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with Reading Museum Service

THIRTEENTH CENTURY SHIP H266



The Viking longship was a graceful, long, narrow, light wooden boat with a shallow draft designed for speed. Longships were fitted with oars along almost the entire length of the boat itself. Later versions sported a rectangular sail on a single mast which was used to augment the effort of the rowers, particularly during long journeys. Their shallow draft allowed navigation in waters only one metre deep and permitted rapid beach landings. However, their shallow draft meant they could not carry much cargo.

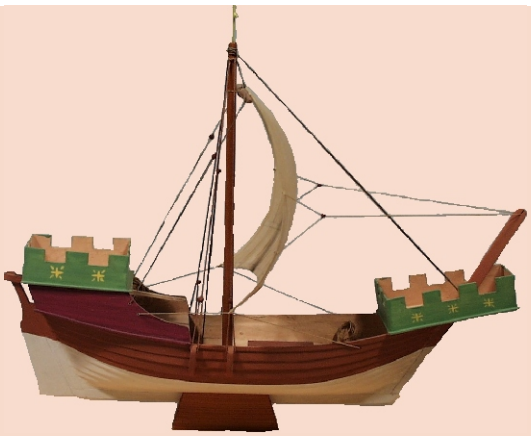
Left: The Oseberg longship, which has been dated to 815-820 AD, which was found in a burial mound in Vestfold south of Oslo, Norway.

To solve the problem of limited cargo capacity Norse merchants developed a vessel known as a knaar. The knaar was a square rigged, single masted trading vessel that relied solely on its square sail for propulsion at sea. It was broader and had a much deeper draft than the longship. The square sail rig gave the knaar a poor performance when sailing into the wind, though it also meant they could sail with a smaller crew. It was usually half-decked, that is, it had a deck at the fore and aft, under which cargo could be stored. It was steered using an oar over the side of the vessel. Knaarer routinely crossed the North Atlantic carrying livestock and stores to Norse settlements in Iceland and Greenland, as well as taking goods to the British Isles. A model of a knaar can be seen on the right.



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The model in this box represents a thirteenth century vessel known as a cog. Cogs were ships that were widely used from around the twelfth century. They were a development of the earlier knaar-type vessels. They differ from the earlier style of ship in having a full deck and a stern-mounted hanging central rudder.



The model also has crenellated fore and stern castles. These structures do not seem to have been a standard feature on merchant vessels, though they could be added for defence against pirates. They provided a platform from which archers could attack anyone trying to board the vessel. They would have been more common on cogs which were built or adapted for war. The picture on the right shows similar vessels taking part in the Battle of Sluys, which was fought on 24 June 1340, between England and France. At this date sea battles usually involved tying the two opposing fleets together to form fighting platforms over which armed foot soldiers skirmished, much as they would if the fighting had taken place on land.



In peaceful circumstances cogs were mostly associated with sea-going trade, particularly in the Baltic Sea region. These sturdy sea-going traders have been called the workhorse of the Hanseatic League. The Hanseatic League was a medieval alliance of trading guilds that established and maintained a trade monopoly in a network of towns from Novgorod in Russia to London in the west. The map on the left shows the main trading centres of the Hanseatic league. Cogs were used to transport everything from tar to fish, woollen cloth to corn.

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Until recently our knowledge of cogs was dependent on artist's impressions found in manuscripts, such as the picture of the Battle of Sluys on the previous page, or the image on the right from the ceiling of a Danish church. However the development in the twentieth century of underwater archaeology has resulted in the discovery and preservation of several cog-type vessels.





The most famous such discovery took place in Bremen, Germany, in 1962 when a new harbour was being dredged (left). The remains have been dated to AD 1380.

The remains of this vessel have been preserved and are now on display in Bremen Museum (right).





From the information provided by this wreck, full-size replicas (left) have been built. Experiments with these modern versions have shown that the originals could perform well in favourable wind conditions, but struggled when the wind was against them.

In 2002 a mid-fifteenth century ship was uncovered in Newport, Wales (right). The remains of the ship extended to 23 metres. It is thought that its original length was around 25 metres.

