HISTORIC BACKGROUND

Delaware's Historic Period began with the initial arrival of European explorers and settlers. An overview of the general trends and significant events that have taken place in the project area vicinity from the beginning of the Historic Period to the present is provided in this section. This discussion provides a chronologically oriented summary of the surrounding area's history with a focus on developments relating to maritime-oriented activity. It is organized according to the historic context themes employed in the "Management Plan for Delaware's Historical Archaeological Resources" (De Cunzo and Catts 1990).

More detailed discussions of each of the three bridge crossing areas are provided later in this report. Those sections contain the results of research into their specific local histories along with information on the presence, distribution, and historical significance of the submerged cultural resources encountered during the field work.

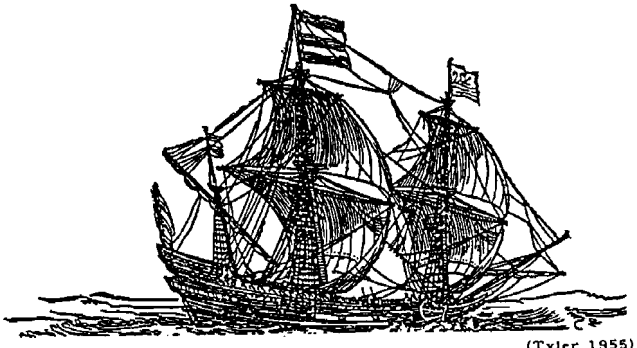
Exploration and Frontier Settlement (1639 - 1730+/-)

Delaware's historic period started with the initial European exploration of the Middle Atlantic region. The first recorded account of Delaware Bay dates to August 1609 when Henry Hudson made a brief visit while exploring the coast of North America in the service of Dutch commercial interests. Hudson is credited with the discovery of Delaware Bay which he named the "South River."

Hudson's vessel, the Half Moon, was a small sailing ship that probably resembled a variety of the "galleon" type, which was common at the beginning of the 17th century (Figure 9). Galleons were characterized by a profile in which the bow had an upswept protruding beak at the bow and the stern carried a high sterncastle. It evolved out of earlier naval architectural design and was developed in western Europe during the late 1500's for oceanic voyaging. English ships of this design class brought the Virginia Company colonists to Jamestown in 1607 and the Pilgrims to Massachusetts in 1620.

FIGURE 9

Hudson's Ship Half Moon (Early 17th Century)



(Tyler 1955)

In the year following Hudson's visit (1610), Captain Samuel Argall entered the mouth of Delaware Bay. At the time he was exploring the Atlantic Coast on behalf of the English colony at Jamestown in Virginia. Argall named the great bay in honor of Jamestown's residing Governor, Lord De La Warre ("Delaware").

The Dutch explorer Captain Cornelius Mey conducted a survey of the New Jersey Coast and Delaware Bay in 1614. He named the southern Delaware Cape "Cornelius" and the northern one "Mey" after himself. New Jersey's Cape May still retains the name he gave it nearly four centuries ago.

The earliest Europeans to regularly visit Delaware Bay were probably Dutch traders. They initially came to the region from their New Netherlands colony along the Hudson River to trade with local Indians for furs. This activity led to the establishment in 1626 of a trading post named Fort Nassau, near present day Gloucester, New Jersey. Rather than being a permanent settlement, this outpost was occupied only during trading activities. The absence of permanent Dutch settlement facilitated the later establishment of the New Sweden Colony. During this early phase of maritime activity, European vessels were only intermittent and temporary visitors to the Delaware Bay region.

At least one early 17th century Dutch trading vessel appears to have been lost in Delaware's interior waterways. According to local historical tradition in Kent County, the crew of a Dutch vessel was massacred by American Indians early in Delaware's historical period. The waterway where that incident is said to have occurred has ever since been known as the "Murderkill" River.

The early Dutch fur traders reported an abundance of whales near the mouth of Delaware Bay. The economic promise of a whaling fishery led to the dispatch from Holland in 1631 of a small expedition to establish a settlement there. The location chosen was along the southern shore of Lewes Creek at a place the Dutch called "Swanendael" (Swans Dale). This became the first recorded European colonial settlement within the territory of the State of Delaware.

The leader of the effort to settle Swanendael was David DeVries. Among his backers was a wealthy merchant named Godyn. In his honor, Delaware Bay was called "Godins (Godyns) Bay" by the Dutch.

Living in the vicinity of Swanendael, however, was a tribe of American Indians that the Dutch called the "Big Siconese." While they initially accepted the presence of the Dutch, relations soon deteriorated. In 1632, a dispute concerning an alleged theft exploded into lethal fury. The outcome was the massacre of every Dutch inhabitant of the Swanendael settlement. DeVries, who was not present during the massacre, reestablished a settlement at the same location later in 1632. However, the site was abandoned early in 1633.

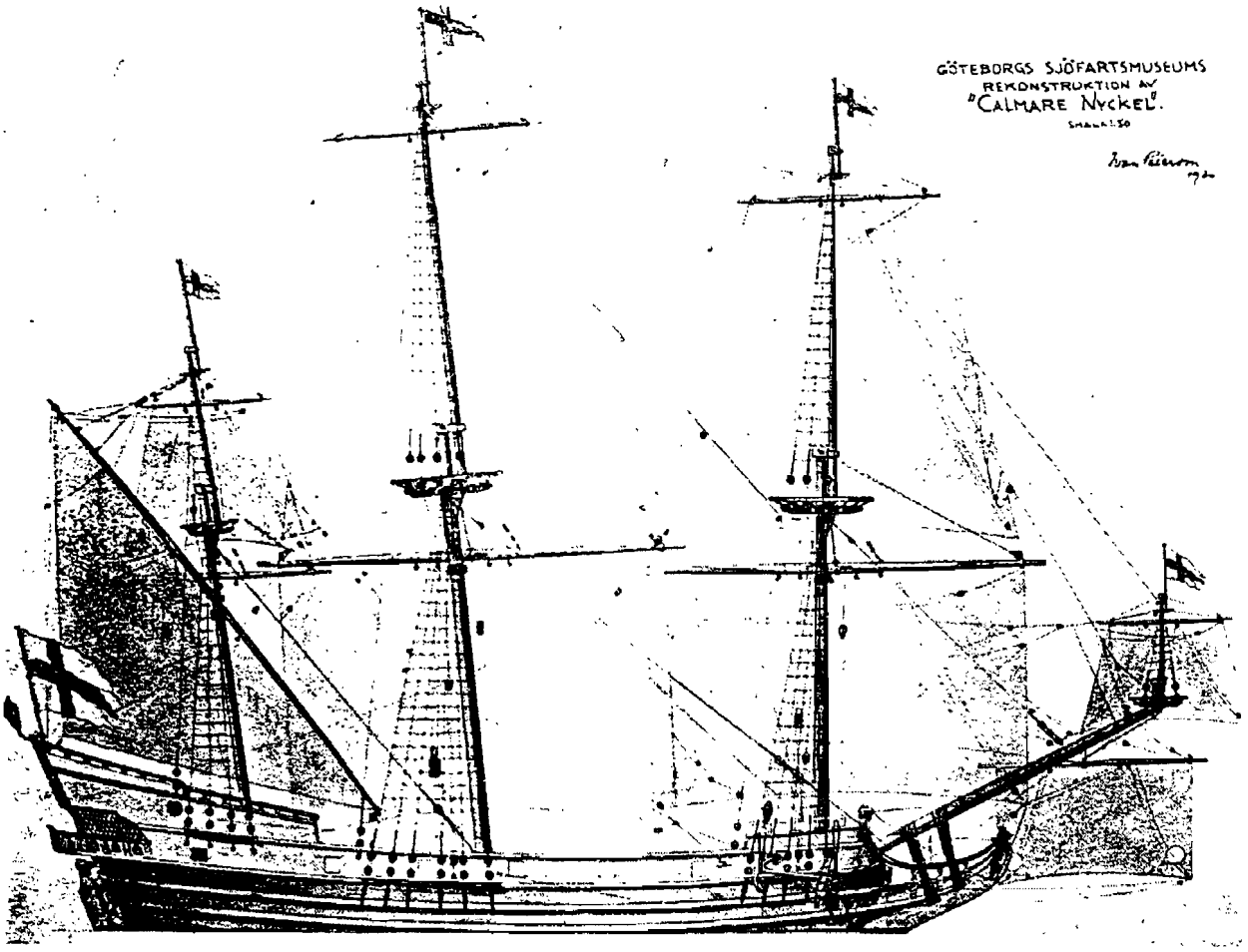
Despite the impermanent settlements at Fort Nassau and Swanendael, interest in the promising commercial outlook of the Delaware River region continued. It led other Dutch entrepreneurs to organize a colonization company in Sweden with Swedish participation and sanction. In 1638, two Swedish ships sailed up the

Delaware Bay to the Christina River. The larger of the two was the Kalmar Nyckel, a ship of the galleon type (Figure 10).

These ships carried a mixed group of Swedes, Finns, and Dutch. Together they founded the colony of "New Sweden." The initial settlement was established at Fort Christina on the Christina River within the present day city of Wilmington, Delaware.

FIGURE 10

The New Sweden Colony's Kalmar Nyckel (c. 1638)



(Tyler 1955)

In competition with the Swedish colony the Dutch West India Company decided to reassert its influence in the Delaware Bay region. To further that goal a fortified settlement (Fort Casimir) was established in 1651 at the current location of the town of New Castle about five miles south of Fort Christina. It was seized three years later by the Swedes but was recaptured the following year by the Dutch.

Shortly after the Dutch took back Fort Casimir in September 1655, they forced the capitulation of the main Swedish colonial settlement at Fort Christina. With the Delaware Bay region once again under Dutch control, a settlement was reestablished in 1659 at Lewes near the mouth of the Bay.

The Dutch vessels that came to Delaware Bay during this period were likely to have been "flutes" (Figure 11). Middle 17th century merchant ships of Netherlands nationality were frequently of that type. They were of moderate size but very seaworthy and had good cargo carrying capacity. This type was developed during the early 17th century in the Netherlands and was employed through the second half of the 1600's. They were the standard freighter of the Dutch civilian maritime industry for about half a century.

In 1664, the English engaged in a successful war against Holland. Their seizure of the New Netherlands Colony ended forever Dutch hegemony in the New York and Delaware regions. The English retained control from then onwards except for a brief foray into the area by the Dutch in 1673. The settlement at Fort Casimir was renamed New Castle after its surrender to the English.

In 1682, the territory making up present day Delaware was granted by the King of England to William Penn. His energetic efforts at building up the Pennsylvania colony were enormously successful. Among the several towns that were founded, grew, and prospered was the port of Philadelphia.

Late 17th to early 18th century English immigration into the Pennsylvania colony also promoted the development of the Delaware counties. Early colonists there frequently established landings and settlements along tidal waterways having access to Delaware Bay. Fast land locations adjacent to navigable waterways were preferred because they provided access to natural waterborne transportation routes (Figure 12).

During the early colonization of Delaware, a settlement was established along the waterway then called "Duck Creek" (now named Smyrna River). It was also called "Duck Creek" and was located at what was then that waterway's head of navigation. A mill dam was erected a short distance above the settlement's river landing. The waterpower it produced turned the wheels of mills built to process wheat and corn from local farms into flour. The production of those mills was transported by watercraft to regional markets such as Philadelphia or was exported overseas.

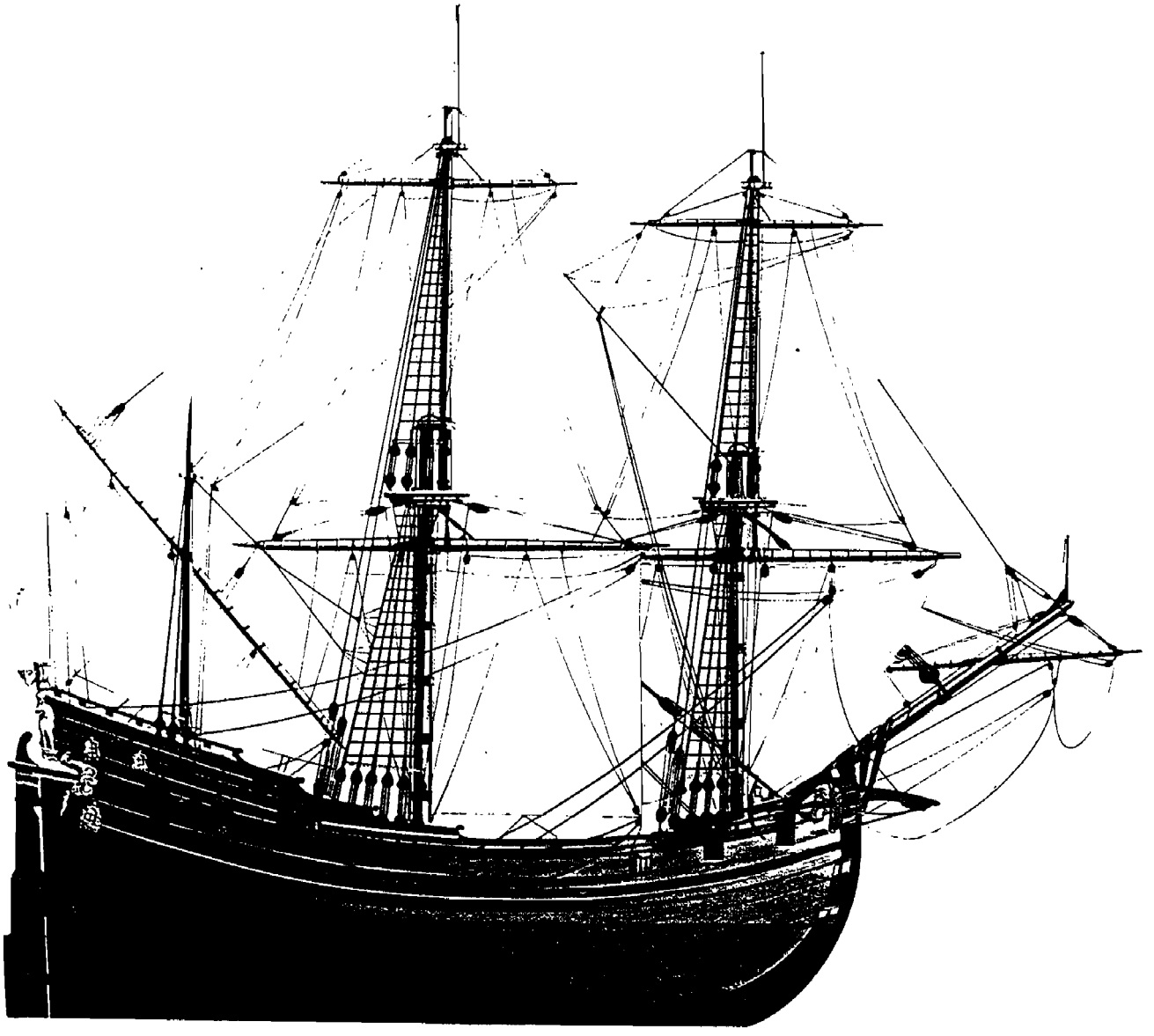
The ships that brought the first settlers to the Pennsylvania Colony were not galleons or flutes. The ongoing development of transoceanic commerce had led to important advances in ship design. Merchant ships of the late 1600's were built to be larger and more seaworthy than earlier types (Figure 13).

