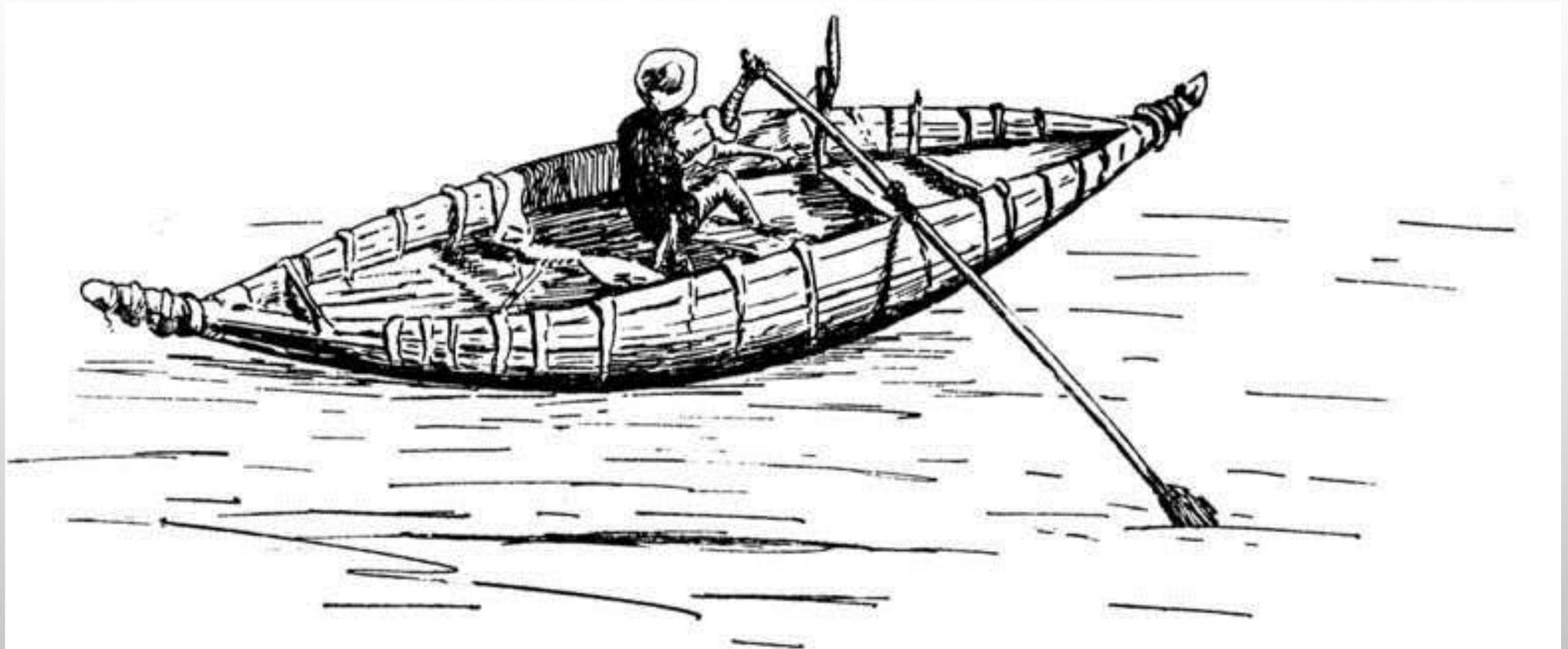


The background features a light gray gradient with several realistic water droplets of various sizes scattered across the surface. A faint, circular globe is centered in the upper half of the image, showing a grid of latitude and longitude lines.

SHIPS OF THE MARITIME WEST

MESOPOTAMIA



Sketch by Miss E. Richardson

FIG. 99 Form of Reed Boat used in Mesopotamia.



“Cylinder seal found at Uruk, biblical Erech. Large figure in the boat can be identified as a king from his garb. His hair and beard indicates he is Semitic-Akkadian, not Sumerian.

<http://allmesopotamia.tumblr.com/post/43314636121/cylinder-seal-found-at-uruk-biblical-erech>

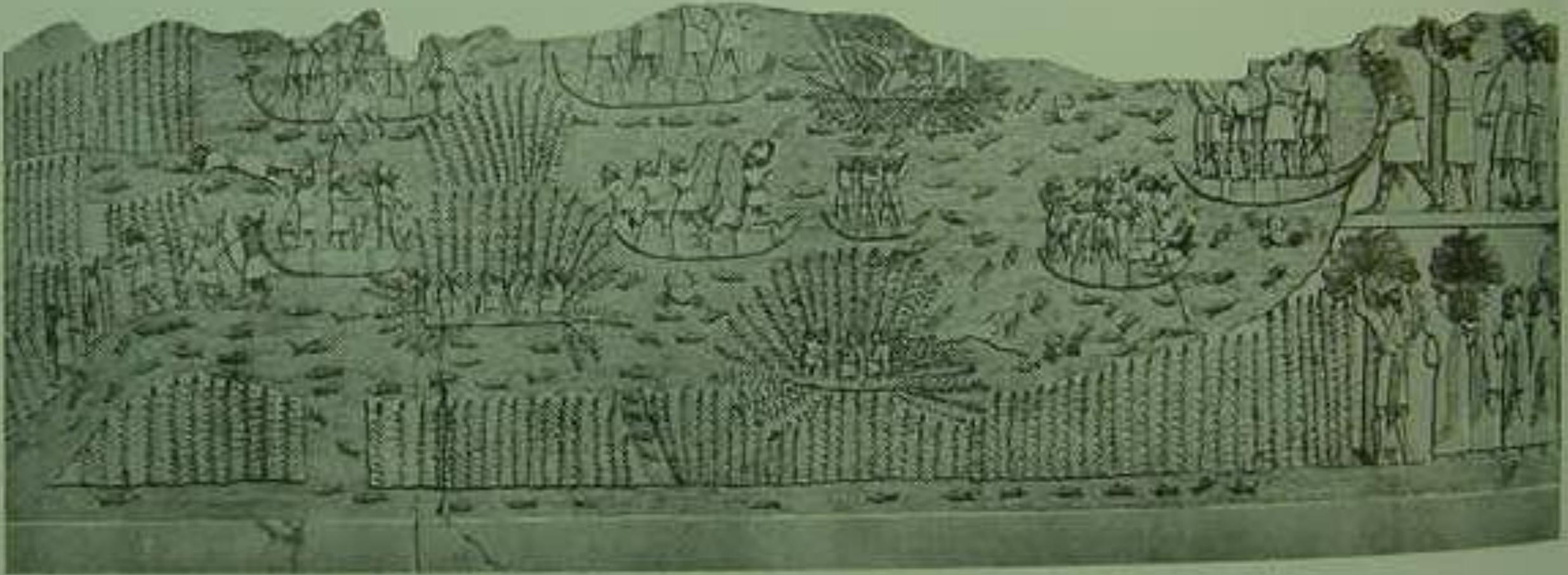


bas-relief from the Assyrian King Sennacherib's (reigned ca. 705-681 B.C.) palace showing his soldiers pursuing in the reed infested marshlands of Lower Mesopotamia, his enemies. Note the shallow draft boats made of reeds lashed together



Akkadian cylinder-seal impression showing the flood-epic. Utanapishtim is in the ark, and Gilgamesh is fighting the Bull. From the British Museum's collection.

201. Sennacherib's war in the marshes, from Kuyunjik.
From a drawing. *London, British Museum*



a line-drawing in ink showing the full panel of Sennacherib's warriors hunting for marsh-dwelling enemies. All the craft are made of marsh reeds but vary in size, the smaller craft hold 3 adults while larger craft can hold as many as 7 adults. Some reed-boats are shown "hiding" amongst reeds which have been pushed down and displaced by the craft, the hiding occupants, men and women, being "seated" rather than standing (cf. p. 176. Henri Frankfort. *The Art and Architecture of the Ancient Orient*. New Haven & London. Yale University Press. 1954. 4th edition 1970. Reprint 1996).



an aerial view of reed-huts or reed-houses in the marshes of lower Mesopotamia, modern Iraq and Iran, from which Atrahasis' (Utnapistim's) boat would have been constructed.

