

Building boats

Boats were originally made from wood, then iron and now steel, and built in docks or yards next to the waterways.

Materials used in boat building

Wood – used to build the main frame of most boats, although later boats were made of a wider variety materials. The wood had to be a hard wood, such as oak.

Iron – iron sections were used to strengthen the boat and for parts made for the rudder and towing. Iron was also used for nails and fixings. Sections were made by local blacksmiths.

Oakum – made from old bits of rope and used with tar to plug up gaps between the wooden planks to ensure the boat is waterproof.

Rope – an essential part of boating. Before engine, boats were pulled by horses attached to the boats by rope. Rope was also needed to moor boats to the side of the waterway and for fenders (which stop the boats getting damaged if they bump into anything). Rope makers began to work near boat building yards.



This is a yard where boats are made

Strange but True

During the two world wars a lack of resources and a need to build boats quickly led to **bizarre materials** being tried out for boat building, such as **concretel** Not a popular material today but a few concrete boats still remain in museums.

Types of boats

There were many different boats on the inland waterways, often depending on the size and type of waterway.

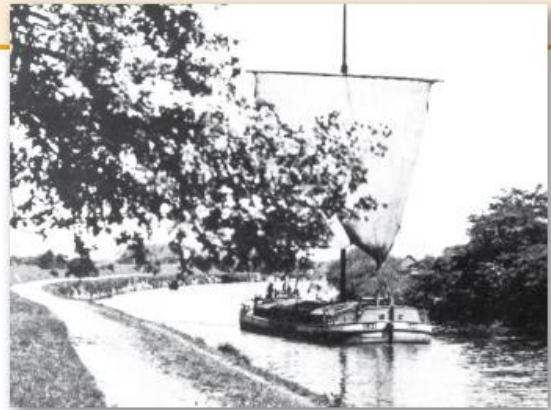


Narrowboat

Narrowboats

Narrowboats were designed for narrow canals. They are traditionally 21m (70ft) long (but short enough to fit in the locks, which are usually 22m (72ft) long and 2m (6ft 10in) wide. Narrowboats in the Midlands area became famous for the 'roses and castle' style of painting. This is still popular on modern boats in all parts of the country. In other areas the designs were simple such as those of the

earliest painted boats, basic geometric designs in bright colours. Horses pulled one or two boats together. Later when the engine was introduced, motor boats, which were also loaded up with cargo, could pull a non-powered boat (butty) as well – meaning that two boats were almost always operated at once. You can see a plan of a motor boat in Appendix B.



Barge

Barges

Barges are wider than narrowboats and in some places were operated by sail rather than being towed by a horse. Some had living accommodation on them, others were day boats. Later, as with narrowboats, barges were powered by steam or diesel engines. Different types of barges worked on different waterways and carried varied cargoes. They often had flat bottoms to avoid scraping the canal or river bed when they were fully loaded. Barges were much more resilient on larger rivers than narrowboats.

The parts of a boat

Next time you visit the canal, see if you can spot any of these parts on the boats.

