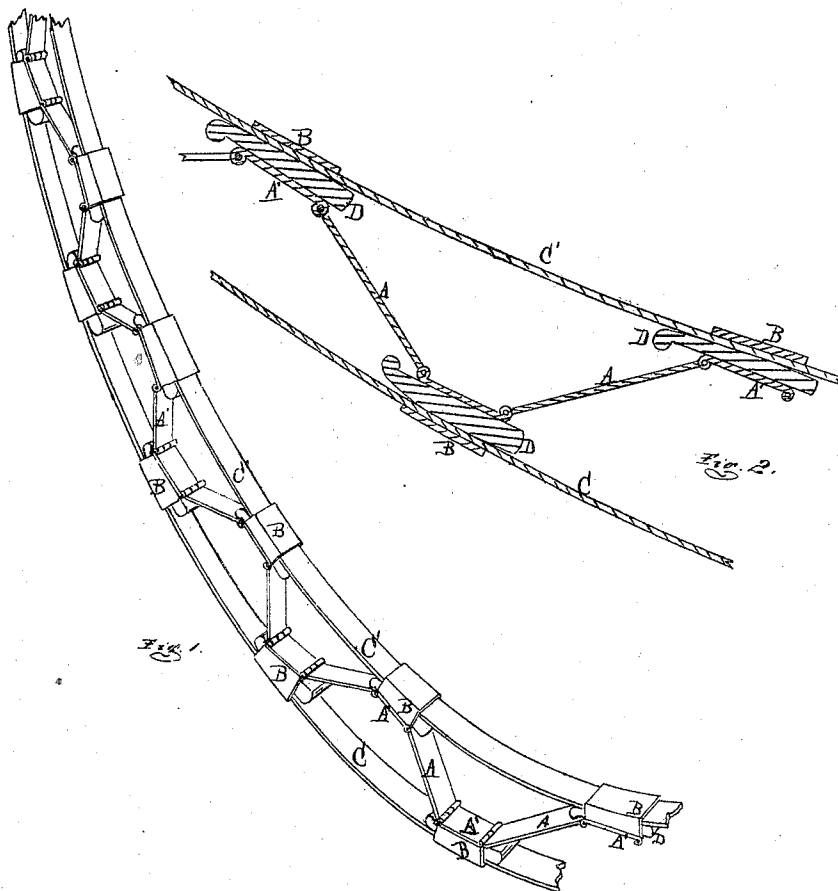


A. PERRIN.

Adjustable Templates for Ship's Frames.

No. 140,071.

Patented June 17, 1873.



ATTEST:

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INVENTOR:

Abram Perrin
By Atty--
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

ABRAM PERRIN, OF MARINE CITY, MICHIGAN.

IMPROVEMENT IN ADJUSTABLE TEMPLETS FOR SHIPS' FRAMES.

Specification forming part of Letters Patent No. **140,071**, dated June 17, 1873; application filed January 21, 1873.

To all whom it may concern:

Be it known that I, ABRAM PERRIN, of Marine City, in the county of St. Clair and State of Michigan, have invented a new and useful Improvement in an Adjustable Templet for Laying Off the Frames of Ships; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a perspective view of my adjustable templet; and Fig. 2 is an enlarged longitudinal section of a portion thereof.

This invention has for its object to provide the ship-builder with a templet which can be adjusted to the width, taper, and curvature of any ship's rib drawn on the molding-floor; which can then be transferred to the timber from which the rib or frame is to be made, thereby saving the expense of the wooden templets usually employed for that purpose. The invention consists in the peculiar construction of the device, which is composed of a bar-link chain, every second link of which carries a metallic loop disposed on alternate sides, through which loops are passed two strips of sheet metal, which are secured in any desired form by wedges or keys driven into the loops behind them, the whole being arranged as more fully hereinafter set forth.

In the drawing, A represents flat plates of sheet metal, which are connected by shorter plates A', hinged to the ends of each pair of link-plates A to form a chain. To each link A' is secured a tapered loop, B, projecting from the chain on alternate sides. C C' are two light strips or ribbons, preferably of steel, passed through the two series of loops B, the former making the face or convex edge of the templet, and the latter the convex edge thereof. In the loops behind the strips C C' a wedge, D, is driven in each, and holds the strips fast in

place. The links A are longest at the lower end of the templet, and from thence to the top are gradually shortened.

When the outline of a rib or frame is drawn in chalk on the floor of the molding-loft, a few pins are driven in on the lines, and the templets, with the keys slackened, laid down inside the pins. Commencing at the lower end of the drawing, he draws out the strips to its outer and inner lines, following their curvatures, and keys the strips fast as each link is drawn up to its adjustment, until the top of the drawing is reached. The adjusted templet is now a segment of a trussed arch or curve, and, although very light, is rigid, and cannot be easily twisted out of form. It is now carried to the yard or mill, and laid on the timber from which the rib is to be cut, and its outline chalked thereon twice, for a pair of ribs of the same size and form are always needed, and, in some parts of the hull, several pairs; after which it is carried back and readjusted to the form of the next rib wanted. This enables the ship-builder to save several hundred dollars, which he would otherwise expend for wooden templets to be used as patterns for the frames of each hull he builds.

If preferred, the keys or wedges may be replaced by set-screws for fastening the strips to the loops; but the wedges are preferable on account of the greater stiffness they give the structure.

What I claim as my invention, and desire to secure by Letters Patent, is—

The adjustable templet for ships' frames, composed of the links A A', loops B, flexible strips C C', and wedges D, substantially as shown and set forth.

ABRAM PERRIN.

Witnesses:

H. S. SPRAGUE,
H. F. EBERTS.