<http://www.bibleorigins.net/NoahsArkil>

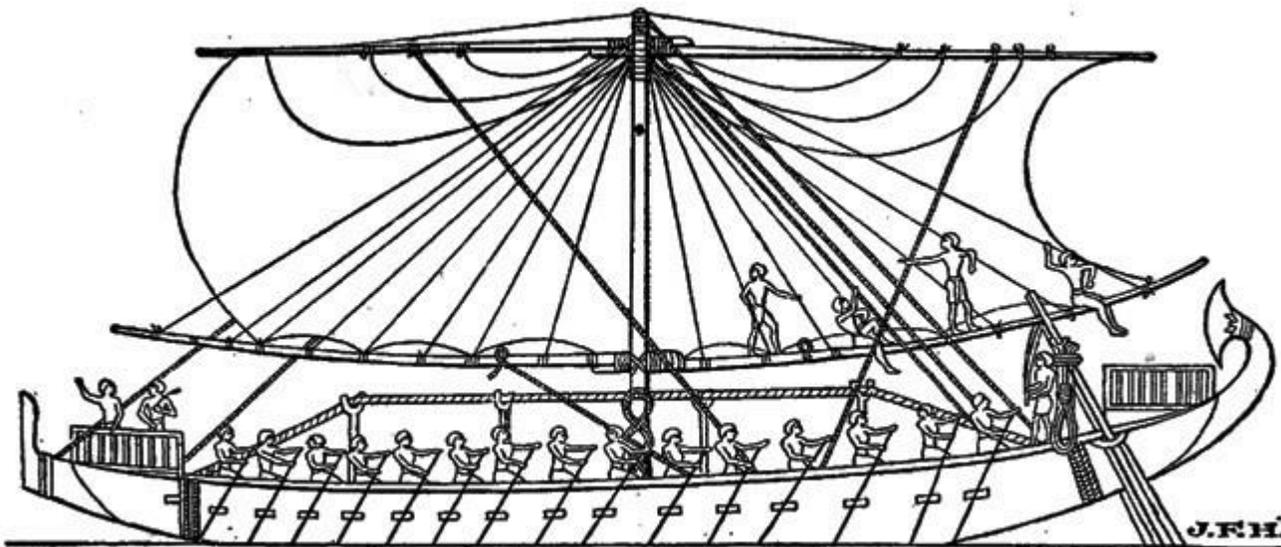


EGYPT





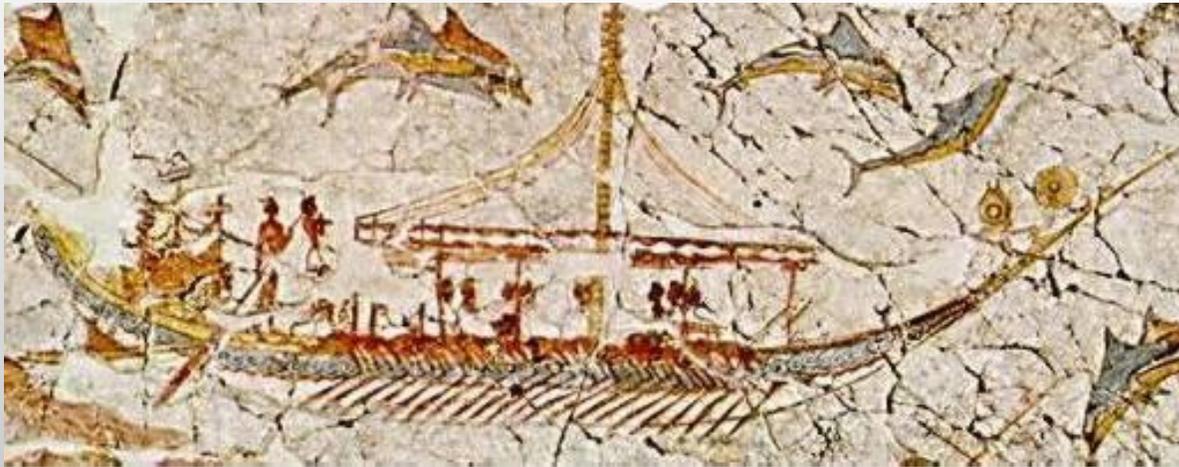
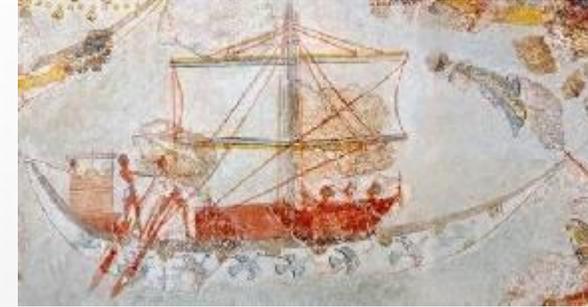
The Egyptian funerary boat on display at the Ure Museum is a typical tomb offering from ancient Egypt, and symbolizes the transport of the dead person or their soul, from life to the afterlife. Egyptians saw death as a boat journey, a trip across their River Nile, which ran down the centre of their country, joining North and South, country and city.. This boat came into the collection in 1923 from the Liverpool Institute of Archaeology, which had received it among other objects from Professor Garstang's excavations. It is for this reason that we know of its findspot, the so-called Tomb of the Officials at Beni Hassan. The little boatmen and their oars, we think, are from the same boat but there were quite a lot of them, so without exact records we can't be sure that the pieces that make up this artefact all originally belonged together.



Egyptian ship on the Red Sea, about 1250 B.C. [From Torr's "Ancient Ships."]



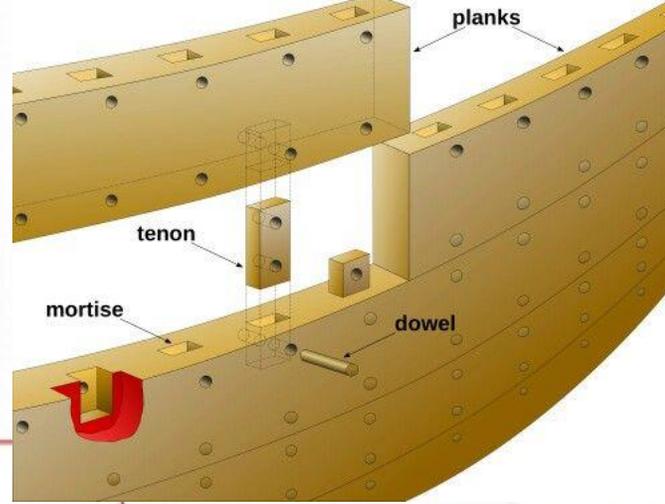
MINOAN



Various types of Minoan ships probably used around 1500 BC. The paintings are parts of a Fresco discovered by the Greek archaeologist [Spyridon Marinatos](#) in "Acrotiri".



PHOENICIAN



Phoenician Traders - 1500/850 BC

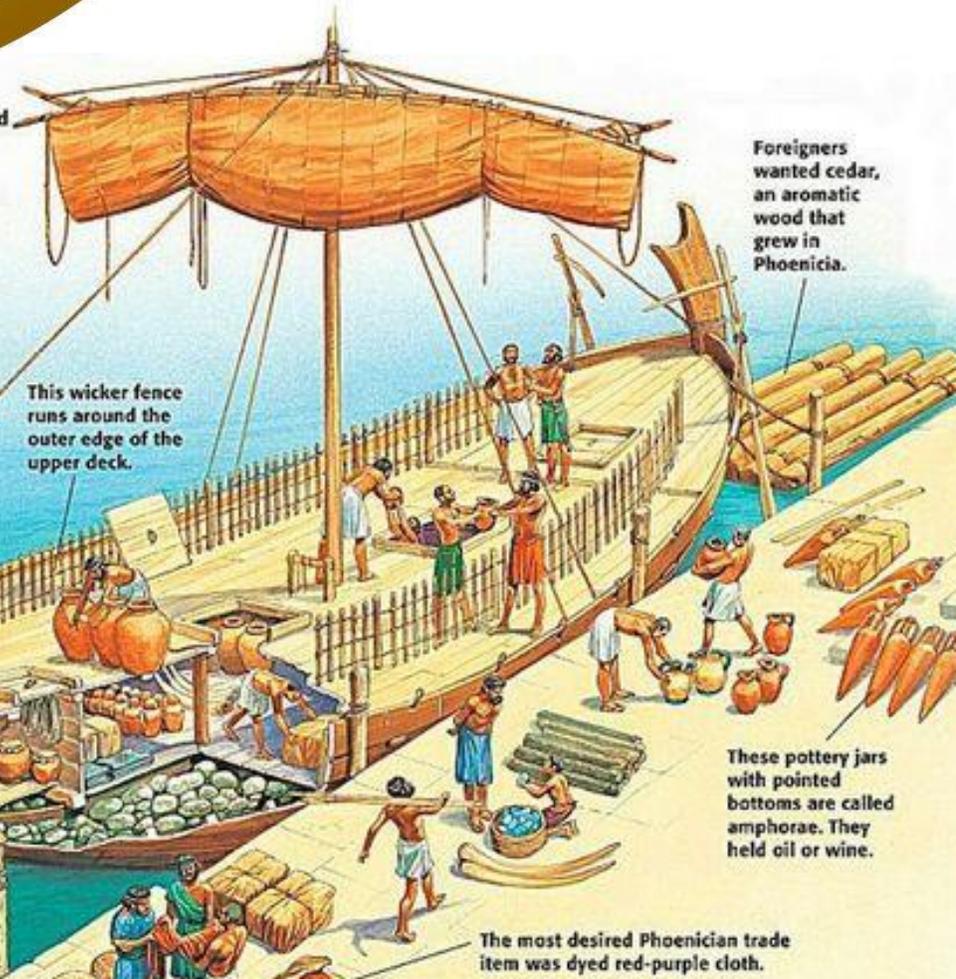


≈ 40 ft long

Merchant Ships

Phoenician sailors developed the round boat, a ship that was very wide and had a rounded bottom. This shape created a large space for cargo.

Phoenician ships often were decorated with horse heads.



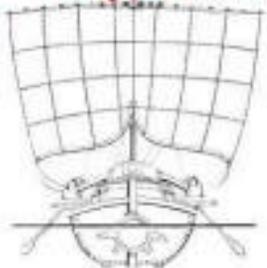
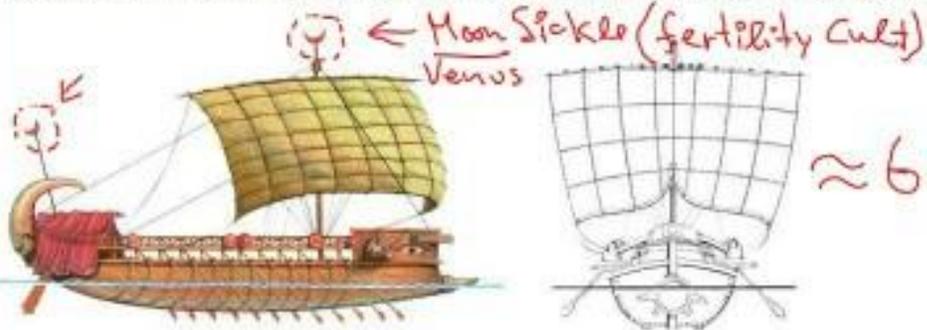
Foreigners wanted cedar, an aromatic wood that grew in Phoenicia.

This wicker fence runs around the upper edge of the deck.

These pottery jars with pointed bottoms are called amphorae. They held oil or wine.

The most desired Phoenician trade item was dyed red-purple cloth.