Around the beginning of the 18th century, the design of European ocean going ships underwent major modifications. Among these were a reduction in the height of sterncastles and raising of the bow's beak. This gave ships of the early 1700's a more symmetrical profile from stem to stern (Figure 14). This

streamlined design was more seaworthy than the previous types and led to the construction of larger and more sea worthy ships having greater cargo capacity.

FIGURE 11

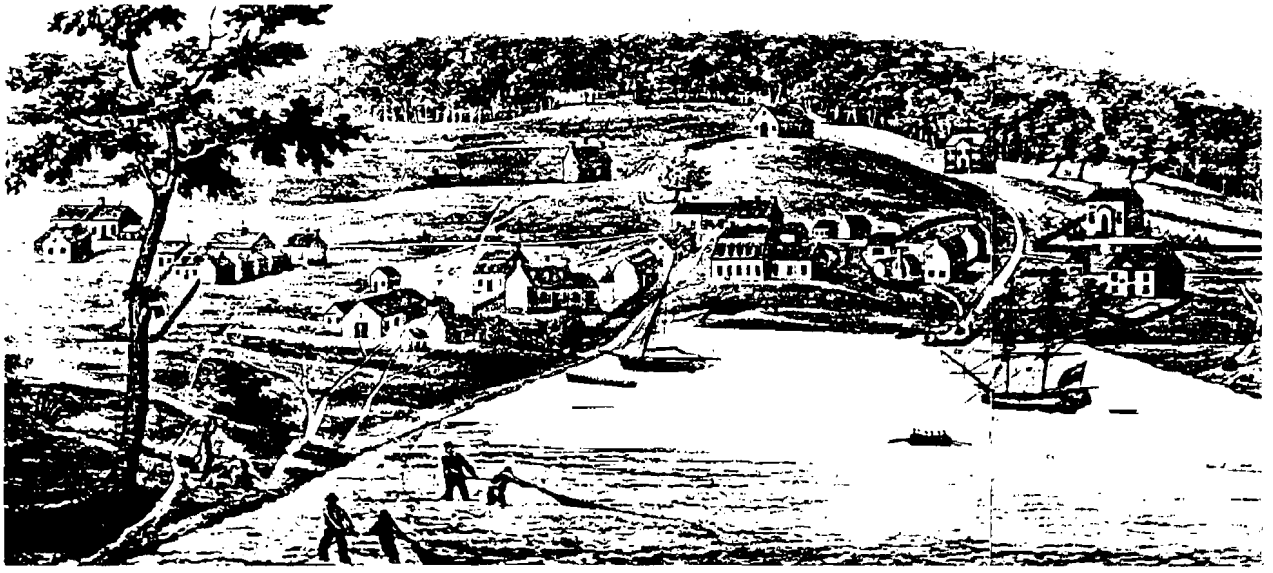
Dutch Merchant Ship of the "Flute" Type (Early to Middle 17th Century)



(Botting 1978)

FIGURE 12

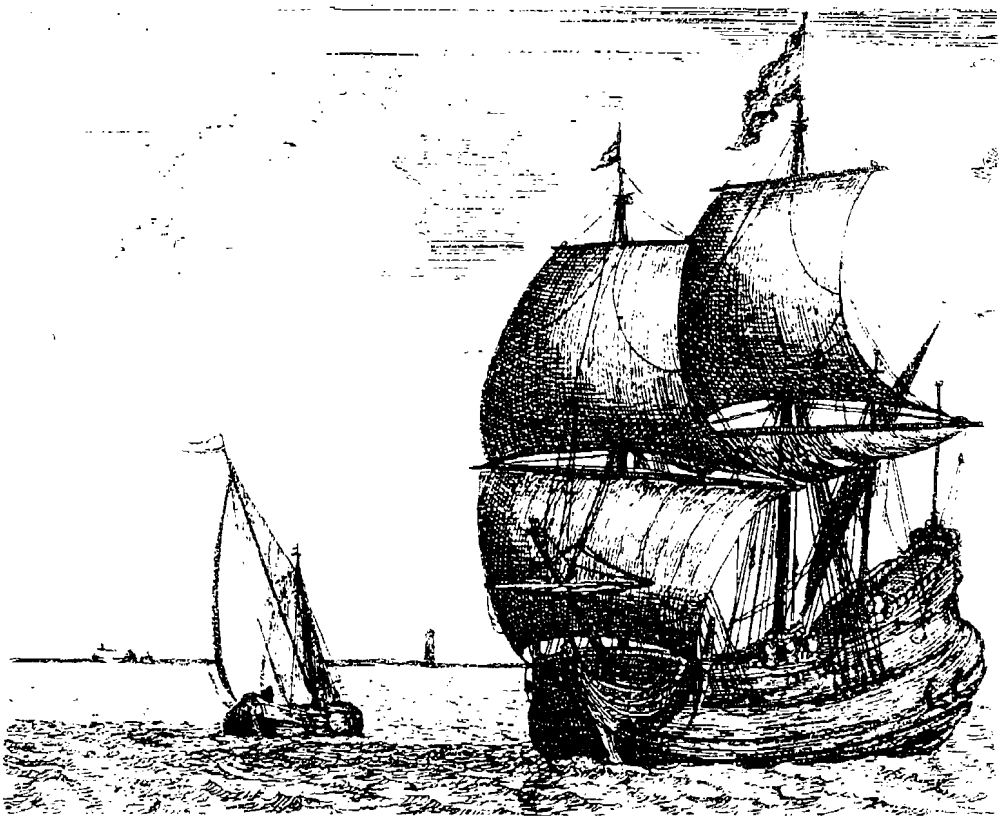
Colonial Riverfront Settlement (Early to Middle 18th Century)



(Athearn 1963)

FIGURE 13

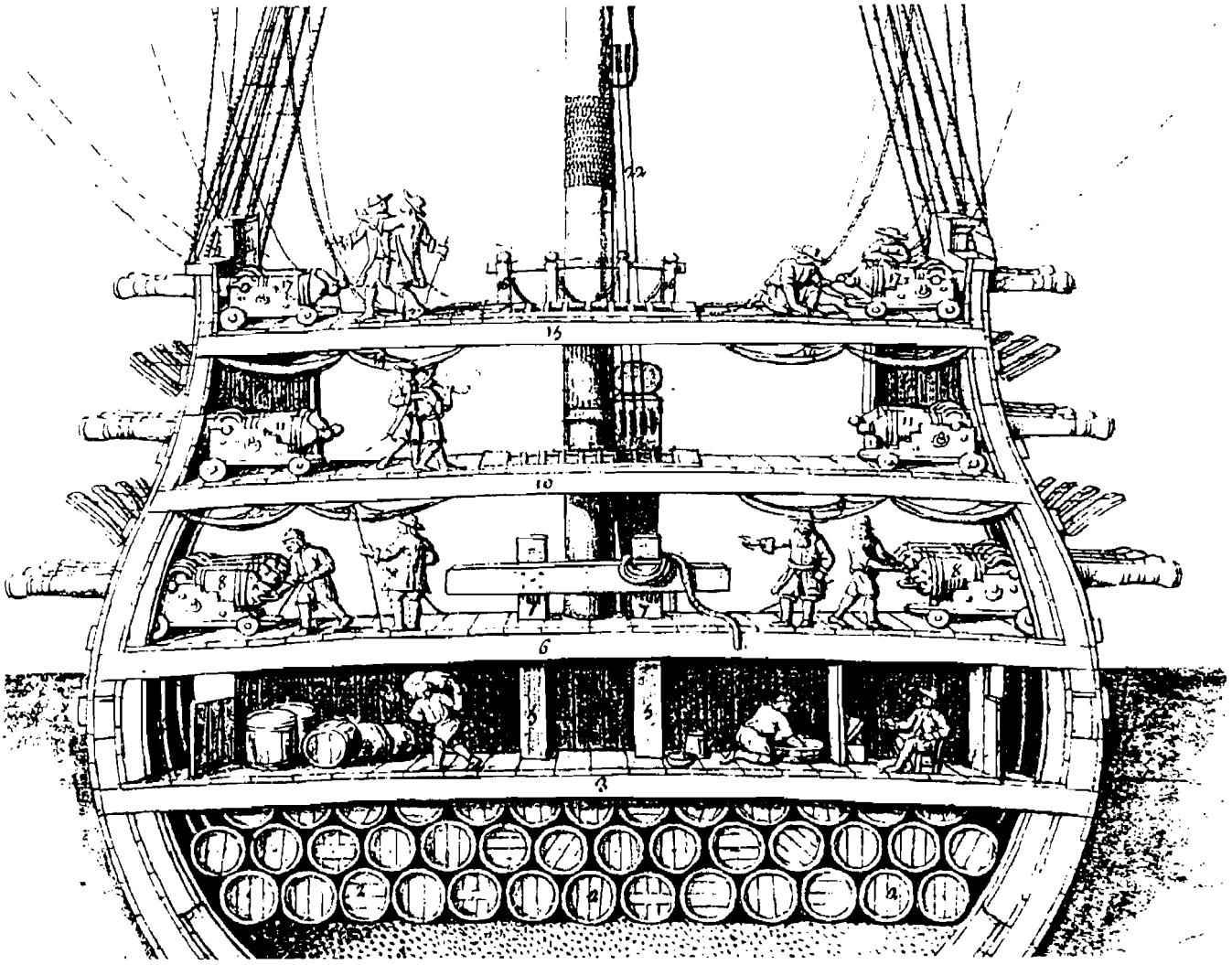
Merchant Ship of the Late 1600's



(De Groot and Vorstman 1980)

FIGURE 14

Cross Section of Late 17th Century Ship-of-the-Line

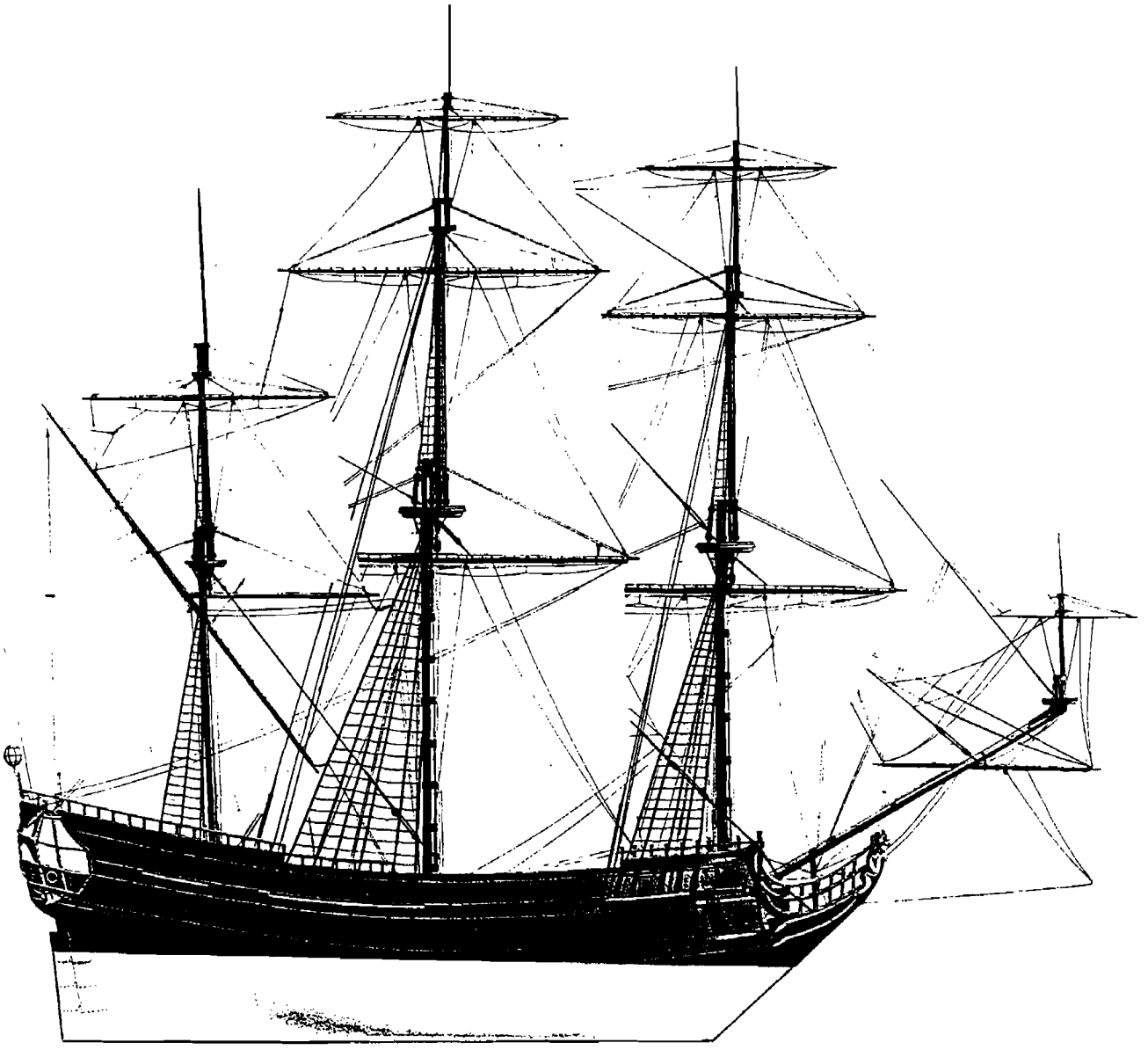


(Bathe and Others 1967)

