Working alongside shipwrights, caulkers plugged the seams between planks and joints to make a ship watertight. Using specialized mallets designed to reduce vibration and a variety of iron wedges, caulker would thread oakum into the gaps. Oakum was created from hemp and cotton fibers, often recycled from old rope. Recycling rope into oakum was painstaking and tedious work, sometimes produced through prison labor or as a punishment for sailors at sea. With the gaps filled, caulker would then have the unpleasant task of heating and applying hot pitch to waterproof the fibers. A caulker anywhere in the United States could expect little sympathy in a 19th century shipyard. Considered less prestigious, and with lower entry costs than other shipbuilding trades, caulker often came from marginalized communities. Poorer European immigrants and African-Americans frequently filled these positions; the latter were regularly banned outright from becoming shipwrights in many yards.

While shipwrights were building the basic structure of a schooner or barque, the task of making it seaworthy fell to others. A variety of trades prepared different parts of the ship, each with their own specialized tools and skills.

**THE CAULKER**

**THE RIGGER**

In order to keep its many moving parts together, a tall ship required a complicated system of ropes, blocks, and tackle, all positioned to work in harmony. The mast, spars, sails, and other gear had to be secured through rigging. Lengths of rope, or “lines,” with constant tension formed the standing rigging that kept a mast in place. Lines with pulleys, or “blocks,” formed the running rigging to perform a variety of tasks like raising sails. The rigger was tasked with putting all of these pieces together.

One common task for the rigger was rope splicing. Using a fid or marlinespike – elongated cones of wood or metal – lines and cords would be unwound to allow for ends of rope to be connected, or spliced, together. A rigger’s quality of work was crucial, since a line that snapped or failed could easily cause a sailor death or injury. Shipyard riggers were often sailors themselves and the term “Marlinespike Seamanship,” the knowledge of tying knots and working with rope at sea, originated from the common tool used between both occupations.

**THE SAILMAKER**

The defining feature of any tall ship was the use of sails to capture the wind. A tall ship could have dozens of sails, and each of these large stretches of canvas had to be meticulously planned, cut, and sewn to shape by hand. The sailmaker, often working in a special loft with large empty floors to spread out material, was tasked with producing each custom sail. As a sail needed to be able handle all forms of weather and strain, heavy canvas and stitching methods required a sailmaker to use large needles and thicker thread, adding to the already strenuous activity of stitching thousands of feet. Significant manual dexterity and constant attention to fine detail were needed. Skilled sailmakers were always sought-after on shore and sea alike. The size and force of needle strokes demanded the use of a sailmaker’s palm, a leather and metal thimble that covered the whole hand. This oversized thimble helped reduce accidental stabbing, but unfortunately did little to prevent crippling arthritis later in life.

The Caulker

The Rigger

The Sailmaker

**RELATED TALL SHIPBUILDING TRADES**

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