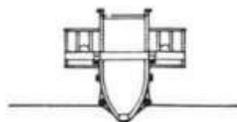
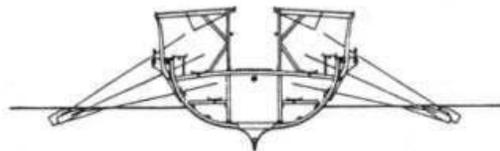
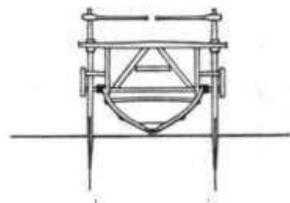
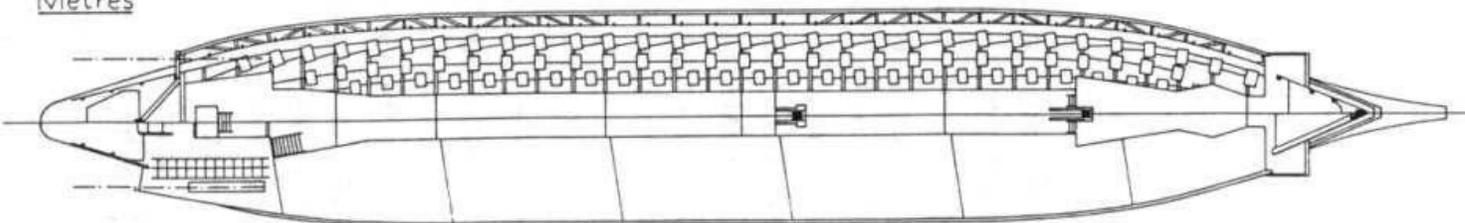
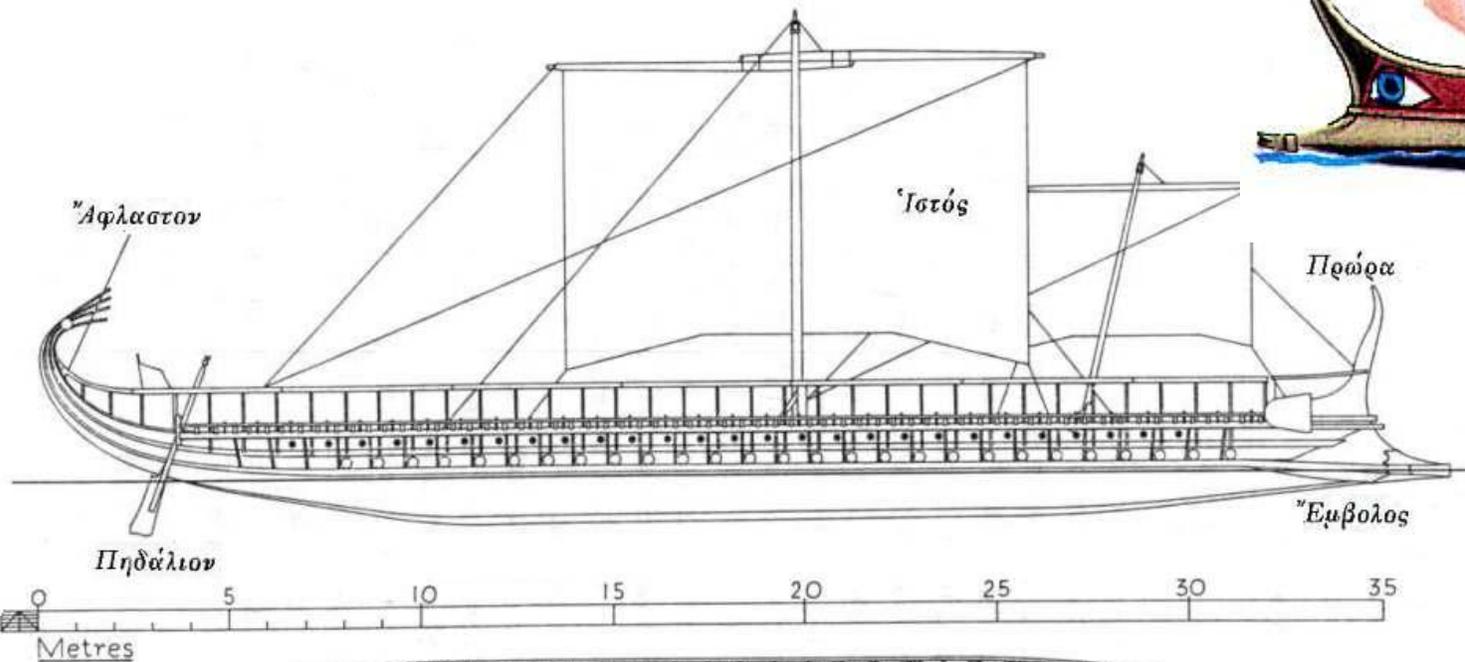
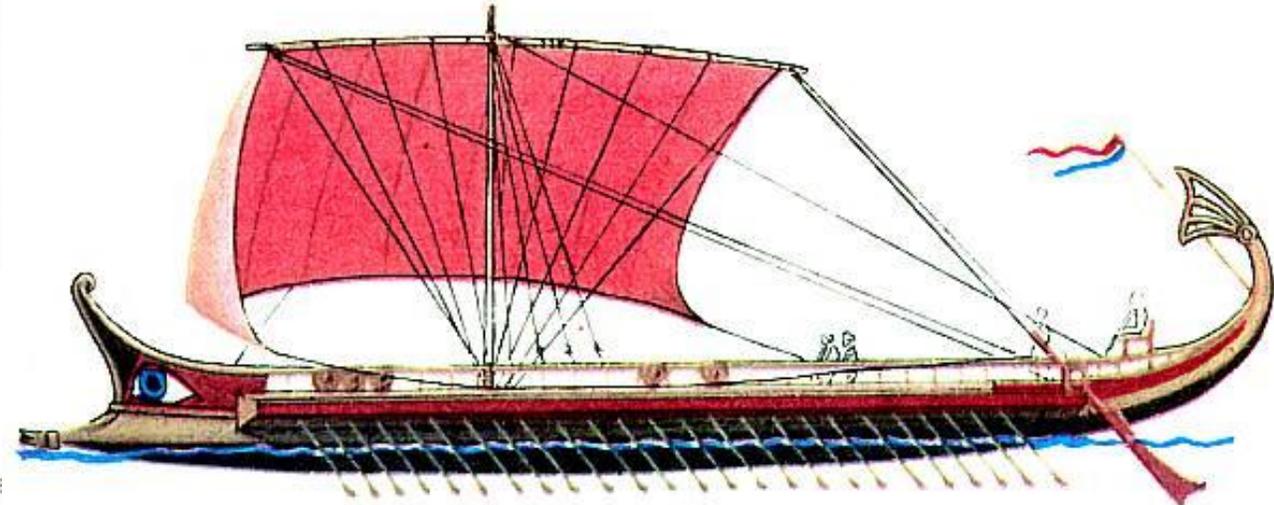
Above is a Phoenician trade ship of about 1500 BC. This is a rather capacious vessel with strong stem posts (firm beam in prow and stern extremities of the ship) and two stem oars. The mast bore a direct sail on two curved beams. To the prow stem post they fastened a large clay amphora for a storage of potable water.



≈ 60 ft long

A later ship is depicted above dating to around 850 BC. Pictures of this type of ship can be found decorating antique vases of VIII century BC. The hull of the boat was low in height and the low strong mast bore a large rectangular sail, quilted for strength with leather belts. The hull was quite often filled with water transported usually amphora densely corked and filled by wax or asphalt. The upper deck was used to transport valuable consignments. The vessel was paramilitary and so the bow was bound with iron protecting the hull in case of impact with the hull of the enemy ship.

HELLENIC





Ancient Greece and Trade
2000-1200 B.C.

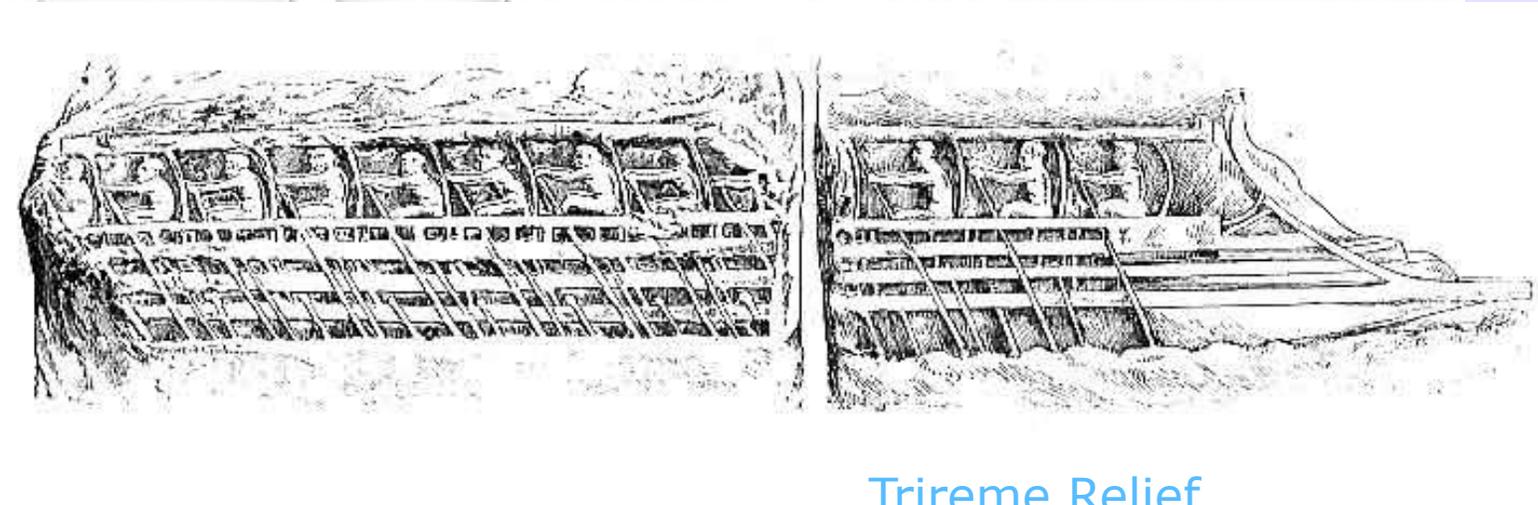
Greece in 1300 B.C.	Pottery	Metals
Trade route	Wine	Precious stones
EGYPT Culture region	Olive oil	Grain
	Ivory	