The sailing ships of the late 17th century were of such efficient design that vessels of virtually the same configuration remained in use for more than a century afterwards. The longitudinal symmetry of these vessels was also conducive to the construction of large multiple decked warships. These came to be known as "ships of the line" and the largest ones carried more than a hundred cannon (Figure 15). Merchant ships were smaller than the naval ships of the line. However, their appearance sometimes closely resembled those of warships. Many actually served as private warships (privateers) during the frequent episodes of 18th century warfare involving the European colonial powers.

FIGURE 15

Merchant Ship of Early to Middle 18th Century



(Botting 1978)

Intensified and Durable Occupation (1730 - 1770+/-)

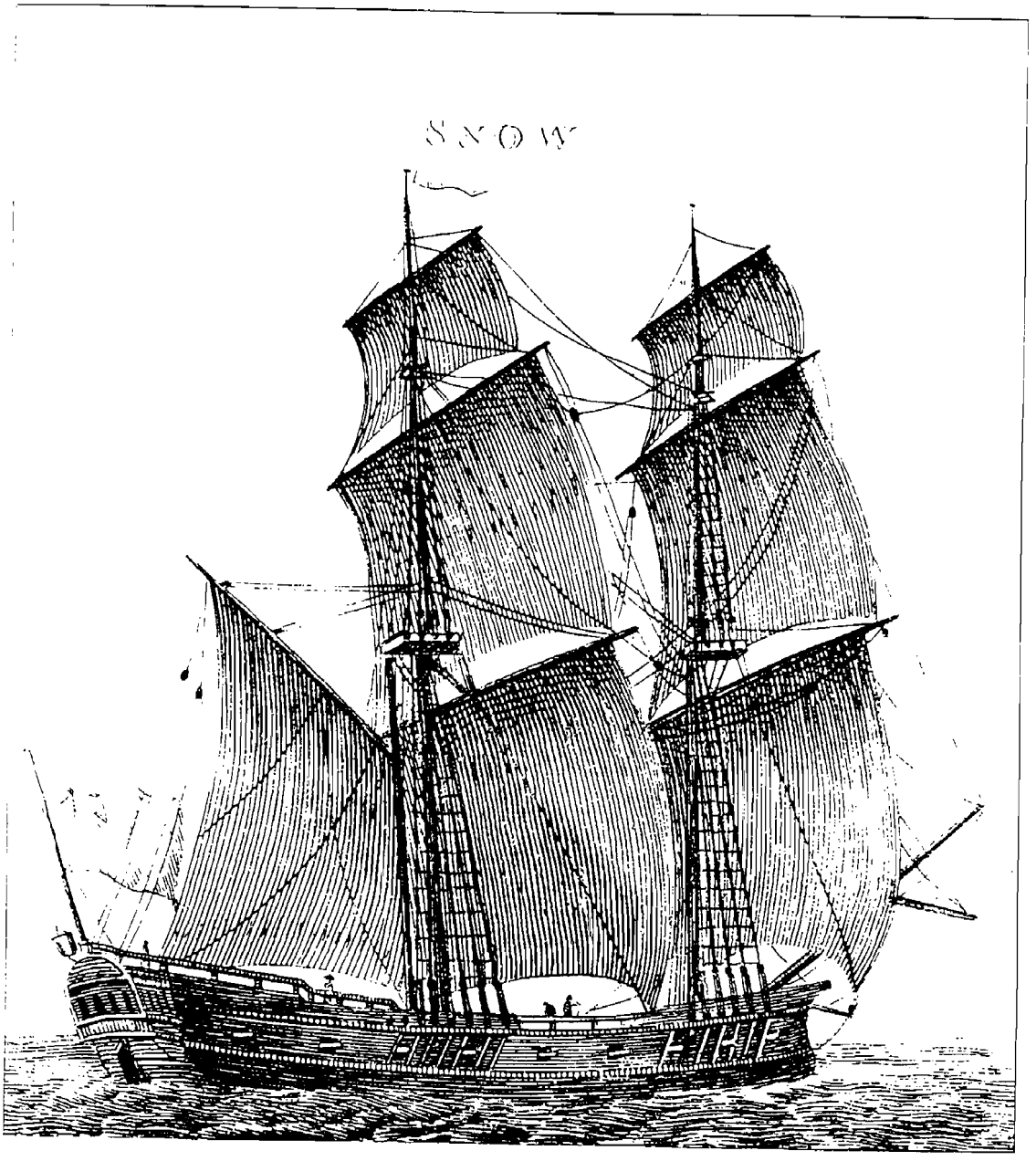
In addition to sea going merchant ships a wide variety of smaller civilian watercraft were also in use during the period from the middle 17th century to the late 18th century. These included two masted brigs, snows, schooners, and single masted cutters and sloops (Figure 16).

One- and two-masted sailing vessels were especially important to coastwise

colonial commerce from the second half of the 17th century through the end of the 18th century. These watercraft could be readily constructed in small colonial shipyards using locally available materials (Figure 17). As settlement and commerce increased in the North American colonies, so did the number and variety of watercraft used to transport people and cargoes.

FIGURE 16

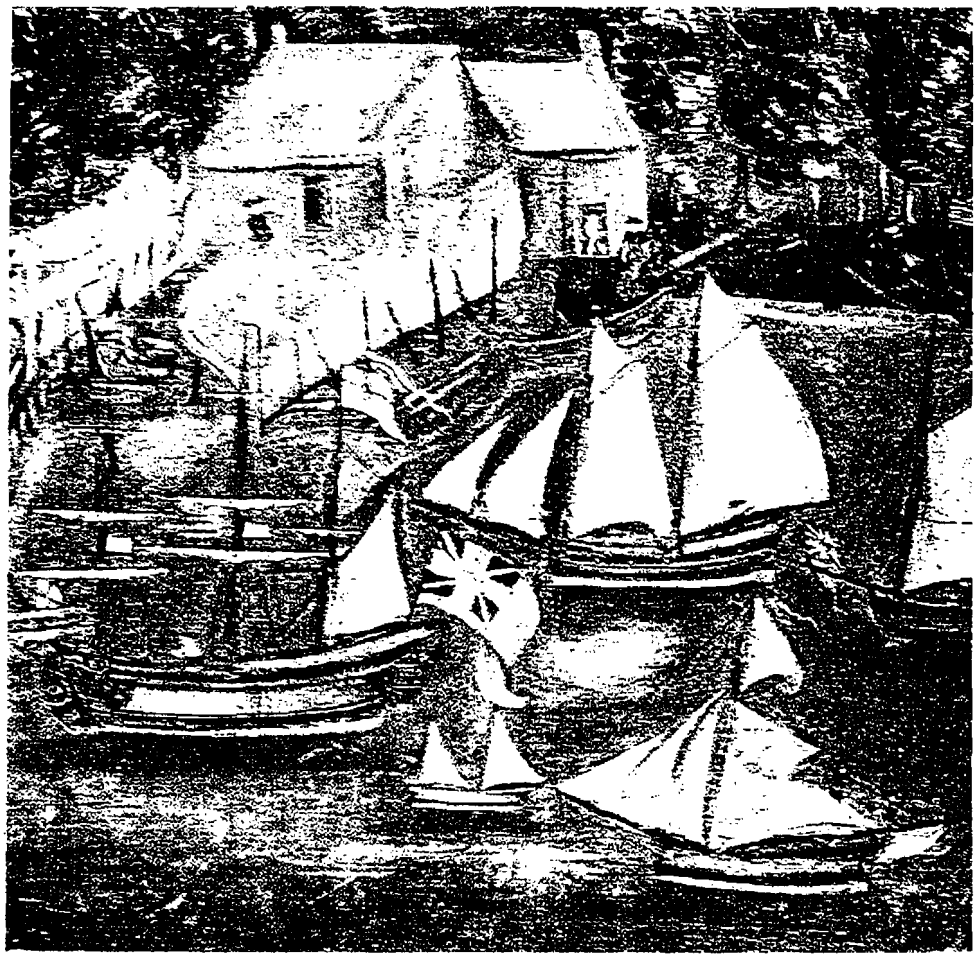
Merchant Ship of the "Snow" Type (Late 18th Century)



(Steel 1818)

FIGURE 17

Middle Atlantic Region Colonial Period Shipyard (Mid-18th Century)



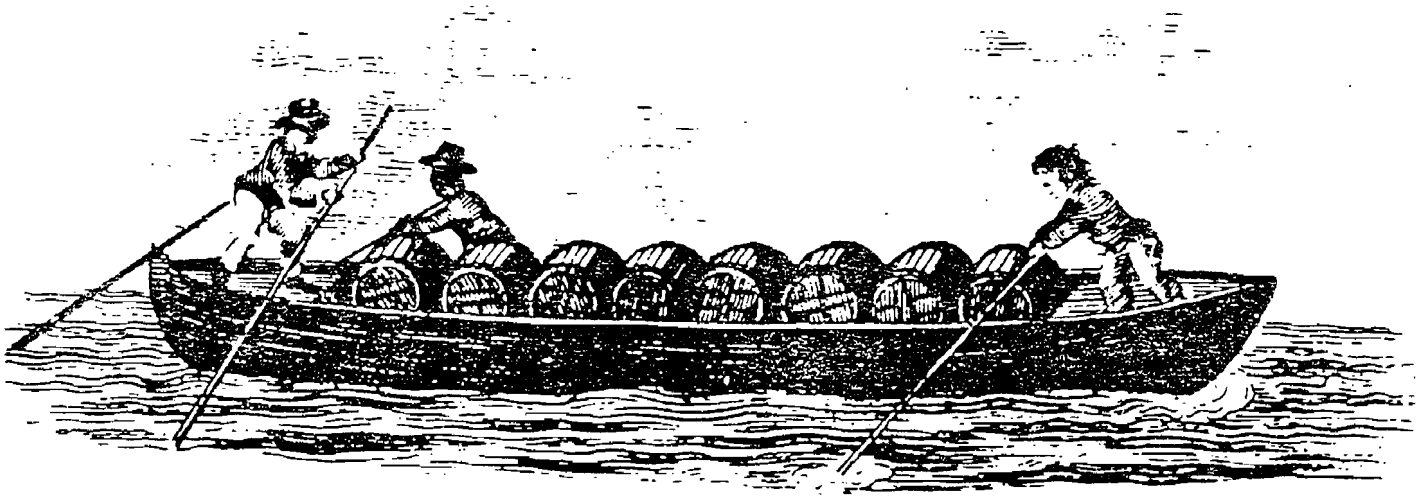
(Morris 1963)

Much of the early commercial traffic along the Delaware River and its tributaries was carried in large rowboats. Various designs of these were called bateaux, galleys, and "Durham Boats" (Figures 18, 19, 20). Varying in length from about twenty to forty feet, they were primarily propelled by oars. They were also frequently fitted with a removable mast so that a sail could be raised if desired to catch favorable winds. It is likely that much of the traffic along Delaware's interior rivers consisted of this type of watercraft. Their shallow draft and use of both oar and sail power facilitated access to inland tidewater locations. They could be easily constructed locally and navigated by non-seafaring settlers.

