europe between 1789 and 1807. Great Britain attempted to enforce the Rule of 1756, holding that trade not open to neutrals in time of peace should not be open in time of war. The French West Indies and French trade, chiefly in provisions, was held contraband by the British.

Between 1789 and 1812 there was continual friction with Great Britain over her stopping and searching American ships for English deserters to the American higher wages and American code for seamen. In 1793 President Washington proclaimed our neutrality. France was incensed because we had not openly sided with her, and until Napoleon's desire for peace brought a temporary patching, we were in a state of quasi-war with that nation.

The second peace with England released manpower and other resources for purposeful and speedy resumption of our maritime activities. Reciprocal trade treaties came more slowly. Not until June of 1818 could Mr. Monroe address a letter to Jonathan Russell, Minister at Stockholm, introducing Silas E. Burrows, who carried the first United States commercial treaty to Sweden. These were the days when only Prussia and Sweden recognized the infant nation as a commercial equal.

It was Burrows, who in 1827, offered his brigs *Athenian* and *Burrows* as

relief ships to the Greek revolutionists. The offer, however, was refused. In 1830 Burrows' schooner *Superior,* Captain Stephen Conger, rescued at sea the demasted yacht of the Czar of Russia, the *Kensington.* The Czar's refusal to pay repairs and salvage forced Burrows into bankruptcy in New York City. All his eggs were not in one vessel, however, and in 1834, to his rapidly expanding fleet in the New York, New Spain, and Cartagena trade was added the *John Baring,* 590 tons.

It was Silas E. Burrows who, in 1847, introduced the telegraph in Russia. Count Nesselrode had expressed the Emperor's wishes for an American Magnetic Telegraph. Burrows had two men by the name of Robinson install a line from St. Petersburg to the Czar's palace at Tsarskoye Selo.

The Greenmans' *William Rathbone,* launched in 1849 for the Liverpool packet service, was considered one of the best Atlantic liners.

Formerly a whaler, Captain Albert Crary Burrows sailed with the Mallory line more than twenty years, making in all more than a hundred trips across the Atlantic. It is said of him that when the *Rio Grande* was afire ninety miles from the Delaware breakwater, Burrows overhauled an Italian barque, and transferred his ninety-seven passengers. Burrows then ran the *Rio Grande* on the shoals, sank her to her decks, extinguishing the fire; the crew then pumped her out, refloated her, overtook the Italian and retransferred the passengers.[38]

Abel Eldredge of Mystic, twenty-six, drowned when the Mallory steamship *Atlanta* broke up and sank off Sandy Hook in 1865. This was a dramatic end to a brief, vivid life, when one observes that Eldredge had been on a vessel burned at New Orleans; had been aboard the clipper *B. F. Hoxie* burned by a pirate ship; was aboard the steamer *Fanny* which sank in a collision; had suffered two other shipwrecks, and, to boot, had contracted yellow fever in Mexico.

After steam vessels proved their dependability the clipper shipbuilding era gave place to the new type of construction. The existing ships finished their useful days in an unhappy, inglorious trade hauling coal, lumber, and even guano, the odoriferous seafowl excrement from Chili and other outlying islands of the Pacific. When the agricultural experiment stations proved the worth of adding fertilizer to worn out soil here and abroad, it was the Yankee merchant seaman who had the means and stamina to haul the basic ingredient and make a profit at the same time.

A forlorn symbol of the passing of the clipper ship era was the medium clipper *Mary L. Sutton,* driven ashore and wrecked on Baker's Island in the Pacific. She had been loading guano for Europe. The clipper had been insured for $70,000. Captain P. E. Rowland and his crew were saved.

CHAPTER V

End of an Era

THE BUSTLING prosperity of the Mystic of 1900 was indicative of a time of general coastal expansion, reflecting the steady growth of the community from the relatively simple Colonial economy of farm and fisher folk to the gas-lit, steam-powered complexities of the Victorian age.

Across the Thames at New London arched the bridges which now served both the railroad and the quasi-reliable horseless carriage. The railroad itself, now a through line from New York to Boston, signalled Progress. Excursions by rail as well as by Sound steamer were a pleasant indication of the Victorian zest for travel.

Now a closer-knit, more heavily built-up community, the Mystic of 1900 showed, in spite of wars, taxes, fires, and embargoes, a not-to-be-crushed ability to progress in the practical administration of its affairs and in the use of its industrial resources.

