Most of the labor associated with building a schooner fell to the shipwright, a carpenter specialized in shipbuilding. In large established shipyards, dozens of craftsmen might work on a single ship, allowing individual carpenters to specialize on a few tasks. For many of the shipwrights in Northeastern Wisconsin’s early shipbuilding industry, they often had to be able to perform all jobs and more.

A shipwright needed a wide array of tools in order to work the lumber and assemble it into the variety of shapes necessary to form joints and smooth lines. A master shipwright was expected to own their own specialized tools and maintain them through work and weather alike. During a time when tools were often handmade, the significant investment meant they were often handed down between generations.

The first task for a shipbuilder would be to locate the appropriate timber to be squared and cut into usable lumber. A good shipwright was also an effective arborist, able to identify tree species, age, conditions, and determine the hidden quality of a tree’s wood. Luckily for early settlers, the Door Peninsula was filled with a variety of tree species, including large stands of old growth White Pine preferred for masts and spars.

Different parts of a tree had different purposes in shipbuilding: wood cut close to the bottom portion of the trunk ("butt") was the strongest and most suitable for bending, while gnarled and angled roots and branches could be easily shaped into knees. Under ideal conditions this wood would be left to season. As many Wisconsin tall ships were often referred to as ‘leakers’, this was a step that was likely skipped.

In order for a tall ship to sail quickly, and safely, it required a hull with perfect curves. To achieve this, a 19th century shipwright could either source naturally bent lumber, cut lumber into shape, or bend straight lumber. Bending was preferable to cutting because cross-cutting natural fibers would sacrifice strength and durability. Through the application of heat and water, either by boiling or steaming, the fibers of solid wood could be softened and then, with the aid of metal brackets, pulleys, and a lot of brute strength, the lumber would be given its shape and left to dry.

What is a Shipwright?

Tools of the Trade

Sourcing the Lumber

Piecing it all Together

With the lumber prepared, the backbreaking labor of assembling the ship began. After laying the keel – an exceptionally strong and heavy length of straight timber forming the spine – assembled frames would then be attached, forming the skeleton of the ship. Often weighing tons, the dangerous task of lifting each piece required the strength of as many laborers as possible and the extensive use of pulleys and levers. Fully assembled, this skeleton would receive its skin, with side and deck planking fastened to the frame. All of this was accomplished through the collective knowledge and labors of shipwrights.