The increasing economic importance of Philadelphia served as a stimulus for maritime activity in the Delaware Bay and River. While shipping traffic in the region was limited in volume during most of the 1600's, it increased

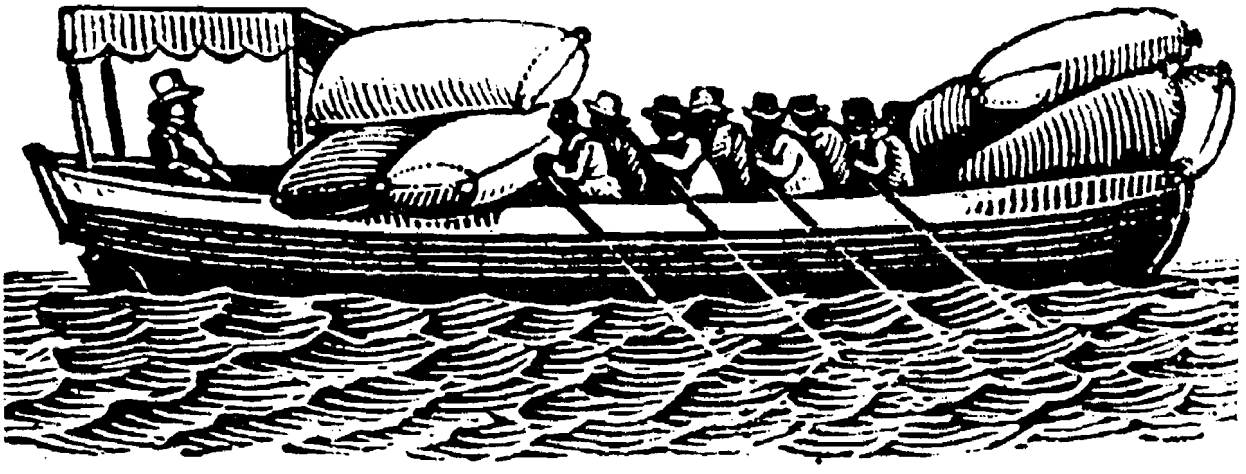
substantially early in the 1700's (Figure 21). This coincided with rapid population growth (especially in Pennsylvania) during the latter part of the colonial period. By 1750 Philadelphia had become the busiest port in the middle Atlantic region. At the time of the American Revolution it was the largest city in the British North American colonies.

FIGURE 18
18th Century Bateau



(Evans 1957)

FIGURE 19
18th Century Galley

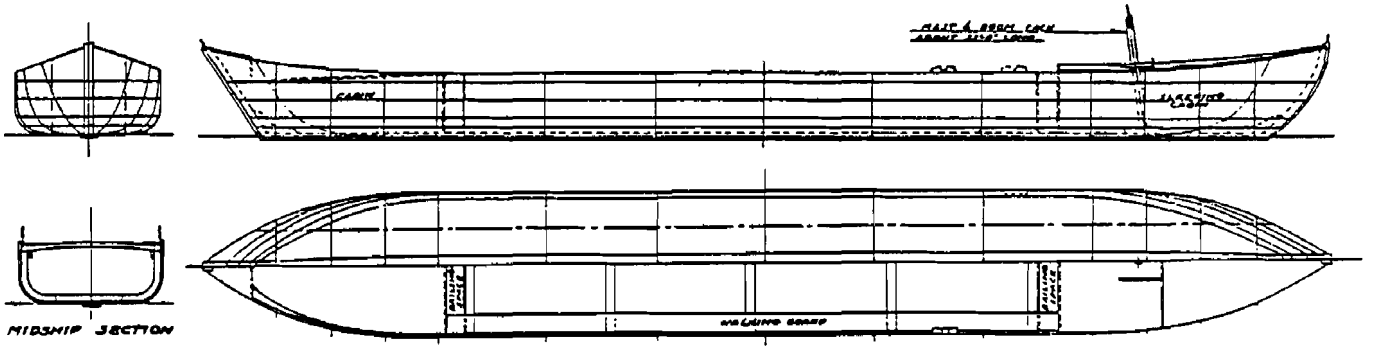


(Tyler 1955)

FIGURE 20

18th Century Durham Boat

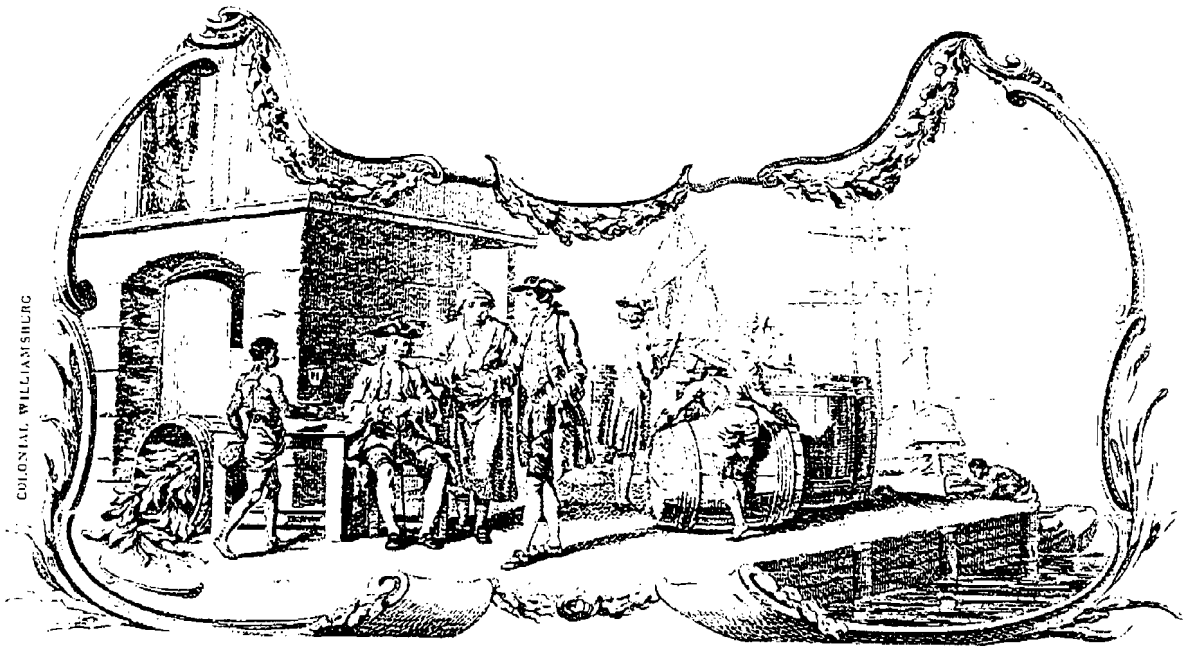
(Tyler 1955)



(New York State Museum n.d.)

FIGURE 21

Colonial Seaport Scene (Late 18th Century)



(Fry and Jefferson 1775)

The relationship between "the lower three counties of Pennsylvania" (Delaware's New Castle, Kent, and Sussex Counties) and the rest of the "province" (colony) of Pennsylvania was fraught with political, economic, and religious rivalry and controversy. In 1704 the lower three counties secured their own legislature with its seat at New Castle. The Governor of Pennsylvania, however, remained the three counties' chief executive until the time of the American Revolution.

Transformation from Colony to State (1770 - 1830+/-)

The lower three counties remained part of the Pennsylvania colony until 1776 when a State Government was organized and independence was declared from both Britain and Pennsylvania. New Castle served as the capital of Delaware until the threat of British attack in 1777 led to transferring the seat of government to Dover which became the permanent capital.

Following the conclusion of the American Revolution, Delaware entered a period of rapid growth in economy and population. This process accelerated even more during the early 1800's. The most rapid expansion of settlement and commercial growth in central Delaware took place during the 19th century.

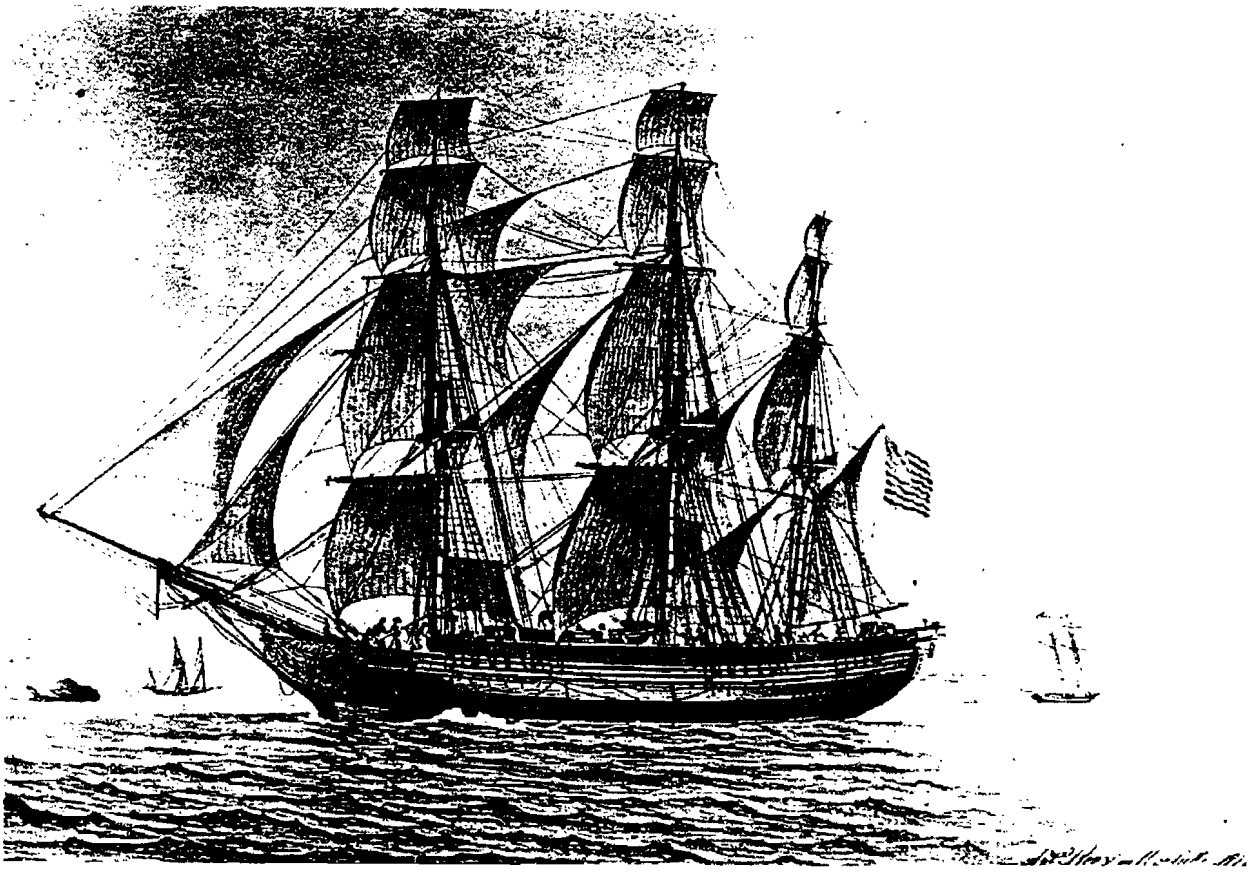
The rapid rise of the United States as a participant in international trade led to a major increase in the number of sea going merchant vessels plying the

waters of Delaware Bay (Figure 22). American built and owned sailing ships were essential to this commercial expansion and the economic vitality of the new nation.

The Industrial Revolution of the late 1700's to the late 1800's was also characterized by tremendous advances in maritime technology. The most significant of these was the development of watercraft powered by steam engines. In 1786 John Fitch experimented with a steam powered boat at Philadelphia. His use of mechanical paddles for propulsion was not efficient, however. Other inventors and engineers continued working on steam powered vessels. By 1810 steamships had become established in Delaware Bay's maritime industry and the "Age of Steam" had begun.

FIGURE 22

Early 19th Century American Merchant Ship



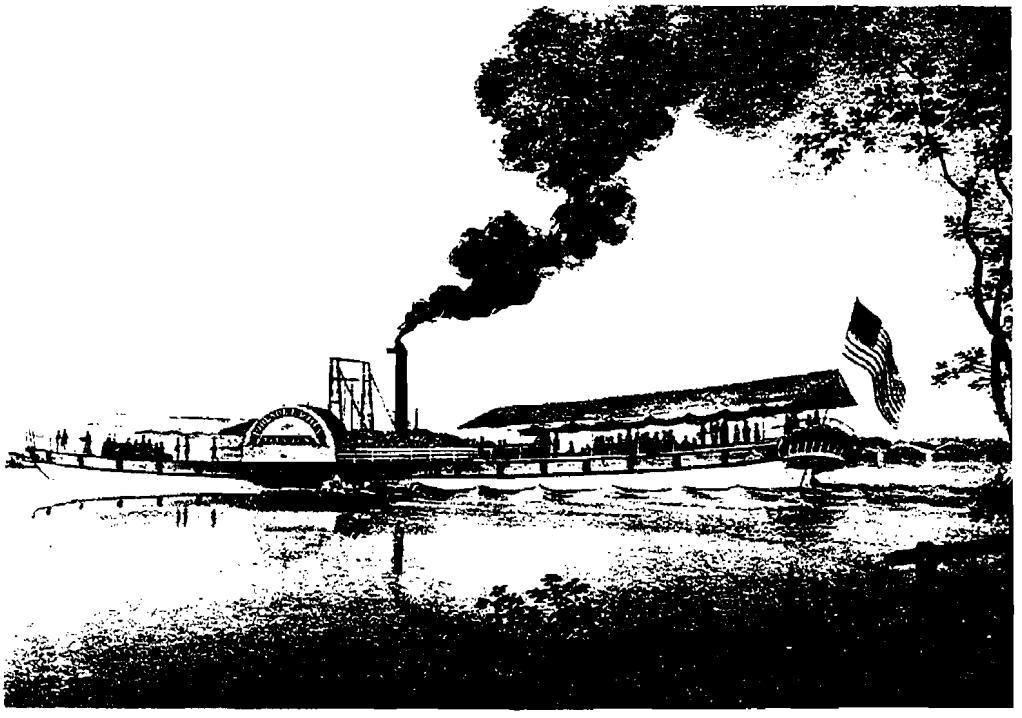
(Tyler 1955)

Vessels equipped with steam engines and paddle wheels were capable of navigating in conditions that were extremely difficult for sailing vessels. They could travel directly into a headwind without having to tack back and forth. These watercraft could readily move towards the rear as well as forward and could turn completely around with ease. This maneuverability quickly resulted in the appearance of the steam powered packet boat for navigation between river ports (Figure 23). Other early applications included tugboats for towing, pushing, and pulling other vessels, and riverine ferry boats.