0 300 600 miles
0 300 600 kilometers



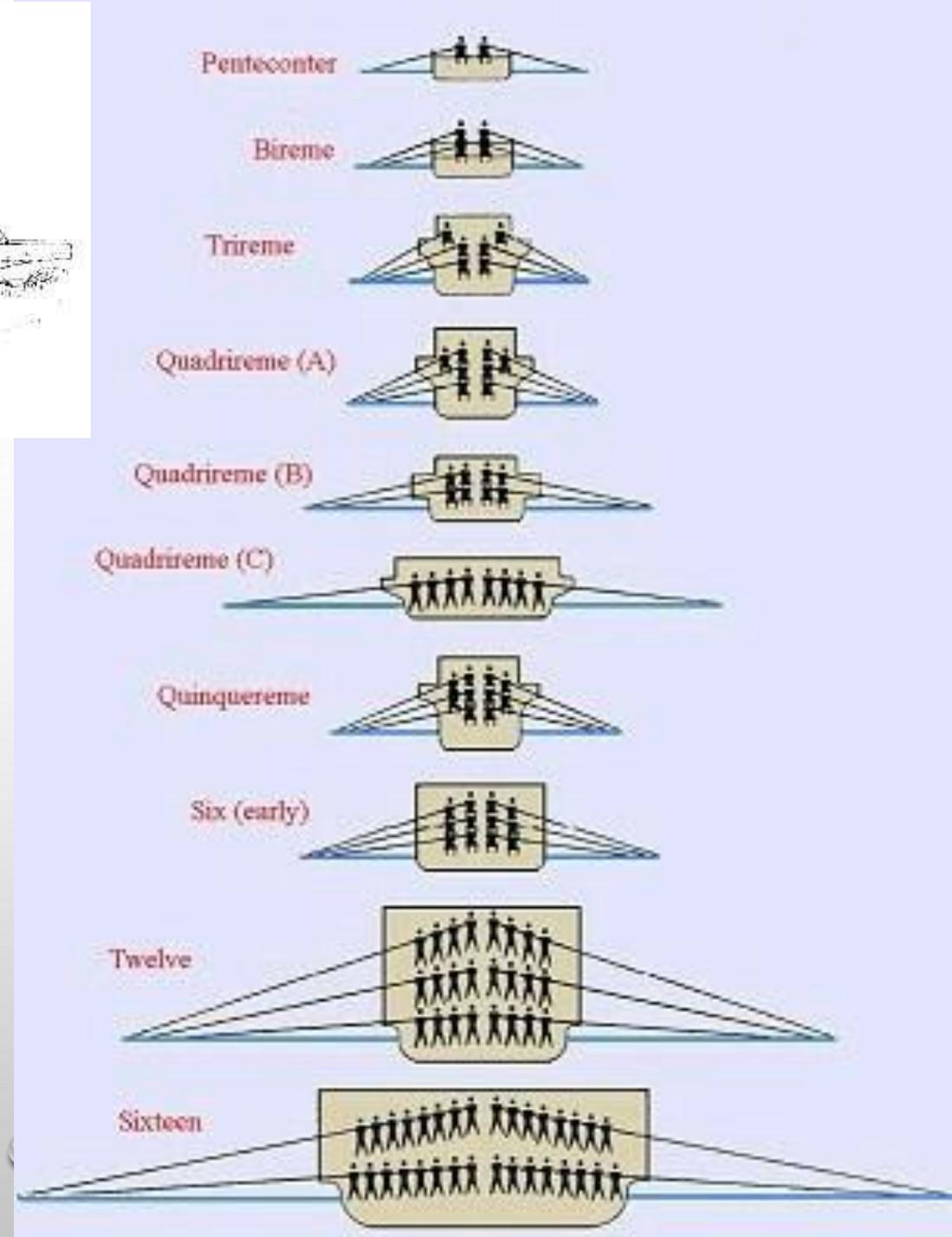
- Areas of Greek settlement
- Parent cities
- Major colonies

0 300 Miles
0 300 Kilometers



Trireme Relief

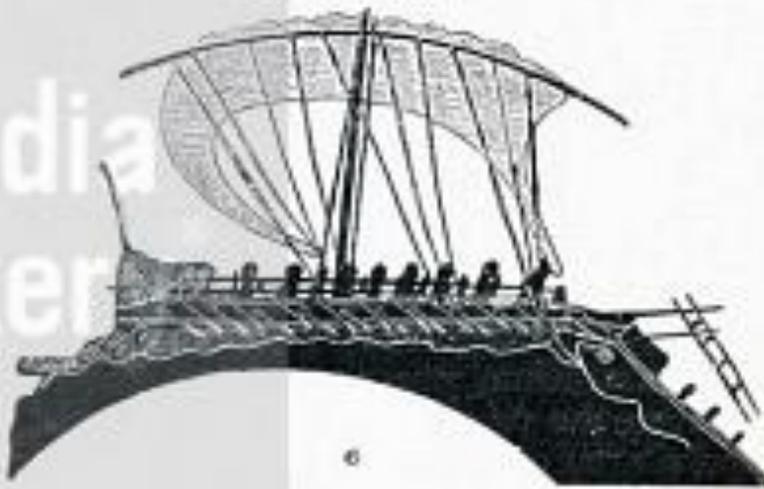
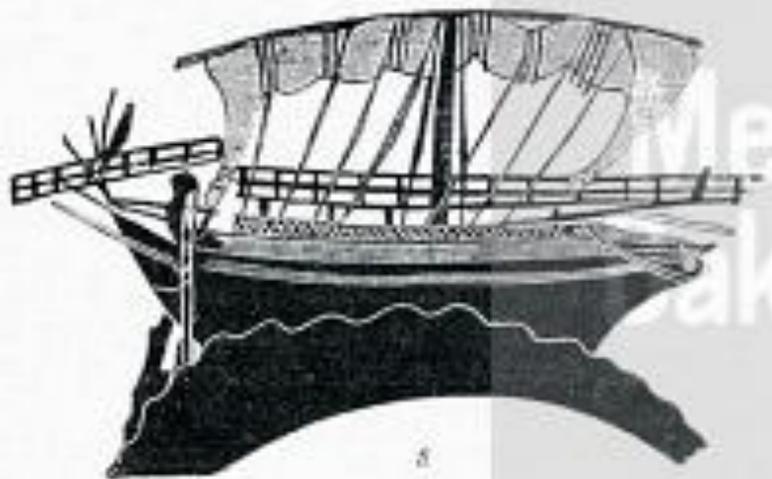
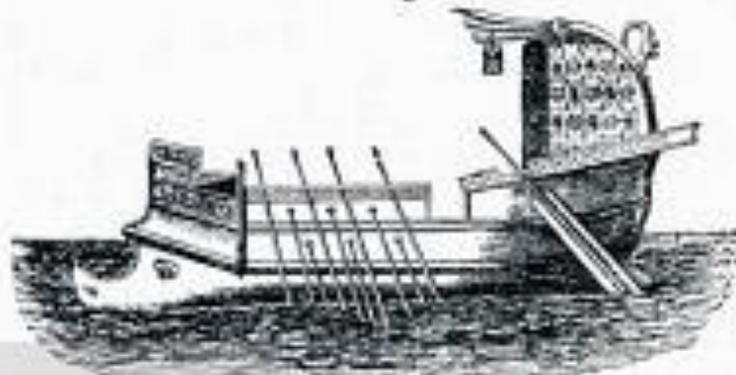
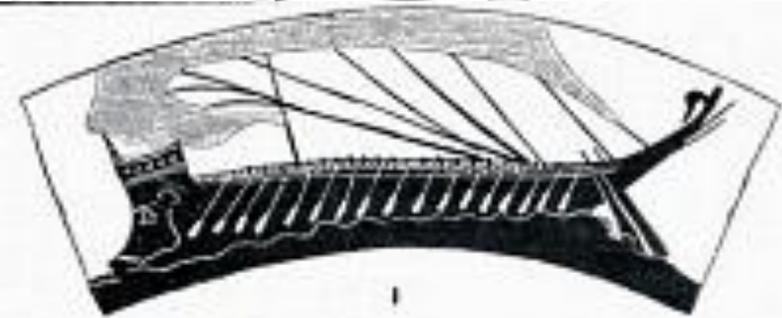
A stone relief found in the Acropolis of Athens showing a trireme crew. The images analyzed and according to a Scientific American publication revealed that the crew used a technique that was discovered again only in the 19th century by athletes in rower contests. A 0.55m x 0.4 m marble relief found by the archaeologist Lenormant. Probably it shows the Trireme Paralos in the 4th century BC. 7 of 31 (on one side) Thranite rowers are shown (here we see only a part of the relief) . The rowers probably used a cushion (hupêresion).





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Ancient Greek and Roman ships which sailed the Mediterranean (from pottery)

1 Greek Bireme

2 Greek Unireme

3 and 4 Roman Galleys from about 100AD 5 and

6 Greek Merchant Ships of around 500BC From the book Harmsworth History of the World published 1908

<http://www.mediabakery.com/afs0393070-ancient-greek-and-roman-ships-which-sailed-the-mediterranean-1-greek-bireme-2-greek-unireme-3-and-4-roman-galleys-from-about-100ad-5-and-6-greek-merchant-ships-of-around-500bc-from-the->

ROME

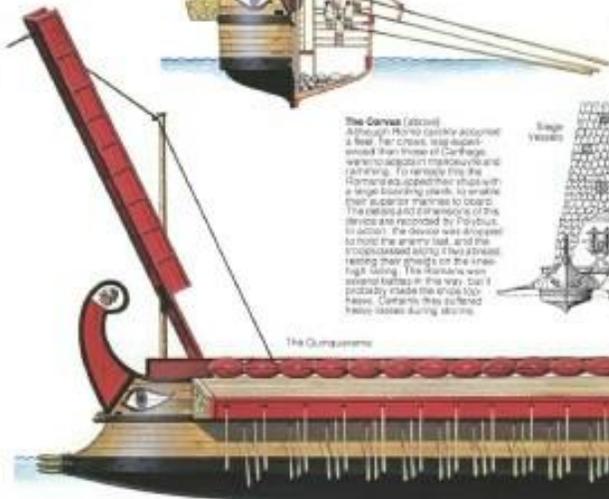


The prow of a Carthaginian protector, showing the thick beak and frame giving the vessel enough strength to survive ramming an enemy vessel. The rower's deck was immediately below the top deck, although their benches are not shown.



A Roman protector passes through the banks of water on three levels. It is equipped with a variety of the pieces ready to engage any enemy ship which survives a ramming. Rowers stand on the deck.

Early Roman Warships



The Quincunx

The Corvus (Lance)
Although the Carthage adopted a few, the Corvus was superior to those of Carthage, which were made of iron and wood. To ram the Carthage's equipment into the water, a single lowering screw, to enable their superior machines to board. The national dimensions of the device are recorded by Polybius. In action, the device was lowered to hold the enemy fast, and the troops advanced using it as a breast, raising their shields on the small high sailing. The Romans were several meters in the way, but it probably made the ship top-heavy. Certainly they suffered heavy losses during storms.



