

19th-Century Ship Parts – Masts and Rigging

Diving in the Great Lakes typically involves wrecks of 1800's sailing vessels. They are a beauty to behold, but they can also be confusing. They frequently contain parts and equipment that are no longer seen on modern ships, and many divers are not sure what they are looking at. Presented here are some descriptions of the major parts likely to be seen on a 19th-century sailing vessel. To make things easier, these descriptions are separated into the bow, amidships, stern, and rigging. Placement on the ship can often aid identification, and things are more easily found and recognized when you know where to look.

Masts and rigging are the final section and will be covered this month.

Foremast – The first mast from the bow.

Mainmast – The second mast from the bow.

Mizzenmast – The third mast from the bow. Only relevant for three-masted vessels.

Topmast – Additional mast attached to the top of a regular mast. This attachment was done with a step. This allowed a topsail to be used. The topmast could be lowered or removed depending on required clearances under bridges or seasonal wind conditions.

Step – A wooden or metal structure used to support the base of a mast. When attaching a mast to the keel, it looks like a box structure. When attaching a topmast to a regular mast, it appears as a figure-8 piece.

Crosstrees – A bracing platform near the top of a mast used to attach the standing rigging to the mast. Frequently appear like telephone pole “T” crossbars, but they can also have more elaborate shapes that look like a crow’s nest.

Standing Rigging – Rigging used to tension and support the masts, bowsprit, and jib boom. For masts, standing rigging was attached between the deadeyes and crosstrees. Early vessels used rope, but later vessels used wire. The remains of wire rigging can sometimes still be found on shipwrecks.

Running Rigging – Rigging used for raise, lower, and position the sails, booms, gaffs, and spars. It was always rope and is never found on shipwrecks beyond the blocks and pulleys that remain.

Fore-And-Aft Gaff Rigged – Also called schooner-rigged. This is where the sail had a boom below and a gaff above with the sail spread in between. It was the main distinctive feature of schooners. These sails were easy to manipulate and handle with a small crew and allowed flexibility in sailing direction, including tacking upwind.

Square Rigged – This was where the sail was suspended from a horizontal spar across the top. They were used in barks and brigs. These sails allowed faster sailing than schooner rigging but required more manpower to set correctly and had trouble sailing in upwind directions. Popular mostly in early vessels and/or military vessels.

Topsail – Triangular sail attached between the topmast and gaff. It was used for additional sail area on low-wind days.

Spar – The upper wooden portion of a square-rigged sail. It was usually moderate in its size and dimensions.

Boom – The lower wooden part of a gaff rigged sail. It was fairly stout and had a fluted moon-shaped notch at one end that butted up against the mast.

Gaff – The upper wooden part of a gaff rigged sail. It was somewhat smaller than a boom and usually had a taper. It also had a fluted moon-shaped notch at one end that butted up against the mast.

Mast Hoops – Wooden hoops used to attach a gaff rigged sail to the mast. They allowed the sail to easily slide up and down the mast as the sail was raised and lowered.