Improvements to colonial period landings often resulted from the expansion of settlement and commerce. Docks were often built to facilitate the transfer of materials between the shore and vessels (Figure 24). Permanent wharves were constructed in port towns and cities where the intensity of shipping activity warranted (Figure 25).

FIGURE 23

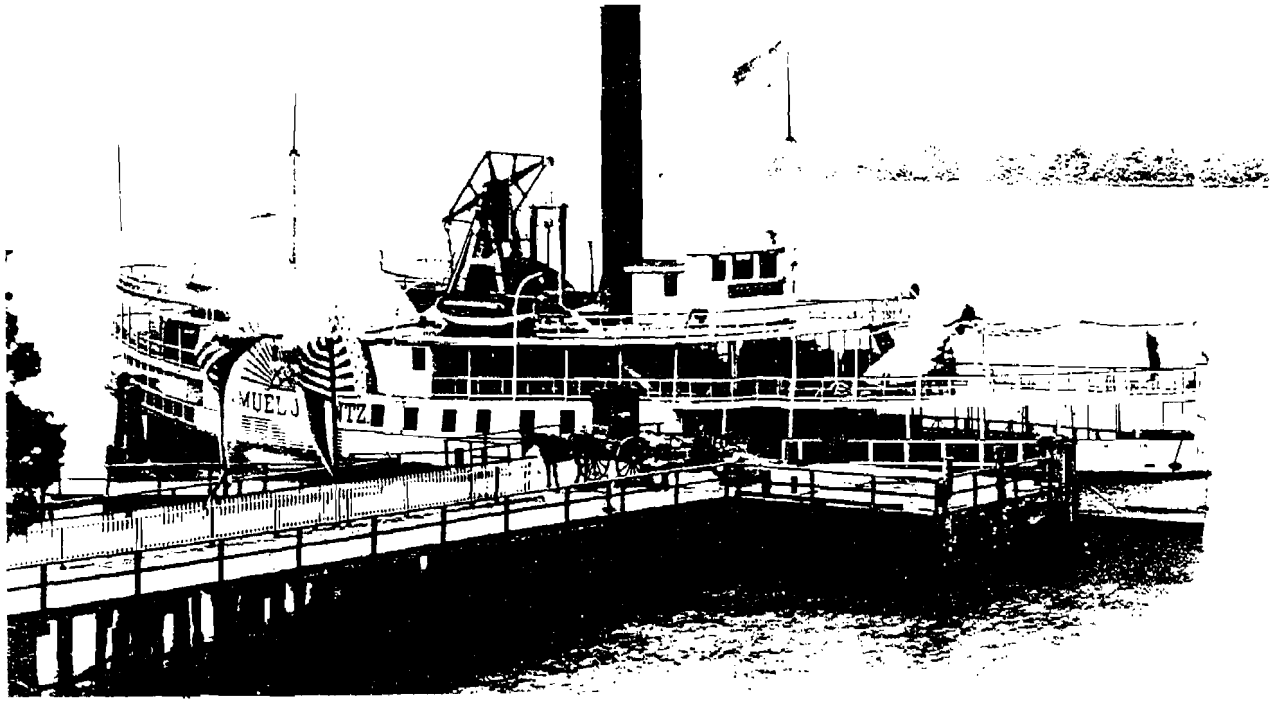
Early 19th Century Riverine Steamboat



(Tyler 1955)

FIGURE 24

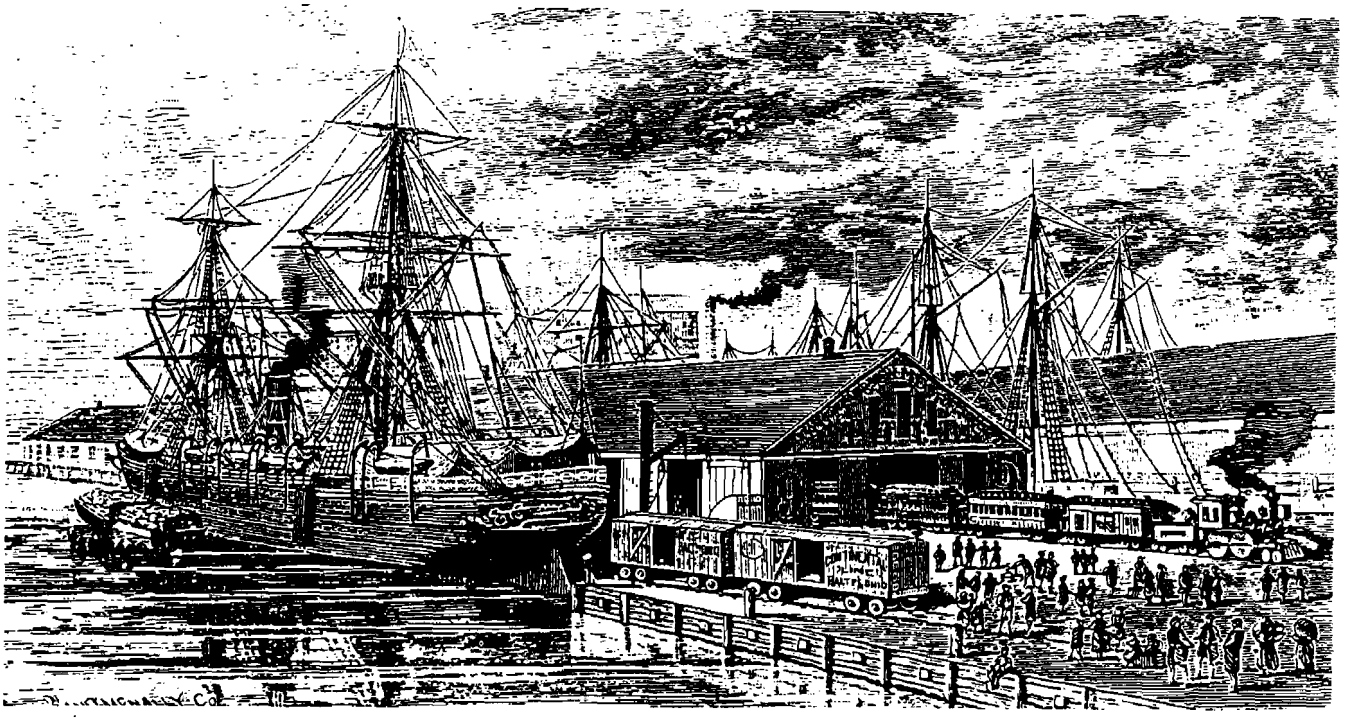
Riverine Steamboat Dock



(Keith 1988)

FIGURE 25

Wharf at a Major Seaport



(Keith 1988)

Industrialization and Capitalization (1830 -1880+/-)

In the late 1830's the screw propeller was patented by John Ericsson (later the inventor of the USS Monitor of Civil War fame). It proved to be more efficient than the paddlewheel as a means of driving vessels through the water. Propeller ships did not require the large paddlewheel boxes attached on either side of the hull which were characteristic of sidewheel steamers, and they were more efficient in using energy. One test conducted in England was a maritime tug of war between two ships chosen as matched in size and engine power, one propeller driven and the other a sidewheeler. The propeller ship won.

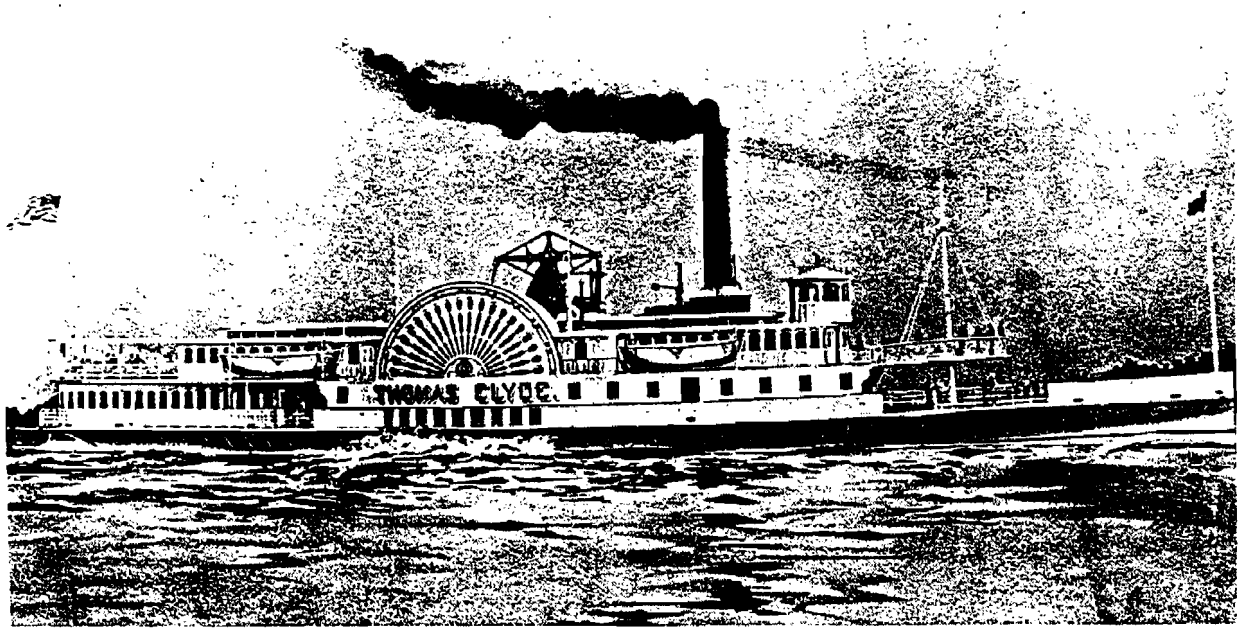
Some the earliest propeller ships in the United States were built in Wilmington, Delaware. One design was made very narrow in order to function as packet boats in service between Philadelphia and Baltimore by way of the Chesapeake and Delaware Canal, which had opened in 1829. The narrowness of the C & D Canal's locks did not permit their use by sidewheel steamers.

By the middle 1800's propeller ships were in widespread use. Over the following decades their greater efficiency led to the virtual disappearance of paddlewheel vessels from oceanic maritime commerce.

For riverine and coastal navigation, however, paddlewheel ships continued in widespread use through the early decades of the 20th century. In the Delaware Bay region sidewheelers were used both for hauling freight and passengers until around the middle of the 20th century (Figure 26).

FIGURE 26

Sidewheel Steamship Thomas Clyde (Built in 1878)



(Tyler 1955)

Vessels with stern-mounted paddlewheels were not often seen in Delaware. That design was not efficient for craft plying the open waters of oceans or large bays. Sternwheel steamers were most commonly shallow draft vessels used for navigating inland rivers such as the Mississippi River system. At the present time the few active paddlewheelers operate only on inland waters, surviving because of their nostalgic attractiveness.

Urbanization and Suburbanization (1880 - 1940+/-)

Maritime technology on Delaware's tidal rivers during the second half of the 19th century was dominated by vessels powered by engines. This was the "Age of Steam" when ships with steam engines ruled the seas and the railroad steam locomotive represented the most advanced technology in land transportation.

The industrialized city of Wilmington in northern Delaware became a major center for steamship construction. Many of the commercial steam vessels navigating the Delaware River and Bay were built there as well as ocean-going ships. One of the foremost shipyards in the Delaware Bay region was Wilmington's Harlan & Holling Shipyard. Most others, however, were smaller establishments (Figures 27, 28, 29).