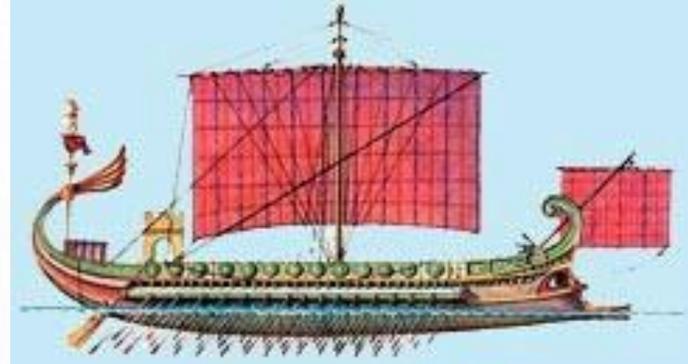
The Quincunx
Length: 140 (210 ft)
Beam: 17 (27 ft) (outboard)
Draft: 20 (60 ft)
Crew: 100-120
Upper 110
Lower 50
Masts: 40 (normal)
120 (war ship)

The Corvus
Total length: 380 (1100 ft)
Width: 40 (130 ft)
Mast height: 280 (900 ft)
Height of deck: 20 (65 ft)



The Quincunx
The standard Carthaginian warship was the 'Felix' and the Roman ship was the 'Corvus'. It was these two that were the main ships of the Roman fleet. Some of these carried a very small crew. These vessels were fully decked and were propelled according to the Carthaginian system, which was well known to the Romans. The Carthaginian system was a single mast with a single sail, but the Roman system was a double mast with two sails. The Carthaginian system was a single mast with a single sail, but the Roman system was a double mast with two sails. The Carthaginian system was a single mast with a single sail, but the Roman system was a double mast with two sails.

Single Masts
In order to mount siege equipment, the ships were sometimes lashed together. The drawing will show a single mast. The Carthaginian system was a single mast with a single sail, but the Roman system was a double mast with two sails. The Carthaginian system was a single mast with a single sail, but the Roman system was a double mast with two sails.



Roman War Ship



Roman Trade Ship



Egyptian Trade Ship

- BRITANIA: Key**
 1. Poole 2. New Forest
 3. Southampton
 4. Alice Holt 5. Oxford
 6. London 7. Colchester

ROMAN TRADE

- main sea transport routes
- river transport routes
- sources of Roman pottery discovered in Guernsey areas
- approximate border of Roman Empire in the late 2nd century A.D.

The Romans introduced into northwestern Europe; pheasants, peacocks, guinea fowl, fallow deer, vines, fig, walnut, medlar, mulberry and sweet chestnut

Granite from Guernsey was found in the large Roman Palace at Fishbourne in Sussex

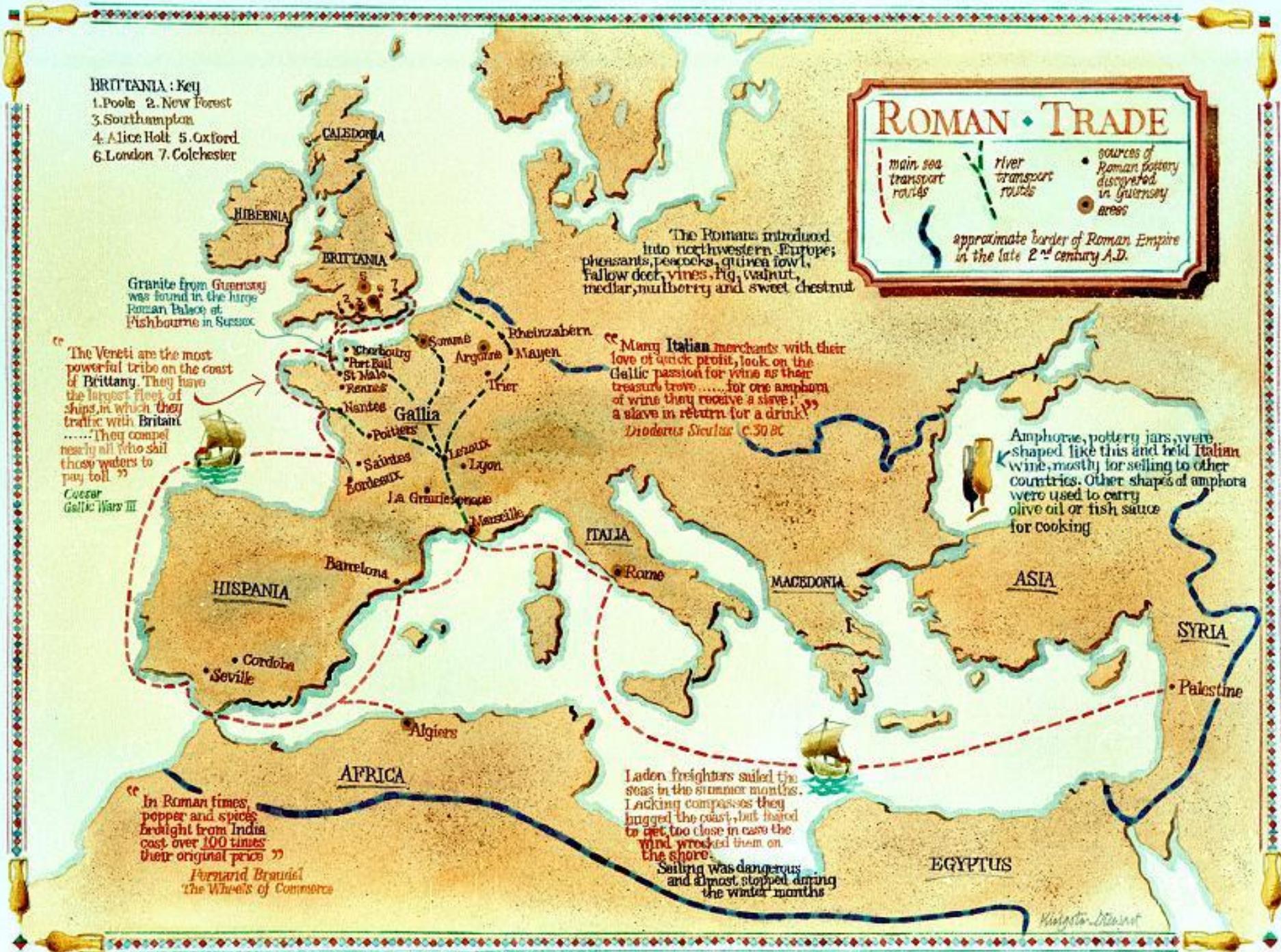
"The Veneti are the most powerful tribe on the coast of Brittany. They have the largest fleet of ships, in which they traffic with Britain They compel nearly all who sail those waters to pay toll"
 Caesar
 Gallic Wars III

"Many Italian merchants with their love of quick profit, look on the Gallic passion for wine as their treasure trove for one amphora of wine they receive a slave; as a slave in return for a drink!"
 Diodorus Siculus c. 30 BC

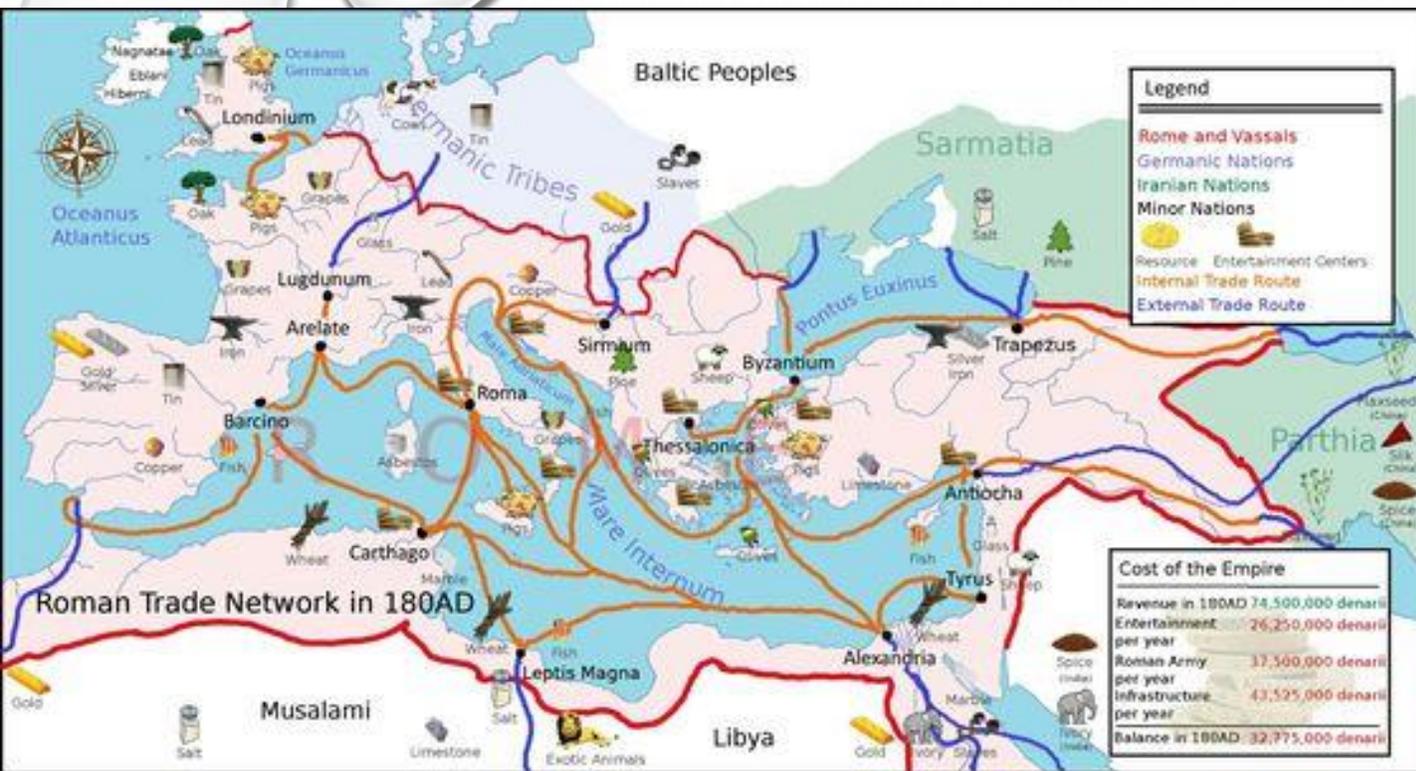
Amphorae, pottery jars, were shaped like this and held Italian wine, mostly for selling to other countries. Other shapes of amphora were used to carry olive oil or fish sauce for cooking