Physical indications of this economic strength were to be seen on the two banks of the Mystic River, on the west side in stately rows of Greek Revival and Colonial houses, the homes of Mystic industrialists, and on the east side in not so graceful, but sturdy signs of steady industrial development.

Smoke rising from the chimneys of the Rossie Velvet Mill and the sound of hammer and saw at booming Industrial Place were signs of growth still to come. From the site of the old grist mill, continuously a work-site of one sort or another from the town's earliest days, came the clatter of a woolen-finishing mill.

Symbolic of changing times, too, were the antiseptic odors of Packer's Tar Soap and witch hazel, and the noisy evolutionary sounds of the Lathrop gasoline marine engine as it was developed from two to four-cylinder status.

The once-resounding shipyard hum echoed from downstream at the Palmer Shipyard at Noank, where the rectangular hulls of large wooden barges now slid down the ways.

Sail, except for pleasure yachts, had left the seas, but squadron racing in the burgeoning New York and Boston yacht clubs kept the sail a familiar

sight on the horizon. The successful Mystic merchant seaman retired from "slamming packets" back and forth to England, built himself sailing yachts that enlivened his leisure days with the pleasure of the race. Not just a few of these yachts, carrying eight and ten men crews, skirted the waters of the world. It was not always true of the Mystic sailor, as it was of Stevenson's "Home is the sailor, home from sea, and the hunter home from the hill" that "here he was where he longed to be." Truer of him were the words of the familiar sea chanty, "His home is on the rolling sea."

Despite the pleasurable activity of yachting and squadron racing, the shipbuilding days of Mystic were numbered. The maritime economy, once so vital a factor in the economic life of Mystic, was no longer of prime importance. Coastal trade emanated now from larger ports. To and from the larger Eastern and Western seaports, now the focal points of trade, went the West Indies and South American trade, and the California and European ventures, carried now in larger, sturdier, steel hulls.

Of all the early economic factors, fishing, in its always small, always privately owned scale, continued uninterrupted, aided but comparatively unchanged by the faster moving era in which electricity and gasoline were replacing the age of canvas and steam. And further back from the banks of the river, ploughed fields, segmented by miles of stone walls, and cattle grazing in the hilly meadows, bore testimony to the continuing labor of the dairy and truck farmer.

So here is Mystic, at the turn of the century, survivor of all the vicissitudes of a changing economy. If the community at large no longer thrilled to its first sight of the long lean lines of a Mystic-built clipper hull, it was because in the bustle and hustle of the emerging twentieth century there was little time for nostalgia. And if the residents took rather for granted a deep-rooted industrial past, it nevertheless took from it the strength to move confidently forward into the age of electricity and of the atom.

Appendices

A

The Association of Pawcatuck People

Whereas there is a difference between the two Cullonyes of Matachusetts and Conecticoate about the government of this place, whearby we are deprived of Expectation of protection from either, but in way of Curtecy, and whereas we had a command from the General Court of Matachusetts to order our own business in peac with common consent till further provition be made for us, in obedyience to which command we have addressed our selves thearunto, but cannot atain it in regard of soomm distractions among ourselves, and thear hath bene injurious insolencys done unto soomm persons,—the cattell of others threatened to be taken away,—and the chattell of soom others already taken away by violence.

We having taken into consideration that in tymes so full of danger as theas are, unyon of our harts and percons is most conducing to the publick good and safety of the place,—thearfore in pursuance of the same, the better to confirm a mutual confydence in one another and that we may be perserved in righteousness and peac with such as do commerce with us, and that misdemeanors may be corrected and incorrygable persons punished:—we whose names are hereunto subscribed do hearby promis, testify and declare to maintain and deffend with our persons and estait the peac of the plac and to aid and assist one another acoording to law & rules of righteousness acoording to the true intent & meaning of our asociation till such other provition be maide for us as may atain our end above written, whereunto we give our assent, & nether ffor ffear hope or other respects shall ever relinquish this promis till other provition be maide ffor us. We do not this out of any disrespec unto ether of the afoursaid governments which we are bound ever to honnor, but in the vacancy of any other aforesaid.