FIGURE 27

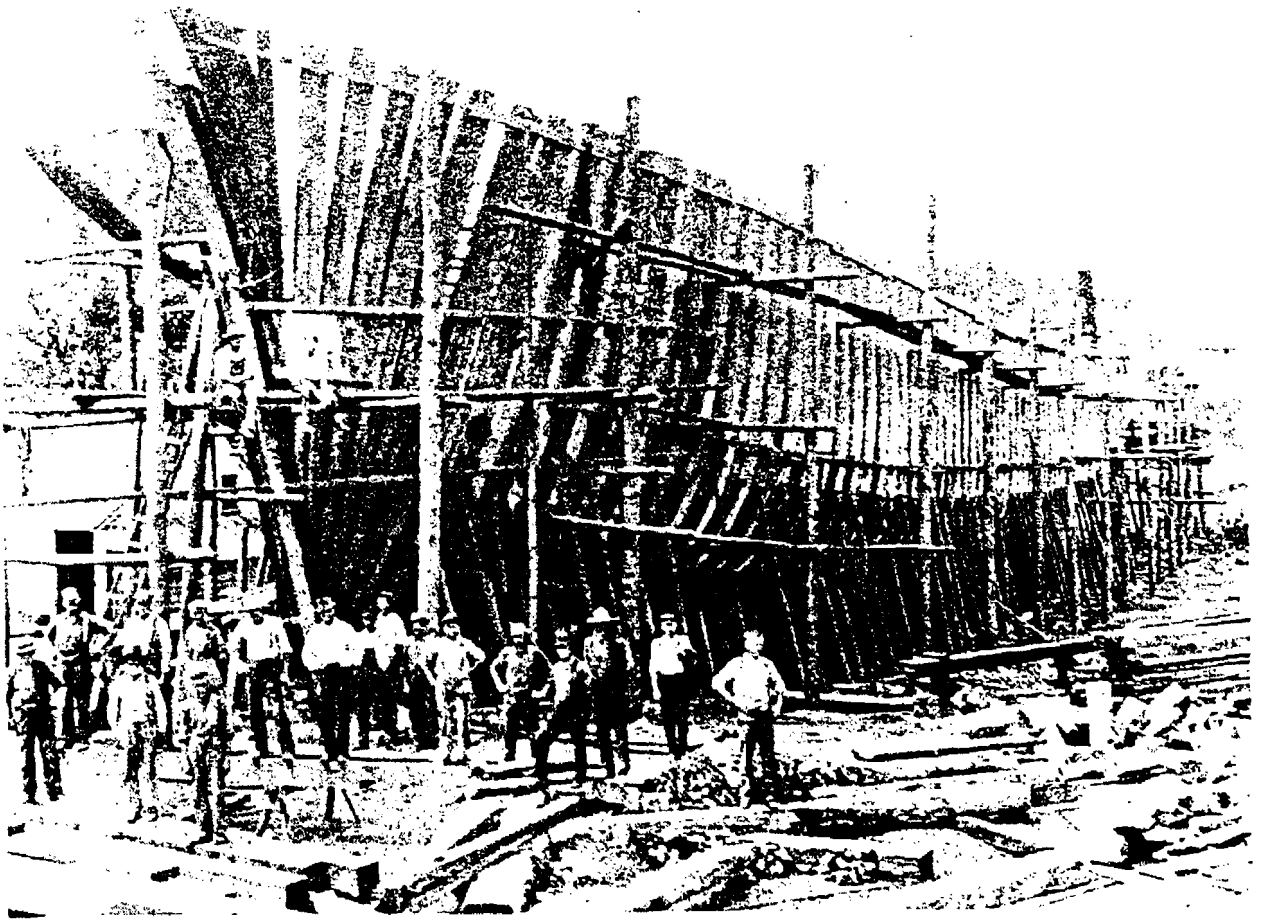
E. C. Moore Company Shipyard in Wilmington (About 1900)

(Tyler 1955)

FIGURE 28

Abbott's Shipyard at Milford, Delaware

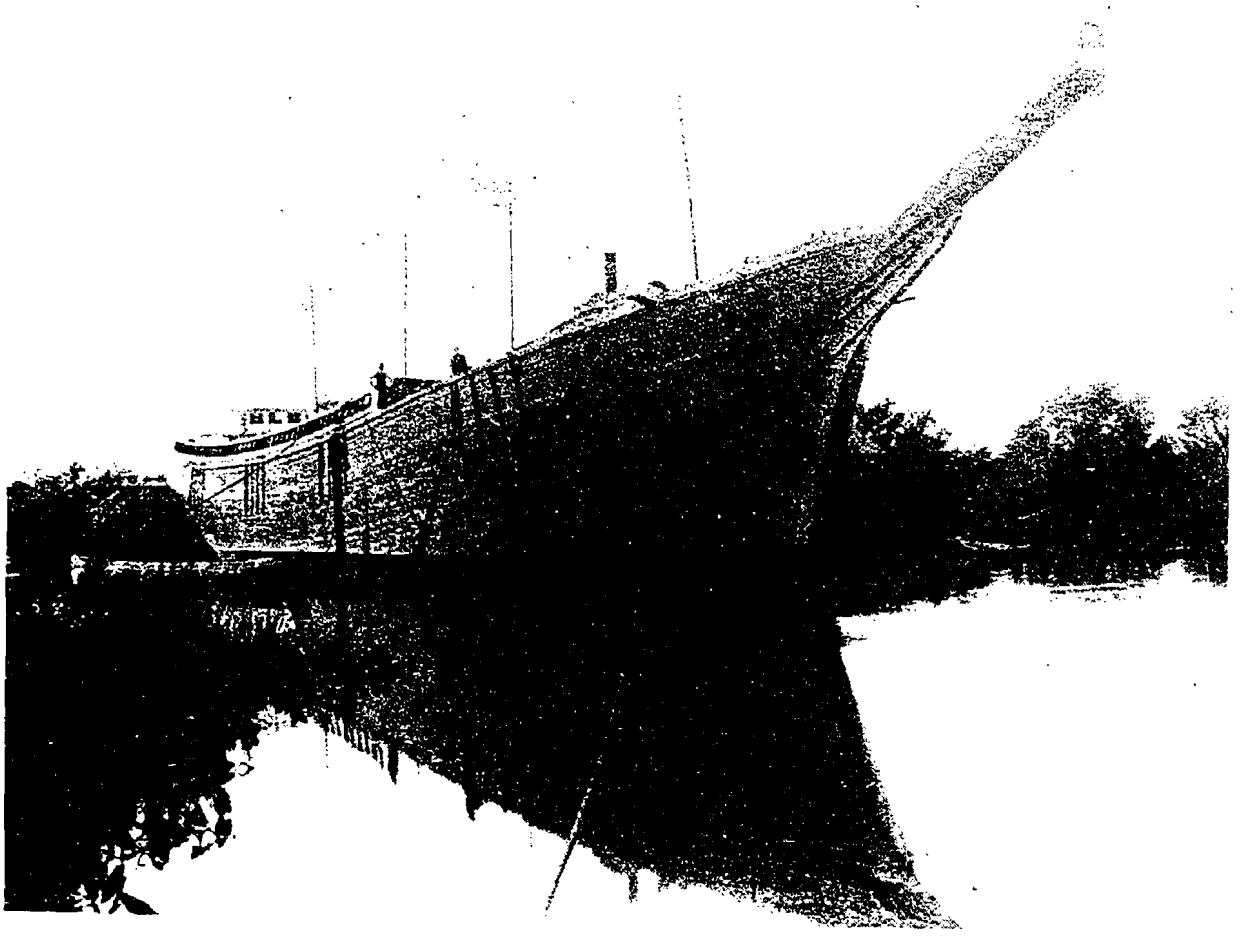
(Schooner George May Under Construction in 1900)



(Tyler 1955)

FIGURE 29

Schooner George May After Being Launched at Abbott's Shipyard in Milford, Delaware (1900)

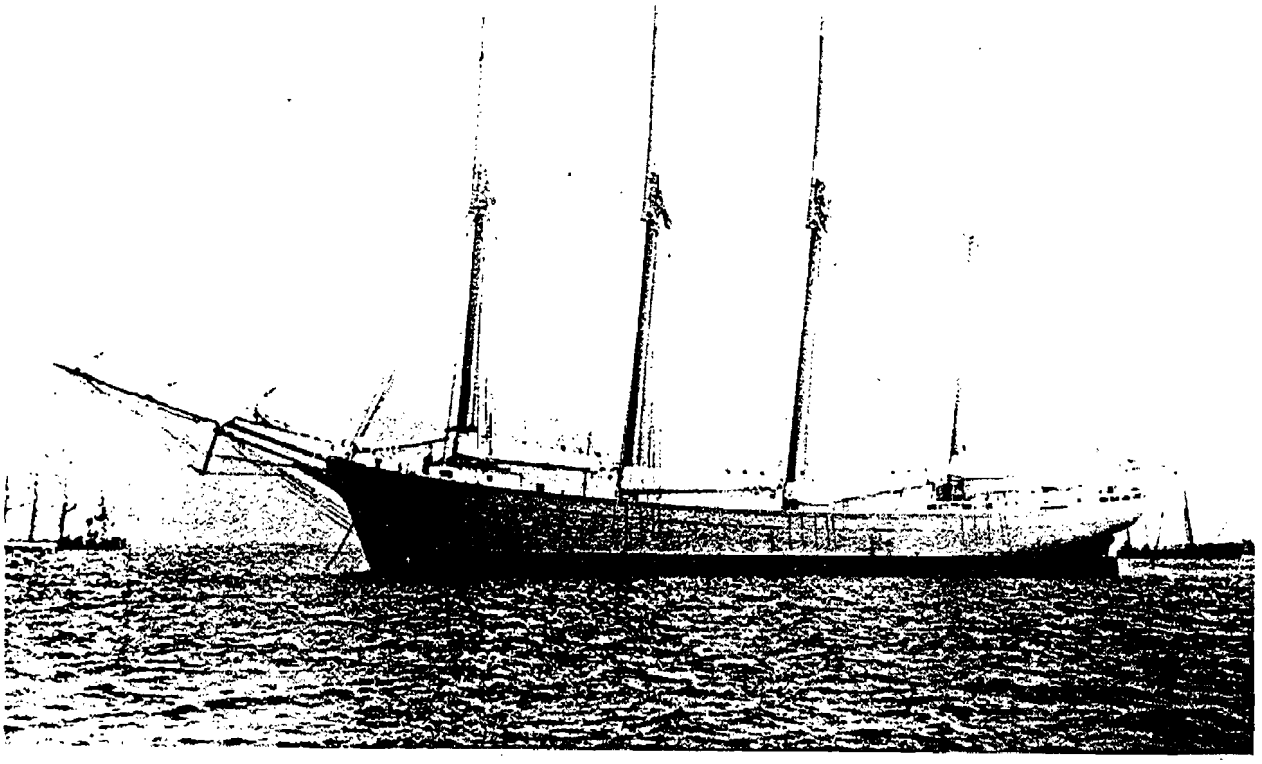


(Tyler 1955)

While steamships had substantial advantages over commercial sailing craft, they required substantial initial investments for construction or purchase and they consumed costly fuels. These characteristics usually made the shipping cost of freight carried aboard steam vessels greater than freight shipped aboard sailing craft. Since freight charges were often less expensive when transporting cargoes on board sailing vessels, bulk cargoes such as lumber, grain, and fertilizer were often shipped aboard sail powered craft as late as the second quarter of the 20th century (Figure 30). This was especially true for coastwise traffic. The time needed to sail between regional ports was relatively short and the speed difference between steamships and sailing craft was not a critical consideration in many circumstances.

FIGURE 30

Schooner Albert R. Paul Built at Abbott's Shipyard in Milford, Delaware in 1917



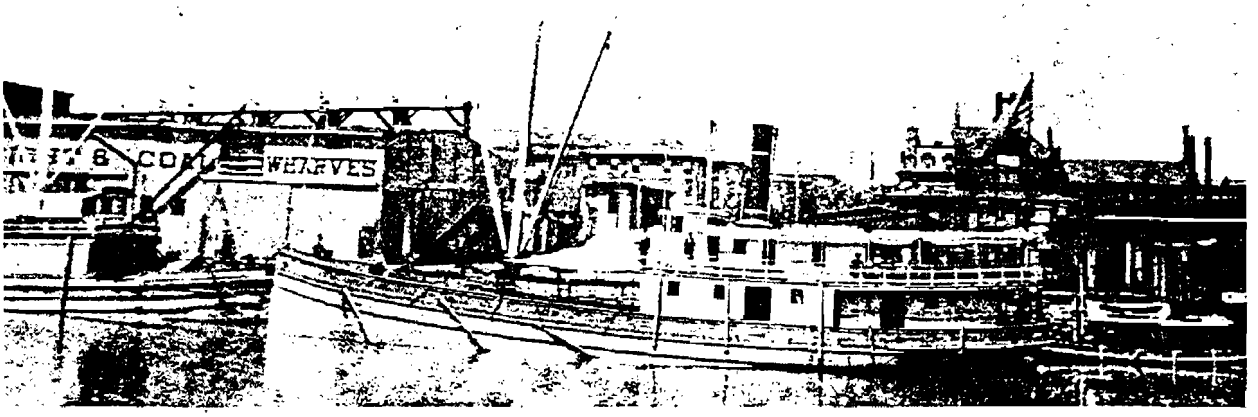
(Tyler 1955)

In the middle Atlantic region the number of sailing vessels in commercial use exceeded the number of steam powered craft until the early 20th century. After the beginning of the 20th century, however, the use of sail power in commercial maritime traffic was increasingly superseded by the use of craft powered by steam and gasoline engines (Figures 31, 32, 33). That was also the period when wagons drawn by horses were replaced by motor vehicles in land transportation.

Commercial sailing vessels continued in operation through the end of World War II (Figures 34, 35). During the 1950's technological advances in motor vessels coupled with postwar prosperity virtually ended the commercial use of sailing vessels in the United States. Except for the anachronistic "skipjack" oyster boats of the Chesapeake Bay and tourist windjammers, there is presently no commercial traffic involving sailing vessels in U.S. waters.