"In Roman times, pepper and spices brought from India cost over 100 times their original price"
 Fernand Braudel
 The Wheels of Commerce

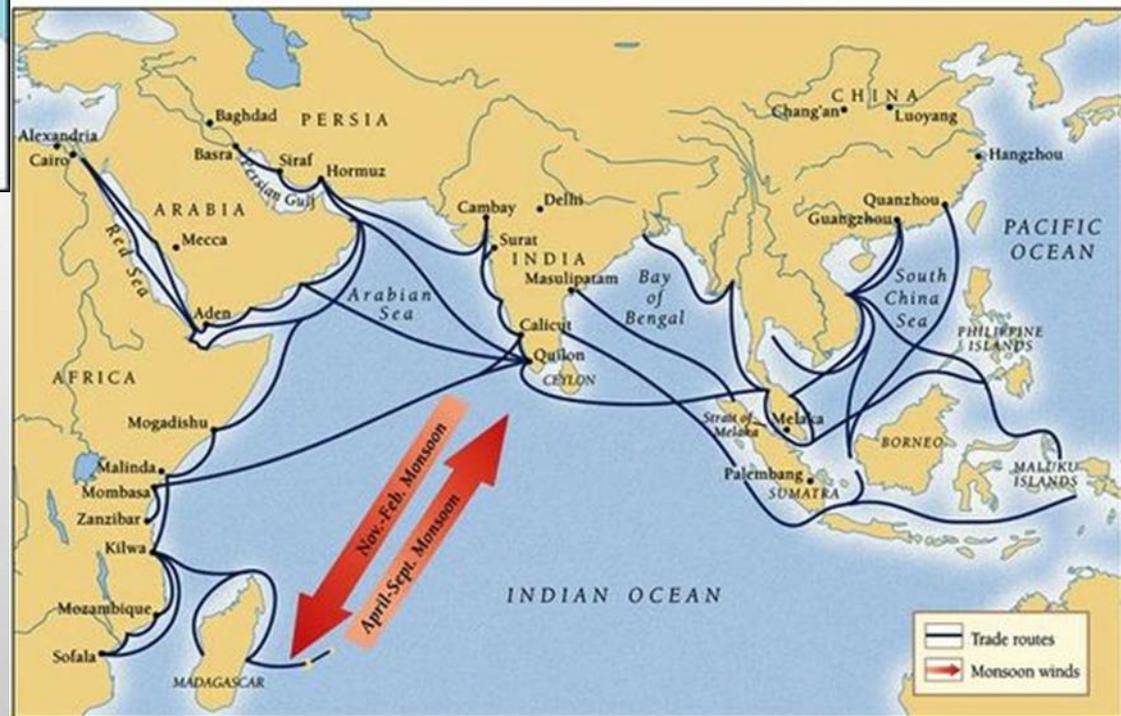
Laden freighters sailed the seas in the summer months. Lacking compasses they hugged the coast, but feared to get too close in case the wind wrecked them on the shore.
 Sailing was dangerous and almost stopped during the winter months



Wagner-Stewart



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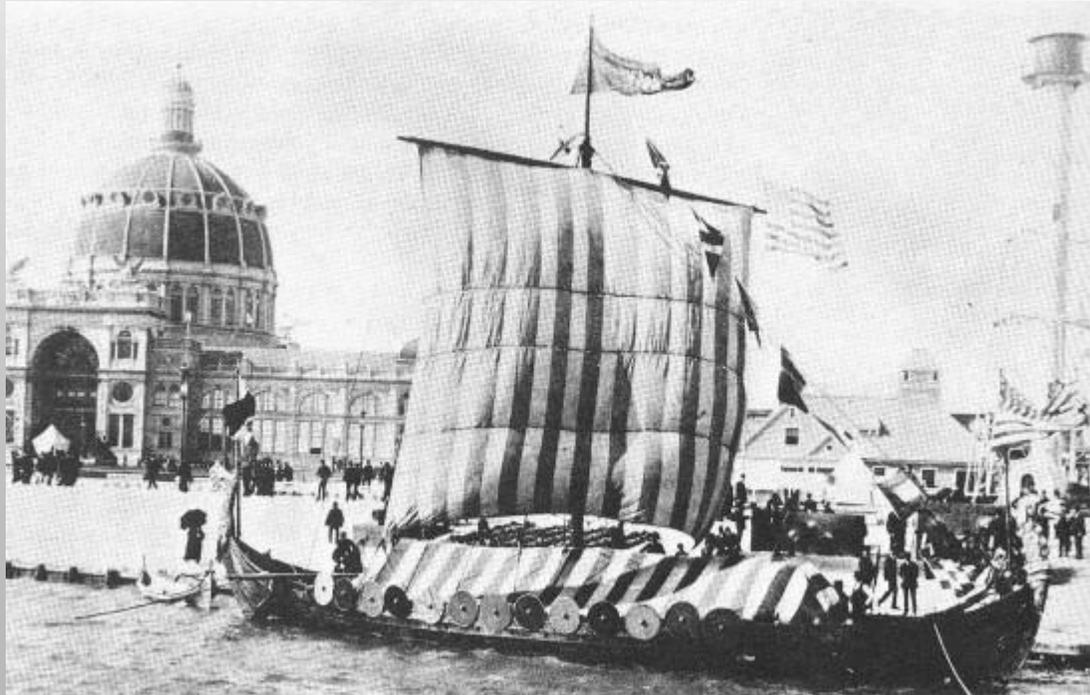
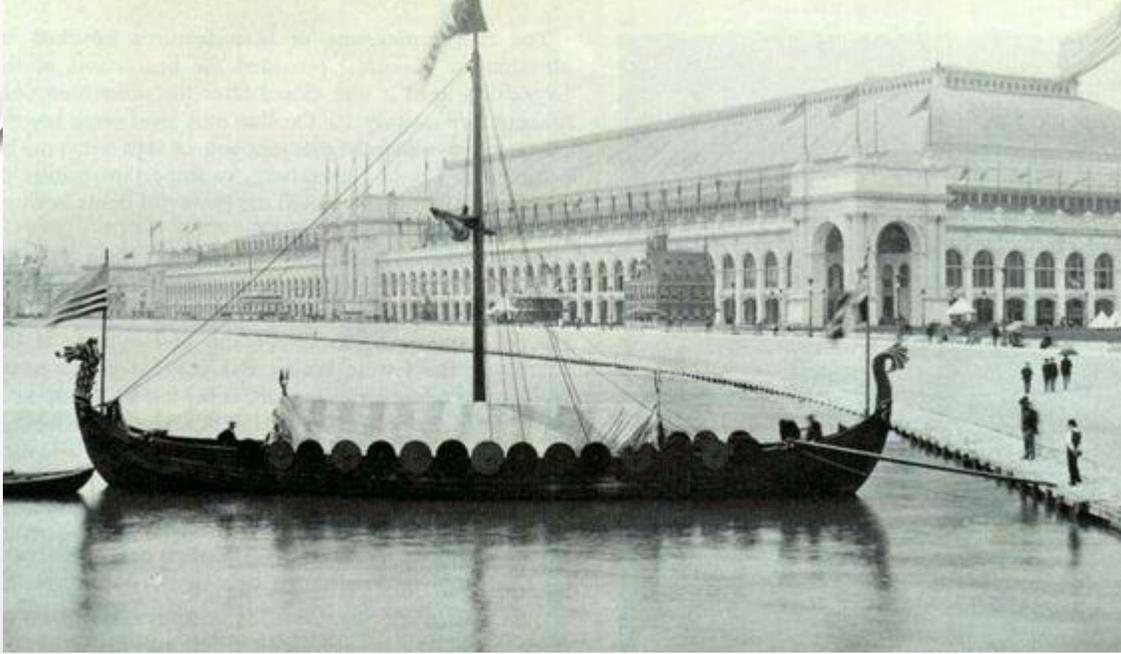


BYZANTINE



NORSE





DHOW



captain and navigator, who steered by the sun and stars in this pre-compass era. A Chinese merchant may have been a passenger, judging from personal items found in the wreck.

21 feet wide
(6.5 meters)

56 to 59 feet long
(17 to 18 meters)



Captain

Rudder

Bamboo deck
Oars

Stoneware jars and rice-straw bales held bows.

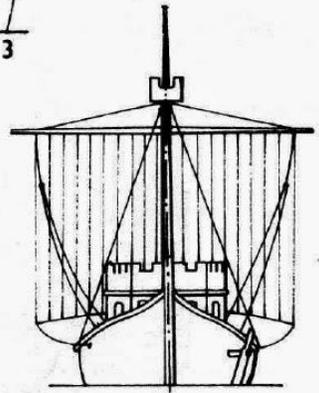
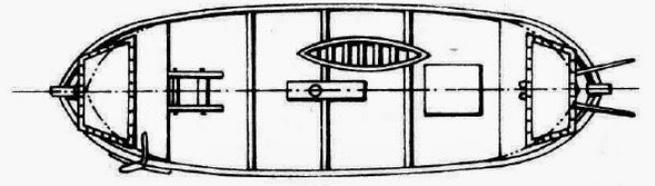
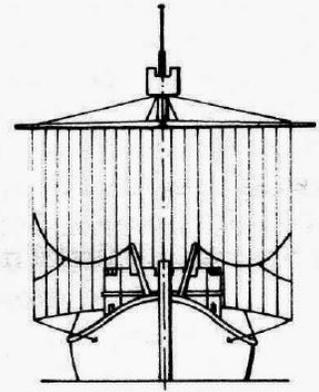
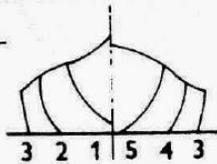
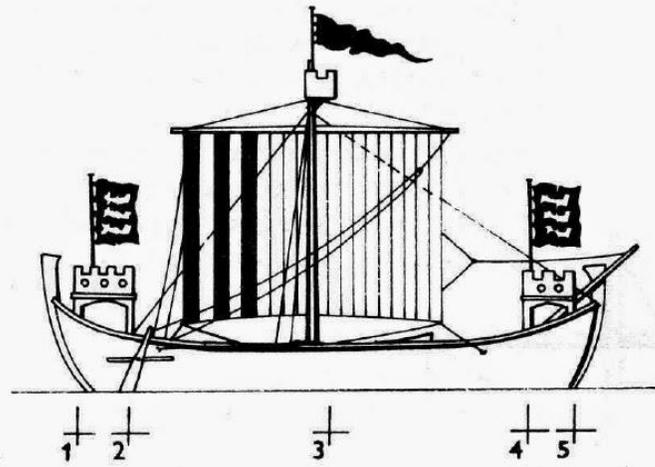
Lead ingots, for ballast and trade, covered 18 silver ingots.