George Denison
Thomas Shaw
Nathaniel Chesebrough
Elihu Palmer
Thomas Stanton
Elisha Chesebrough
Moses Palmer
Walter Palmer
Tho Stanton
Wm Chesebrough
Samuel Chesebrough

Upon the request of severall among us to enter into this asociation with us theay are admitted and have accordingly subscribed thear names.
June 30, 1658

By vertue of this Asociation, that justice may not be obstructed, &c the peac preserved,—we maid choise of Captain Georg Dennyson & Wilm Chesebrough to be comytioners to issue out warrants & to cause to be brought before them anny suspitious percons, or ffor anny misdemenor, & to hear & determine the casses, and to pronounce sentence upon them & to see the judgment executed, provided it extend not to the los of life or limb or banishment or stigmatizing; in such casses as thear power will not reach due punishment for the Crime, then to taik order thear percons may be secured, and sent whear justice may procede against them.

And further they are to issue all their differences, whether of debts, or cases, and to kepe a register of thear actions provided allwaies the action excede not forty pound.

This choise is the act of the houle body of the Asociates.

WALTER PALMER
THO. STANTON

—Stonington Records
Quoted from Hurd, pp. 615–616.

B

Groton Town Meeting June 20, 1774

At a town meeting held Monday 20 June, 1774, William Williams, Moderator, this town taking into consideration the dangerous situation of the British Colonies in North America, respecting sundry late acts of the British Parliament, particularly those of shutting up the Port of Boston, the Metropolis of Massachusetts Bay, and abridging their chartered rights, &c, which, if carried into execution, not only deprives us all of our privileges, but renders life and property very precarious. As we esteem the inhabitants of Boston, now suffering the tyranny of such acts of Parliament, and in the common cause of America; *Voted:* That we will join with the other towns in this Colony in such reasonable measures as shall be judged best for the general good, and most likely to obtain redress of our grievances.

Voted: That we esteem a General Congress of all the Colonies the only probable method to adopt a uniform plan for the preservation of the whole.

Voted: That if it be judged best by said Congress to stop all exports to Great Britain and the West Indies, and all imports from them, we will most

cheerfully acquiesce in their determinations, esteeming the benefits arising therefrom mere trifles compared with the rights and privileges of America.

Voted: That Captain William Ledyard, Thomas Mumford, Ben Adam Gallup, Doctor Amos Prentice, Messrs. Charles Eldredge, Jr., Deacon John Hurbut, and Amos Gere be a Committee to correspond with the Committees of the several towns of this and other British Colonies.

Voted: That the above resolutions be published in the New London Gazette.

WILLIAM AVERY, *Town Clerk*

Notes

CHAPTER I

1. Frances M. Caulkins, *History of New London, Conn.* (New London: H. D. Utley, 1895), p. 23.
2. Harold U. Faulkner, *Economic History of the United States* (New York: Macmillan Company, 1928), p. 101.

CHAPTER II

1. Caulkins, p. 20.
2. Williams Haynes, *Stonington Chronology* (Stonington, Conn.: Pequot Press, 1949), p. x.
3. Henry Steele Commager, *Documents of American History* (New York: F. S. Crofts, 1943), p. 26.
4. Haynes, p. 11.
5. *Ibid.*
6. Caulkins, p. 78.
7. *Ibid.*, p. 98.
8. Haynes, p. 12.
9. Caulkins, p. 98.
10. D. Hamilton Hurd, *History of New London County, Connecticut, with Biographical Sketches of Many of Its Pioneers and Prominent Men* (Philadelphia: J. W. Lewis & Co., 1882), p. 419.
11. Caulkins, p. 96.
12. Hurd, pp. 612–14.
13. Haynes, p. 12.
14. *Ibid.*, p. 13.
15. *Ibid.*
16. Hurd, p. 615.
17. Haynes, p. 15.
18. Hurd, p. 617.
19. *Ibid.*, p. 618.
20. Caulkins, p. 104.
21. Haynes, p. 15.
22. *Ibid.*
23. *Ibid.*, p. 24.
24. *Ibid.*, p. 25.
25. *Ibid.*
26. *Ibid.*, p. 26.
27. *Ibid.*
28. *Ibid.*, p. 35.
29. Faulkner, p. 42.
30. Albert E. Van Dusen, Associate Professor of History, University of Conn., Lecture: "The Early American Colonies and England's Colonial System," Munson Institute, June 30, 1958.