FIGURE 31

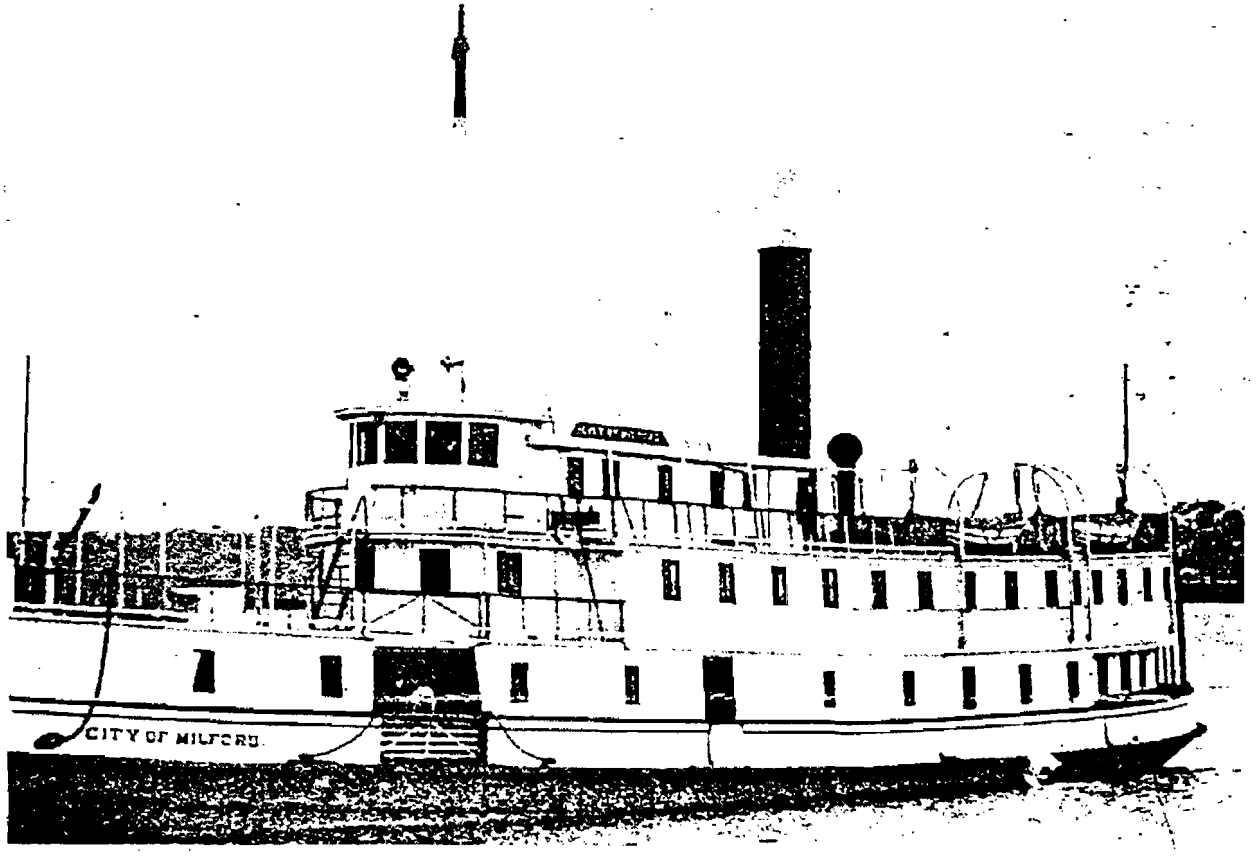
Delaware River Steamboat J. V. Craven (About 1890)



(Tyler 1955)

FIGURE 32

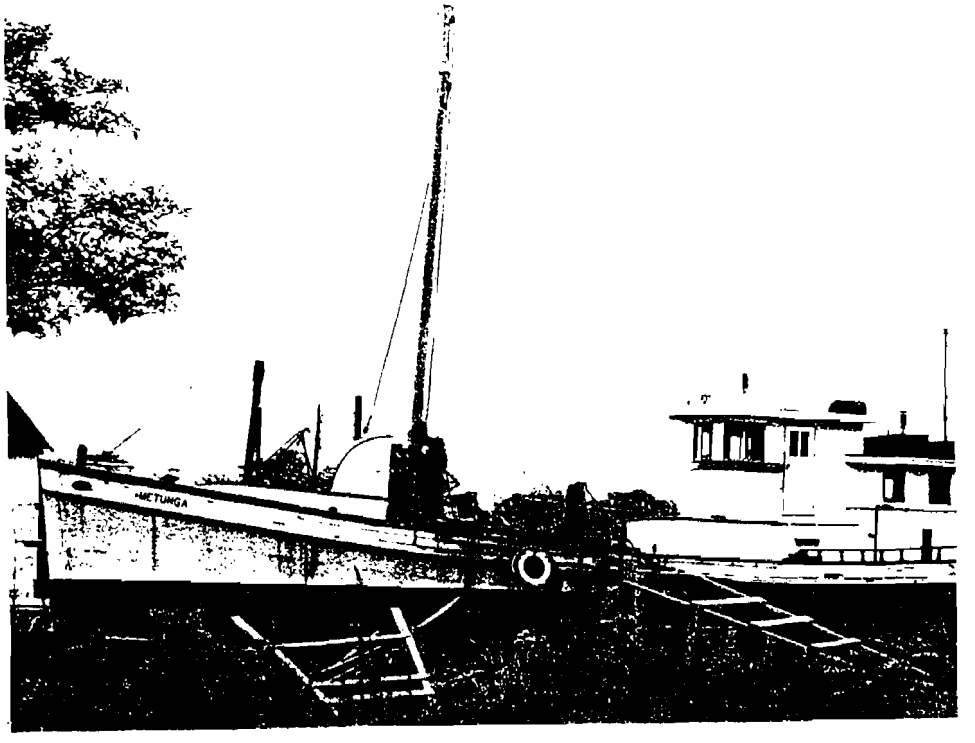
Steamboat City of Milford (About 1910)



(Tyler 1955)

FIGURE 33

Work Boat Metunga (Built Early 1900's)



(Lankford 1988)

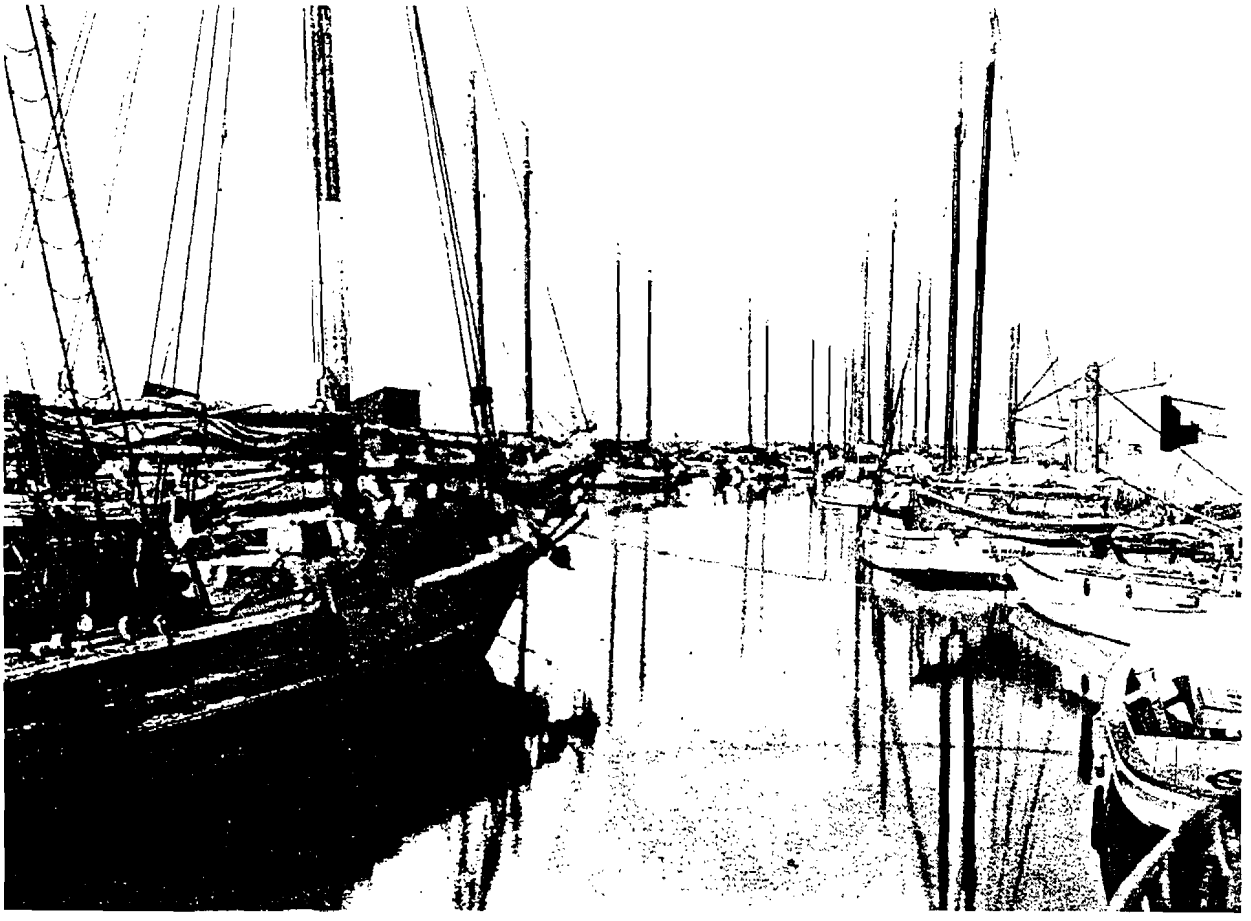
FIGURE 34

Schooners Dredging for Oysters in Delaware Bay (About 1940)

(Tyler 1955)

FIGURE 35

Oyster Schooners at Little Creek, Delaware (About 1910)



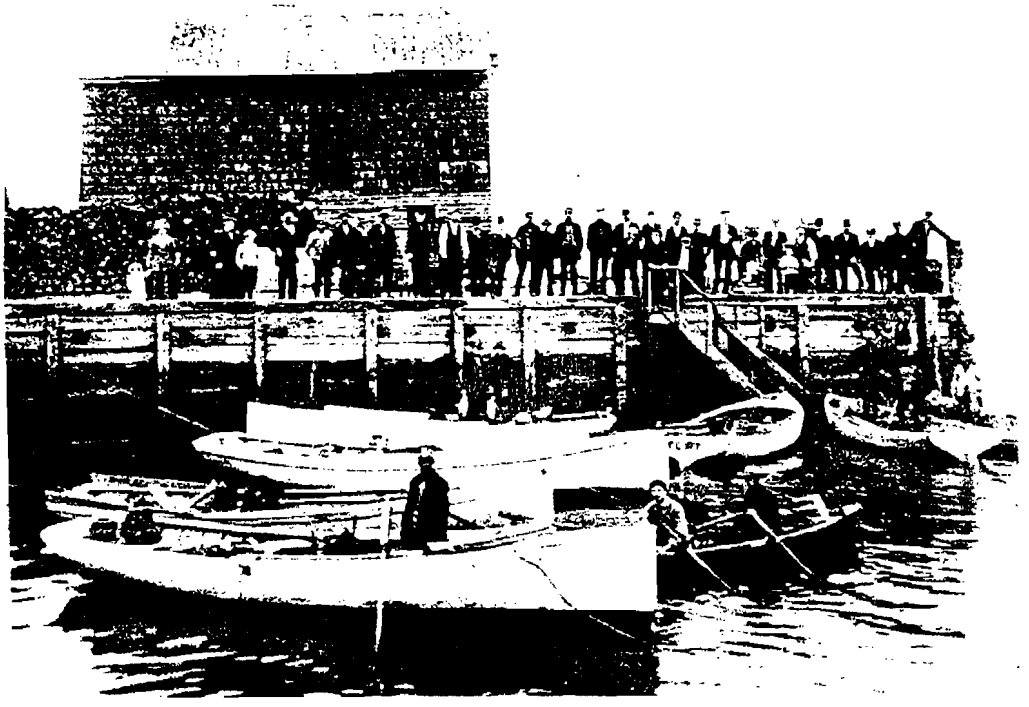
(Tyler 1955)

In addition to the larger commercial vessels, there were many varieties of small craft. These included oar powered (Figure 36), sail powered (Figure 37), and motorized vessels.

In the third quarter of the 20th century the rapid development of terrestrial and aviation transportation systems virtually eliminated interior riverine maritime freight and passenger traffic in Delaware. In the final decade of the 1900's maritime commerce in the Delaware region is largely restricted to sea going freighters and tankers and vessels that support them (such as tugboats). Local maritime passenger service in Delaware is tourist oriented and of small volume. The commercial fishing fleet in Delaware is much reduced from its former size. Most locally oriented maritime activity in Delaware is now recreational. The commercial shipping industry that formerly served the state's once bustling small riverine ports has almost entirely disappeared.