Frame
Keelson
Keel

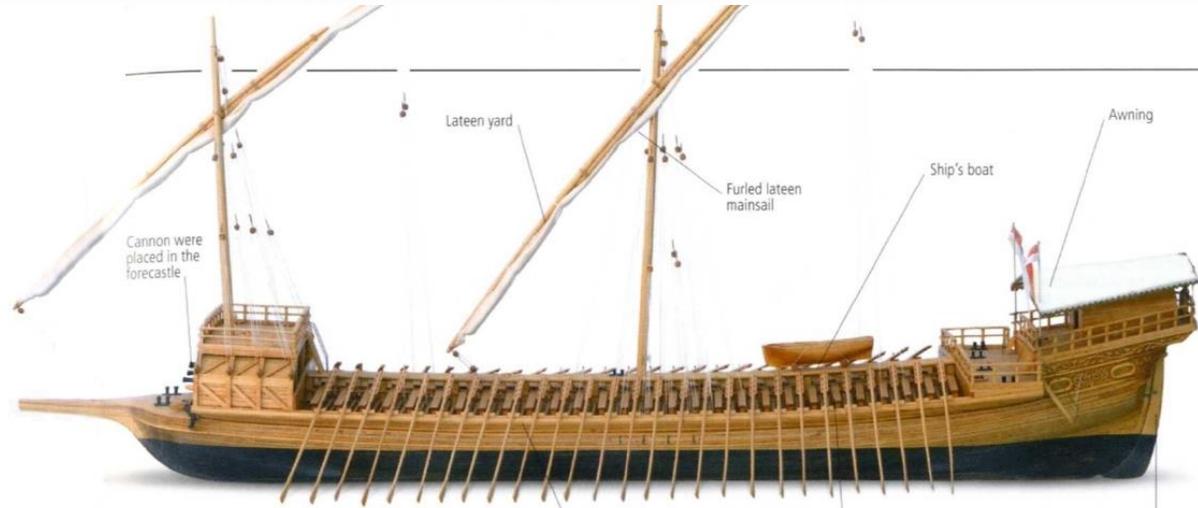
Anchor constructed of iron and wood

Built perhaps in Oman, the ship was crafted from African hardwoods and Indian teak. Typical of dhows, no nails were used: Its planks and beams were sewn together, probably with coir, a coconut-husk fiber. Paperbark wadding

Hull planks
Paperbark



Nef - Dover 1284

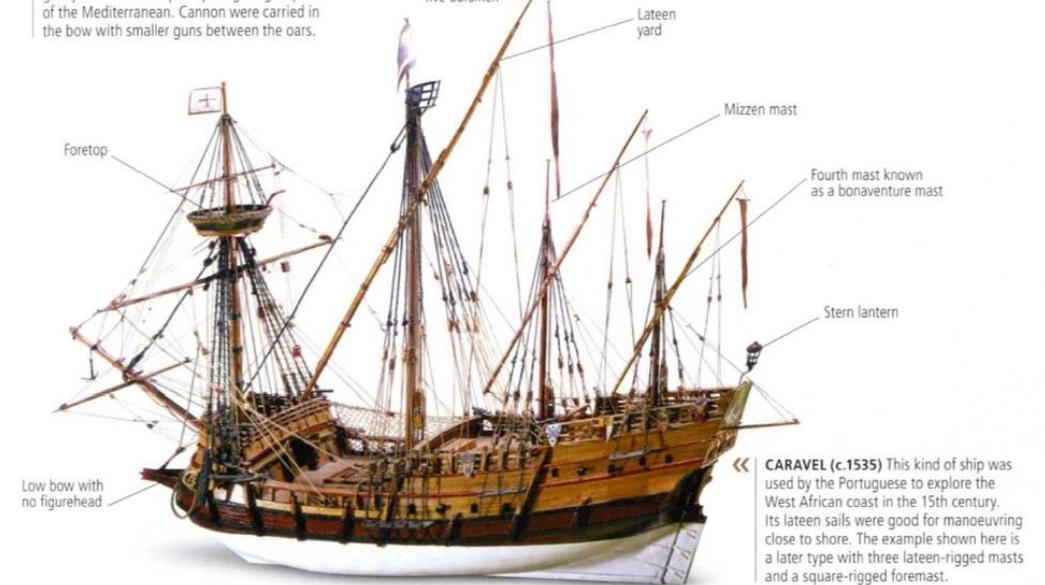


VENETIAN GALLEY (c.1500) Although the Atlantic nations now sailed into battle, oared galleys were still the principal fighting ships of the Mediterranean. Cannon were carried in the bow with smaller guns between the oars.

Long oars rowed by as many as five oarsmen

Thwarts, or rowing benches

Rudder, first fitted to north European cogs, then adopted by galleys



CARAVEL (c.1535) This kind of ship was used by the Portuguese to explore the West African coast in the 15th century. Its lateen sails were good for manoeuvring close to shore. The example shown here is a later type with three lateen-rigged masts and a square-rigged foremast.