31. Faulkner, p. 38.
32. Haynes, p. 11.
33. Faulkner, p. 39.
34. *Ibid.*, p. 40.
35. Haynes, p. 38.
36. Faulkner, pp. 43–4.
37. *Ibid.*, pp. 42–4.
38. *Ibid.*, p. 45.
39. Hurd, p. 671.
40. Haynes, p. 21.
41. *Ibid.*, p. 41.
42. Van Dusen, "Effects of the Revolution on Connecticut Trade," July 3, 1958.
43. Haynes, p. 41.
44. Hurd, p. 629.
45. Haynes, p. 42.
46. Ibid., p. 43.
47. Hurd, p. 427.
48. Haynes, p. 44.
49. Faulkner, pp. 54–5.
50. *Ibid.*
51. *Ibid.*, p. 62.
52. *Ibid.*, p. 65.
53. Haynes, p. 49.
54. Faulkner, p. 67.
55. *Ibid.*
56. *Ibid.*, p. 69.
57. Haynes, p. 50.
58. Philip R. Mallory, *Mystic Seaport—And the Origins of Freedom, an Anniversary Address* (New York: Newcomen Society of North America, 1954), p. 20.
59. *Ibid.*
60. Hurd, p. 427.
61. *Ibid.*, p. 635.
62. Haynes, p. 50.
63. Hurd, p. 644.
64. *Ibid.*, p. 431.
65. Haynes, p. 51.

CHAPTER III

1. *Ibid.*, p. 16.
2. *Ibid.*, p. 24.
3. *Ibid.*
4. Hurd, p. 674.
5. Marion Dickerman, *The Three Greenman Brothers* (Mystic, Conn.: Marine Historical Association, Inc., 1954), p. 19.
6. Carl C. Cutler, *Mystic: The Story of a Small New England Seaport* (Mystic: Marine Historical Assn. Inc., 1945), p. 169.
7. *Ibid.*
8. *Ibid.*, pp. 157–8.
9. William Armstrong Fairburn, *Merchant Sail* (5 Volumes, Center Lovell, Maine: Fairburn Marine Educational Foundation, Inc., 1945–55), p. 2858.
10. *Ibid.*
11. *Ibid.*, p. 2852.

12. Cutler, p. 157.
13. Haynes, p. 74.
14. Cutler, p. 159.

CHAPTER IV

1. Hurd, p. 676.
2. Haynes, p. 24.
3. Hurd, p. 676.
4. Caulkins, p. 232.
5. *Ibid.*
6. *Ibid.*, p. 230.
7. *Ibid.*, p. 240.
8. Faulkner, p. 42.
9. Van Dusen, "Connecticut Trade with the West Indies," July 2, 1958.
10. Cutler, p. 143.
11. *Ibid.*, p. 145.
12. Mallory, p. 17.
13. Haynes, p. 75.
14. W. Storrs Lee, *The Yankees of Connecticut* (New York: Henry Holt and Company, 1957), p. 69.
15. Foster Rhea Dulles, *The Old China Trade* (Boston: Houghton Mifflin, 1930), p. 1.
16. *Ibid.*, p. 50.
17. *Ibid.*, p. 13.
18. *Ibid.*, p. 3.
19. Charles H. P. Copeland, Librarian, Salem Public Library, Lecture: "Far Eastern Trade of Salem," July 14, 1958.
20. Dulles, p. 4.
21. *Ibid.*, p. 13.
22. Hurd, p. 677.
23. Caulkins, p. 638.
24. Edwin Swift Balch, "Antarctic Addenda," Reprinted from *Journal of the Franklin Institute* (Philadelphia, February, 1904), pp. 17–18.
25. Hurd, p. 678.
26. Cutler, p. 147.
27. William Henry Holmes, *Polar Whaling* (Mystic: Marine Historical Association, Inc., 1948), pages unnumbered.
28. Lee, p. 73.
29. Edouard A. Stackpole, "Whaling as an Industry," July 11, 1958.
30. Haynes, p. 51.
31. *Ibid.*, p. 87.
32. Leonard Outhwaite, *The Atlantic, History of an Ocean* (New York: Coward McCann, 1957), p. 254.
33. Mallory, p. 9.
34. Thomas A. Stevens and Dr. Charles K. Stillman, *George Greenman and Company, Shipbuilders of Mystic, Connecticut* (Mystic: Marine Historical Association, Inc., 1938), p. 18.
35. Fairburn, p. 2857.
36. Carl C. Cutler, *Greyhounds of the Sea* (New York: Halcyon House, 1930), p. 367.
37. Cutler, *Mystic*, p. 173.
38. Fairburn, p. 2853.
39. American Book Exchange, Publisher, *Pictorial New London and Its Environs at the Commencement of the Twentieth Century* (Providence: Journal of Commerce Company, 1901), p. 176.

