



Raise the Rigging – Ship Sails and Rigging

In the *Raise the Rigging* exhibit, the HMS *Resolution* model matches the ship in the journal painting.

Over time, the hull shape, sails and rigging of sailing ships changed to suit different purposes. The sails and wind were the engines of the ship, so great care was taken to keep them in good repair. Sails were made of heavy linen canvas and during their spare time, most of the crew had to repair them.

Rigging is a general term given to all the ropes used to support the masts, and to extend or reduce the sails, or arrange them to the wind. There are different types of rigging, depending on the application.

Standing rigging is used to sustain the masts, and remains in a fixed position. Shrouds, stays and backstays are all examples of standing rigging.

Running rigging is fitted to arrange the sails. Braces, sheets, halliards are examples of running rigging.

The front mast is the foremast, the middle is the mainmast and the back is the mizzenmast.

Ships are categorised depending upon how many masts they have and whether the sails are attached using fore-and-aft or square rigging. Below is a summary of the different types of ships and their rigging.

Sloop: one mast with fore-and-aft rigging.

Full-rigged brig: two masts, both square rigged.

Brigantine: two masts - foremast is square-rigged, mainmast has a combination of square and fore-and-aft rigging.

Hermaphrodite brig: two masts - foremast is square-rigged, mainmast has fore-and-aft rigging.

Topsail schooner: two masts - foremast has a combination of fore-and-aft and square rigging, mainmast has fore-and-aft rigging

Schooner: two or more masts, fore-and-aft rigged.

Bark: three masts - foremast and mainmast square rigged and mizzenmast fore-and-aft rigged

Barkentine: at least three masts - foremast has square rigging and the mizzen and mainmast have fore-and-aft rigging

Ship: at least three square-rigged masts

HMB *Endeavour* carried square sails on all three masts, in accordance with navy practice. A ship rigged in this way is known as square-rigged or ship-rigged. A Barque or bark such as HMB *Endeavour* had at least three masts. Only the mizzenmast carried fore and aft sails, while the remaining masts were square-rigged. Three masted barques were especially common and were important in European merchant fleets for transporting goods over long distances. Merchant ships could be sailed with a small crew of 15, as the sails were simple to handle. Large sailing ships were cut down to barque rig to save on crew size and maintenance costs. Brigs had two masts with square-rigged sails. The mainmast also carried a large gaff sail (brigsail or mainsail).

In James Cook's time, a bark meant a 'cat' or bluff-bowed boat of shallow draught, with rigging incomplete in the mizzen. This allowed it to float off if it got caught in shallow water (such as on a coral reef).