FIGURE 36

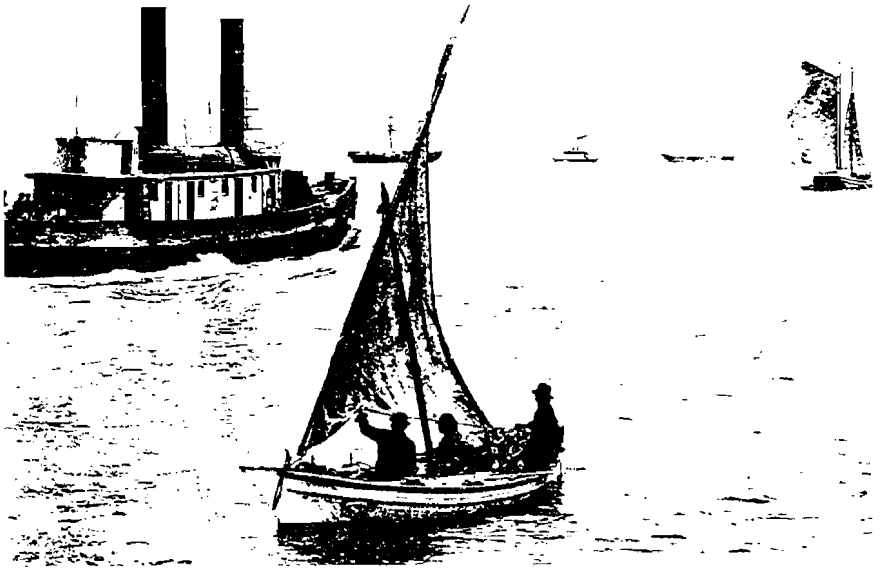
Shad Skiffs at New Castle, Delaware (About 1905)



(Tyler 1955)

FIGURE 37

Sail- and Steam-Powered Vessels (1892)



(Maritime Reporter 1992)

Submerged Historic Period Cultural Resource Types

There is a variety of historic period underwater cultural resources that could be encountered in the waterways of the project area vicinity. These include sites and artifacts deposited as a result of maritime traffic along navigable waterways. In addition, other submerged cultural materials are likely to be associated with local settlement activities. These include refuse disposal and the use of waterways for fishing, hunting, and trapping. Evidence of each of these activities may be encountered in varying intensity depending on the types and patterns of past cultural activity in any specific locale.

One of the most important underwater cultural resource types consists of the remains of sunken vessels. These include boats and ships deposited on submerged terrain either accidentally or purposefully (Figure 38).

FIGURE 38
19th Century Wreck in Tidal River

The accidental deposition of vessels on interior river bottoms may have resulted from collision, fire, warfare, foundering, or impact with a submerged object or physiographic feature. Probably the most common type of accidental loss that occurred in the project vicinity was the grounding of a vessel in shallow water resulting from faulty navigation. In the aftermath of a grounding incident a stricken vessel was often saved by refloating it later. Removal by means of dismantling or demolition was another possible outcome if a vessel could not be removed intact. In such cases wrecks were often purposely broken up with salvageable pieces being recovered and the remainder being left in place or scattered.

Purposeful deposition of wrecks also occurred, such as when a vessel was left abandoned as a derelict. Derelict vessels abandoned in tidal waterways were usually placed at locations upstream of the normal head of navigation or away from navigation channels. In the project area vicinity, abandoned watercraft would most likely be situated in shallow water along interior rivers and creeks where they would not be hazardous to maritime traffic. Tidal waterway locations above the normal limit of navigation were better for this purpose than rivers being actively navigated by maritime traffic. However, derelict vessels that were purposely disposed of by abandonment sometimes became hazardous to shipping traffic.

The chronological age and specific types of sunken vessels in a given locale is likely to reflect both the technology and volume of historic period maritime activity in the vicinity. For example, there was only a small volume of early 17th century shipping activity in the Delaware Bay region. In contrast, shipping activity along Delaware's waterways reached its peak between the middle 1800's and the early 1900's. As a consequence, the abundance of sunken and abandoned wrecks dating to the later period is much greater than the earlier one.

Another category of submerged cultural materials that could be expected to occur in the vicinity consists of objects either willfully or accidentally deposited on submerged lands. Waste or scrap materials were sometimes thrown into rivers and creeks, or were cast over the side from vessels rather than arranging for their disposal on land. Other objects that may be present are artifacts that were lost overboard involuntarily due to error or accident.

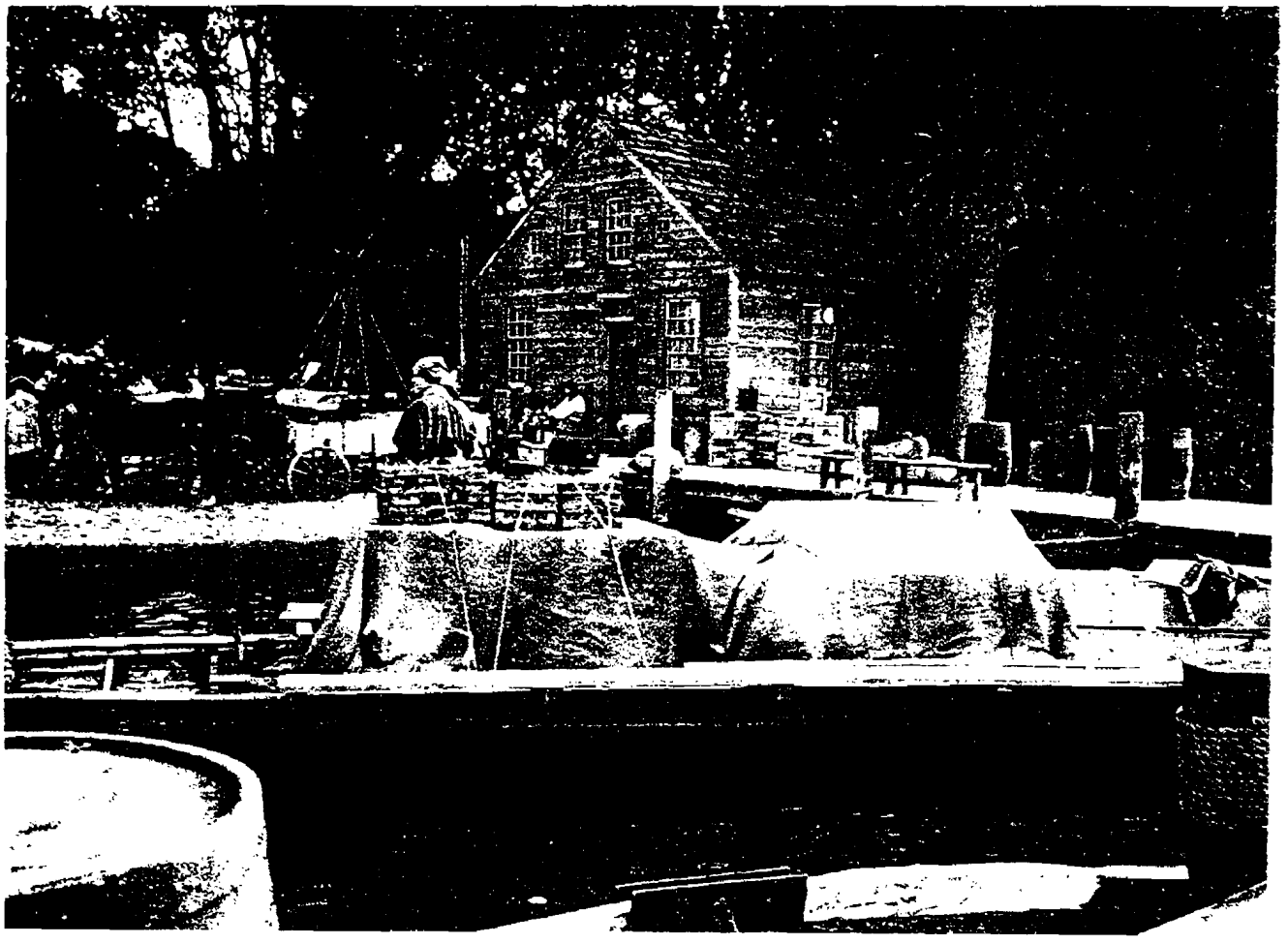
The vicinities of commercial vessel anchorages have usually been the repository of a wide variety of materials. The artifactual content of these deposits tends to be most abundant in places where maritime traffic was greater and anchored vessels were more numerous.

A third important category of underwater cultural deposit is the submerged terrain associated with onshore landing places. Concentrations of artifactual materials are likely to be present along navigable rivers and creeks at locations where upland terrain (fast land) reaches to the water's edge. Such places were frequently used for landings or other water-oriented activity. River landings were locations where watercraft could be loaded or unloaded. They were important foci of cultural activity along Delaware's navigable rivers and creeks from the very beginning of colonial settlement (Figure 39).

In addition to maritime traffic and landing places, cultural activity along Delaware's interior waterways has included resource exploitation. Activities related to hunting, fishing, and trapping have been performed for commercial, subsistence, or recreational purposes from colonial times to the present. For example, muskrat trapping remains a commercial endeavor for some residents of the town of Leipsic, as can be seen by the racks of pelts hung out to dry during trapping season.

FIGURE 39

Rural Colonial Landing of the Middle 18th Century (Reenactment)



(Virginia Canals and Navigations Society 1992, Photo by Tom Saxton)

Potential Historical Significance

The potential significance of underwater archeological resources is evaluated and documented following the same general procedures as terrestrial cultural resources. A substantial amount of published information is available that relates both to the general subject of "significance" and to shipwrecks in particular (e.g. National Park Service n.d., 1986).

To be considered historically significant according to National Register of Historic Places (NRHP) criteria a property must normally be greater than 50 years old. Using this chronological standard cultural deposits of World War II vintage are frequently considered as having the potential to be considered historically significant. In general, however, underwater sites and structures that are of pre-20th century vintage are usually considered as having greater

potential significance than those dating to later than 1900. The reasons for this vary, but important factors include the availability of documentary source materials and commonality of similar cultural resource properties.

There are four general criteria for determining the significance of a property being evaluated for the NRHP. They are listed in Title 36 of the Code of Federal Regulations, Section 60.4 (U.S. National Archives and Records Administration 1990). Depending on the specific characteristics of the property under consideration, one or more of the criteria may apply. In addition, the resource's context and integrity are important factors for making a preliminary evaluation of potential significance.

Site integrity, along with technological and chronological factors, are important considerations in determining the eligibility of a shipwreck for nomination to the NRHP. Relatively few sunken vessels are presently listed on or have been determined eligible for the National Register. The dates and types of NRHP eligible shipwrecks range from the 16th to the 20th century and from barges to battleships. Evaluations have generally been handled on an individual basis and have considered the identity, specific characteristics, and historical context of the submerged cultural property being considered.

Individual vessels that have become shipwrecks may or may not have historical significance. An early 20th century gasoline engine vessel may or may not be significant for a variety of reasons. For example, if its motor is of a type that is important to documenting the engineering of early internal combustion engines, it may be considered historically significant. On the other hand, if the vessel is of a common and well documented type there is substantially less likelihood that it would satisfy National Register criteria.

Potentially significant cultural resources that could be present in locations like the project area consist of two main categories: sunken watercraft and the underwater component of riverine landing sites. Locations of riverine landing sites could be historically significant. They have the potential to contain information concerning inland maritime transport activity and trade that may not be obtainable otherwise.

In the project area, sunken watercraft would most probably be encountered at locations where they had been purposely abandoned after having outlived their usefulness. Shipwrecks due to accident or catastrophe, on the other hand, would more likely be located in association with shipping routes or maritime ports.

Isolated objects on or beneath the submerged terrain of the three bridge crossing areas could include a wide variety of artifacts. The potential archeological importance of isolated underwater objects is normally very limited, however. It not likely that individual cultural artifacts that lack a meaningful contextual association with other cultural materials would be considered as having historical significance. The mere fact of their accidental loss is usually not of significance as an event, and the individual objects themselves

are rarely of sufficient importance to be eligible for nomination to the National Register because of their uniqueness or some other rationale.

Information is the key element for determining historical significance or the lack of significance for submerged cultural properties. While their presence or absence and general characteristics may be determined by indirect methods, such as documentary research or remote sensing, the most credible means by which the National Register eligibility of a potentially significant property can be adequately evaluated is through direct contact. Investigation of a specific site is normally necessary to enable a credible assessment of content, integrity, and archeological context to be accomplished, and the appropriate documentation to be prepared.

With the adoption of the Federal Abandoned Shipwreck Act of 1989, the U.S. Department of the Interior was charged with developing guidelines concerning the management of historic shipwrecks by the individual states. Those guidelines have been published (National Park Service 1990). They are useful for considering issues concerning underwater cultural resource shipwrecks, including evaluations of potential historical significance and eligibility for nomination to the National Register of Historic Places, as well as management of their disposition.

Previous Underwater Archeological Investigations in Delaware

Over the past decade there have been several underwater archeological investigations conducted in Delaware's waters. Most of these have been studies conducted in order to comply with Federal regulatory requirements. The range of development projects for which compliance oriented underwater archeological investigations have been performed includes beach nourishment sand dredging (Koski-Karell 1984a, 1984d, 1988a; Tidewater Atlantic Research 1985), an underwater pipeline (Koski-Karell 1987b), and port facility and navigation channel improvement projects (Koski-Karell 1984b, 1984c, 1984e, 1987a, 1987c).

In addition to the compliance archeological work, there have been two privately funded historic shipwreck projects. The most important of these was the recovery of the British warship H.M.S. DeBraak off Cape Henlopen (Ward and others 1986). The artifactual collection from that sunken vessel was retained by the State of Delaware and became the subject of a major archeological analysis effort (Alden 1989, Beard 1989, Catts and Others 1989, Fithian 1989, Griffith 1989, Guerrant 1989, Hopkins and Shomette 1989, Melson 1989, Shackleford 1989).

In the early 1980's a smaller scale and apparently undocumented commercial salvage effort was conducted offshore of "Coin Beach" north of Indian River Inlet on the Atlantic Coast. It was directed at the wreck sites of two late 18th century vessels, the Three Brothers and Faithful Steward. According to the limited information that has circulated concerning that project, the material recovered had substantially less monetary value than the cost expended.