Bibliography

Burrows, Silas E. *Russia and America.* Vol. I and II. Hartford: Case, Lockwood and Co., 1865.

———. *America and Japan, Russia and the Republic of New Granada.* Privately printed, Title Page Missing.

Caulkins, Frances Manwaring. *History of New London, Connecticut.* New London: H. D. Utley, 1895.

Chitwood, Oliver Perry. *History of Colonial America.* New York: Harper and Bros., 1948.

Commager, Henry Steele. *Documents of American History.* New York: F. S. Crofts, 1943.

Cutler, Carl C. *Greyhounds of the Sea.* New York: Halcyon House, 1930.

Fairburn, William Armstrong. *Merchant Sail.* Vols. II, IV, V. Center Lovell, Maine: Fairburn Marine Educational Foundation, Inc., 1944–55.

Fanning, Captain Edmund. *Voyages and Discoveries in the South Seas.* Salem, Mass.: Marine Research Society, 1924.

Faulkner, Harold Underwood. *Economic History of the United States.* New York: The Macmillan Company, 1928.

Fayle, C. Ernest. *A Short History of the World's Shipping Industry.* London: George Allen and Unwin Ltd., 1933.

Haynes, Williams. *Stonington Chronology.* Stonington, Conn.: Pequot Press, 1949.

Hurd, D. Hamilton. *History of New London County, Connecticut, With Biographical Sketches of Many of Its Pioneers and Prominent Men.* Philadelphia: J. W. Lewis and Company, 1882.

Lee, W. Storrs. *The Yankees of Connecticut.* New York: Henry Holt and Company, 1957.

Morison, Samuel Eliot, and Commager, Henry Steele. *The Growth of the American Republic.* Vols. I and II. New York: Oxford University Press, 1950.

Nettels, Curtis P. *The Roots of American Civilization, A History of American Colonial Life.* New York: F. S. Crofts, 1946.

Outhwaite, Leonard. *The Atlantic, History of An Ocean.* New York: Coward McCann, 1957.

Pictorial New London and Its Environs at the Commencement of the Twentieth Century. Providence: Journal of Commerce Company, 1901. Published by American Book Exchange.

Schlesinger, Arthur M., and Fox, Dixon Ryan. *A History of American Life.* New York: Macmillan and Company, 1927.

Articles and Periodicals

Balch, Edwin Swift. "Antarctic Addenda," Reprinted from *Journal* of Franklin Institute (Philadelphia, February 1904), pp. 17–18.

Cutler, Carl C. *Mystic:The Story of a Small New England Seaport.* Mystic: Marine Historical Association, Inc., 1945.

Daboll. *New England Almanac.* New London: Bolles and Williams, 1847.

Dickerman, Marion. *The Three Greenman Brothers.* Mystic: Marine Historical Association, Inc., 1954.

Holmes, William Henry. *Polar Whaling, A Sea Letter Narrative of a Cruise in the Okhotsk Sea in 1849.* Mystic: Marine Historical Association, Inc., 1948.

Mallory, Philip R. *Mystic Seaport—And the Origins of Freedom, An Anniversary Address.* New York: Newcomen Society of North America, 1954.

Stevens, Thomas A., and Stillman, Dr. Charles K. *George Greenman and Company, Shipbuilders of Mystic, Connecticut.* Mystic: Marine Historical Association, Inc., 1938.

Unpublished Material

Anderson, Virginia B. "The Stonington Sealing Fleet of 1820–1830." A Term Paper for the Munson Institute, Mystic Seaport, 1958.

The following were lectures given at the Munson Institute:

Copeland, Dr. Charles H. P., Librarian, Salem Public Library. "Far Eastern Trade of Salem," July 14, 1958.

Stackpole, Edouard A., Curator, Mystic Marine Museum. "Whaling as an Industry." July 11, 1958.

Van Dusen, Albert E., Associate Professor of History, University of Connecticut. "The Early American Colonies and England's Colonial System," June 30, 1958.

———. "Effects of the Revolution on Connecticut Trade," July 3, 1958.

———. "Connecticut Trade with the West Indies," July 2, 1958.

ACKNOWLEDGMENT

Indebtedness is expressed to members of the staff at Mystic Seaport, and in particular to Carl C. Cutler, Curator Emeritus; Dr. Glenn E. Thompson and Mrs. Rachel Wood, formerly of the Library, and members of the Curatorial staff and Munson Institute.

VIRGINIA B. ANDERSON

Index