Low bow with no figurehead

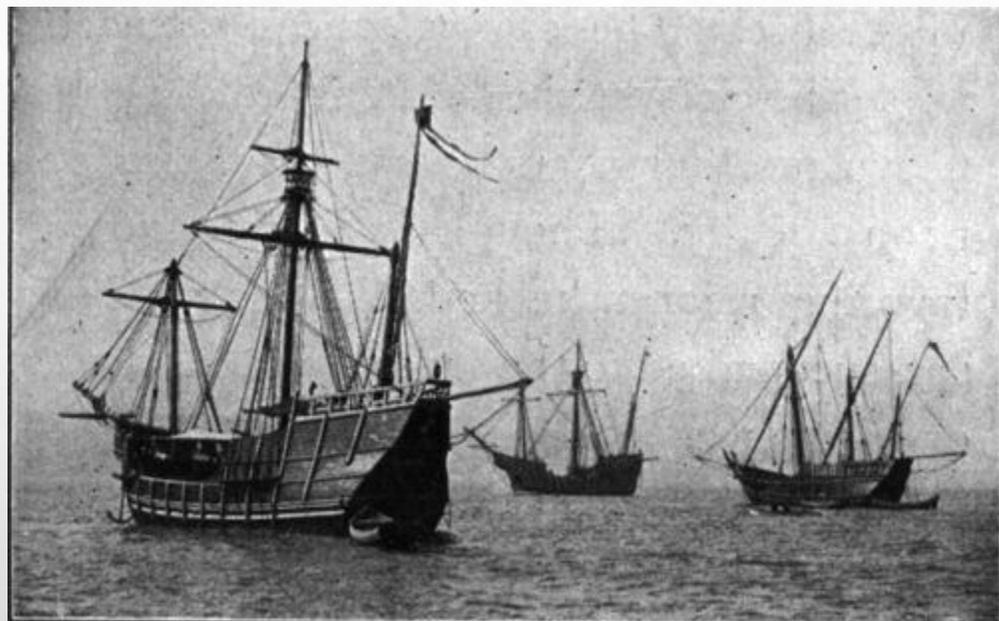
Foretop

Lateen yard

Mizzen mast

Fourth mast known as a bonaventure mast

Stern lantern

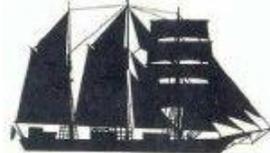




Full-rigged Ship



3 Masted Barque



Barquentine



Brig



Brigantine



4 Masted Barque



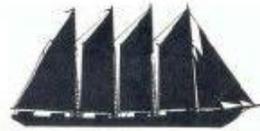
3 Masted Schooner



3 Masted Staysail Schooner



2 Masted Topsail Schooner



4 Masted Schooner



Bermudian Ketch



Bermudian Yawl



Bermudian Schooner



Gaff Cutter



Gaff Ketch



Sloop

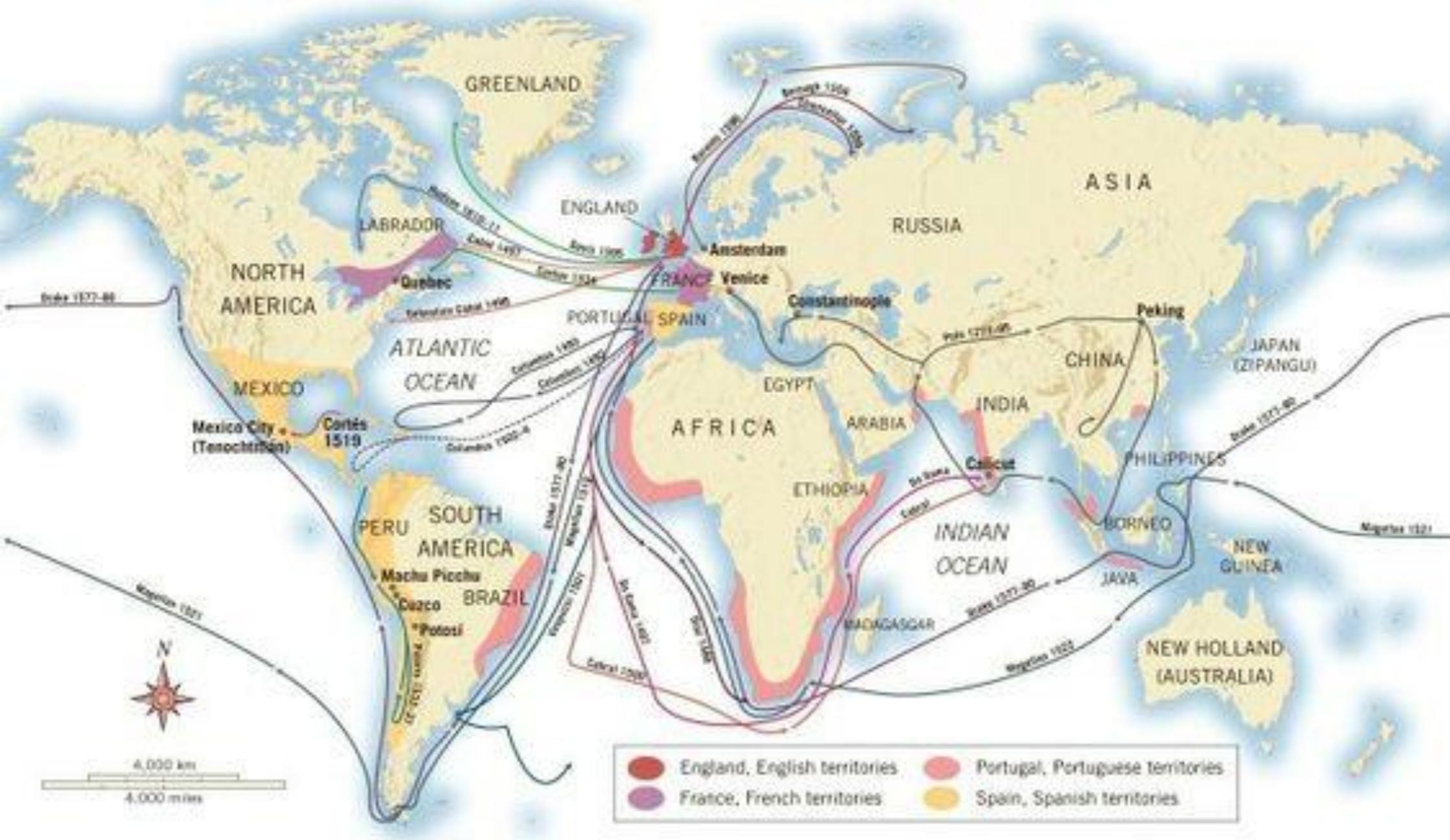


Freedom



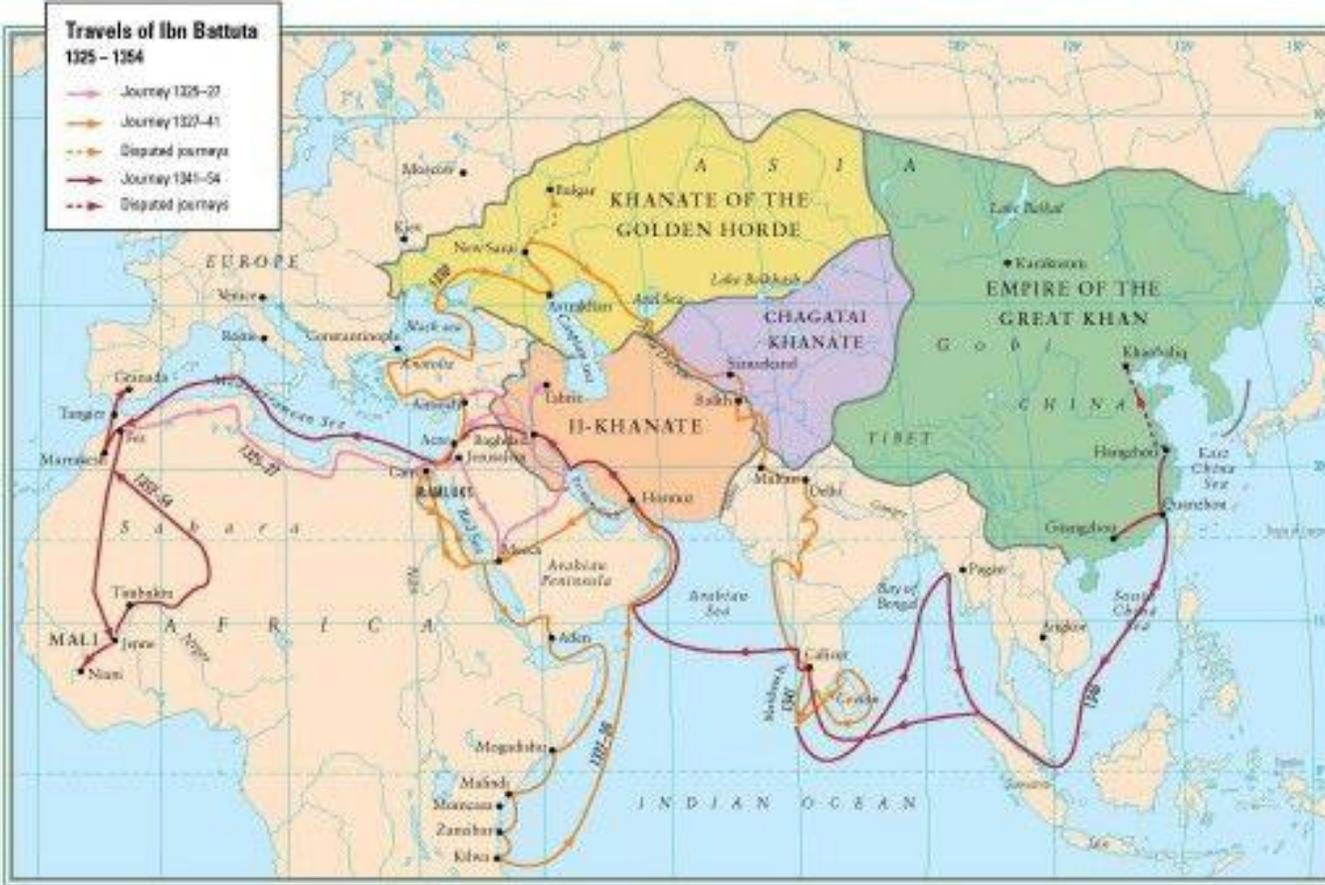
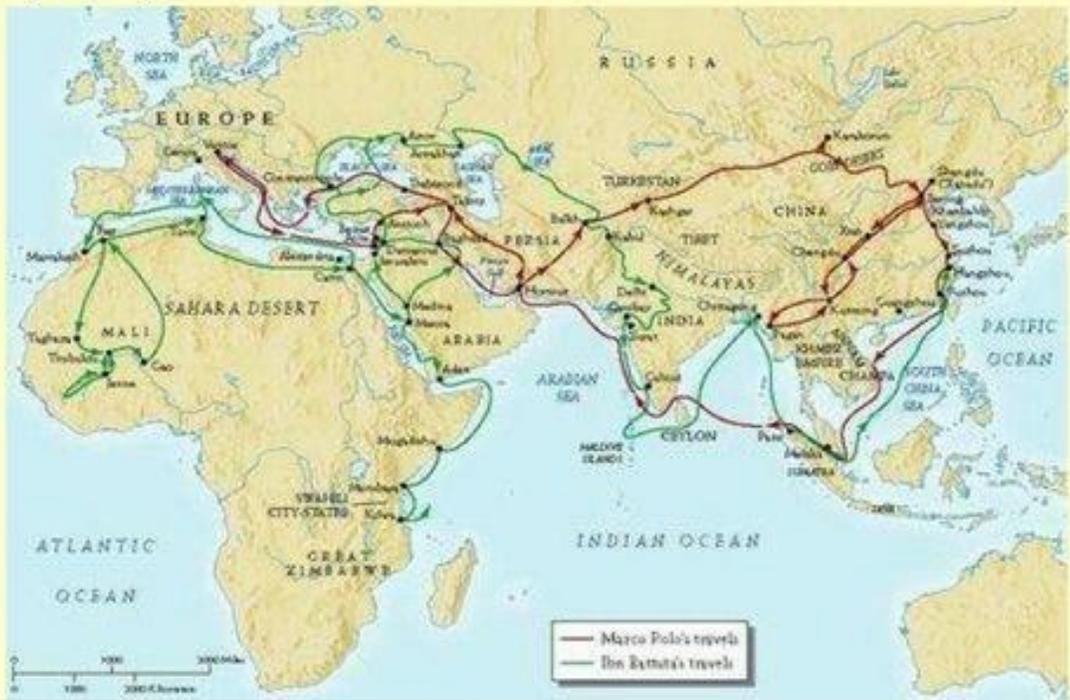
Caravelle





TWO TRAVELLERS

- Much of our knowledge of the world in the 13th and 14th century comes from two travelers, **Ibn Battuta** and **Marco Polo**, who widened knowledge of other cultures through their writings about their journeys.

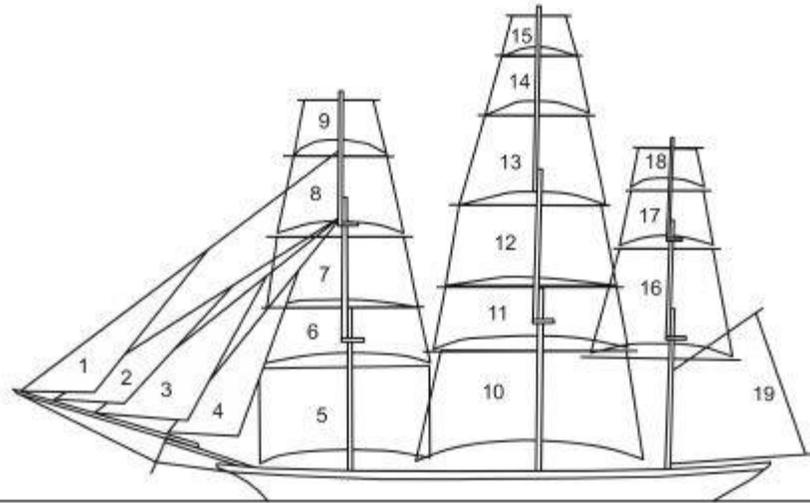


Sailing Plan for Tall Ship Götheborg

1. Lateen mizzen
2. Mizzen topsail
3. Main topgallant sail
4. Main topsail
5. Mainsail
6. Fore topgallant sail
7. Fore topsail
8. Foresail
9. The jib
10. Fore topmast staysail
11. Spritsail topsail
12. Spritsail



Image Source: The Swedish Ship Götheborg



- | | |
|--------------------------|-----------------------------|
| 1. Flying Jib | 10. Mainsail |
| 2. Outer Jib | 11. Lower Main Topsail |
| 3. Inner Jib | 12. Upper Main Topsail |
| 4. Fore Topmast Staysail | 13. Main Top-Gallant Sail |
| 5. Foresail | 14. Main Royal |
| 6. Lower Fore Topsail | 15. Main Skysail |
| 7. Upper Fore Topsail | 16. Mizzen Topsail |
| 8. Fore Top-Gallant Sail | 17. Mizzen Top-Gallant Sail |
| 9. Fore Royal | 18. Mizzen Royal |
| | 19. Spanker or Driver |