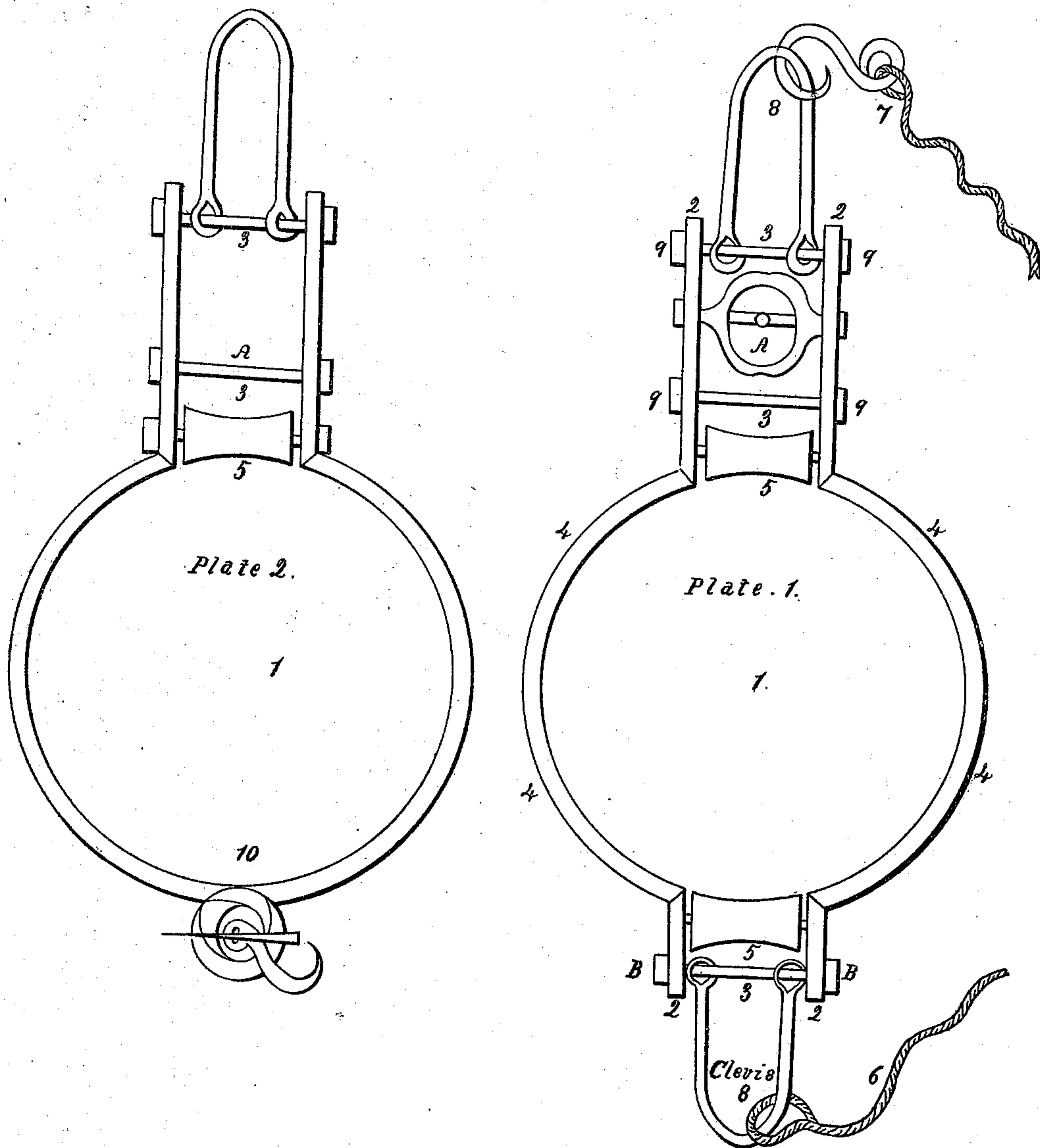


E. Foster.

Ship's Mast Hoops.

N^o 12, 506.

Patented Mar 13, 1855



Witnesses.

William D. Danforth,
Ephraim H. White.

Inventor.

Elmer Foster.

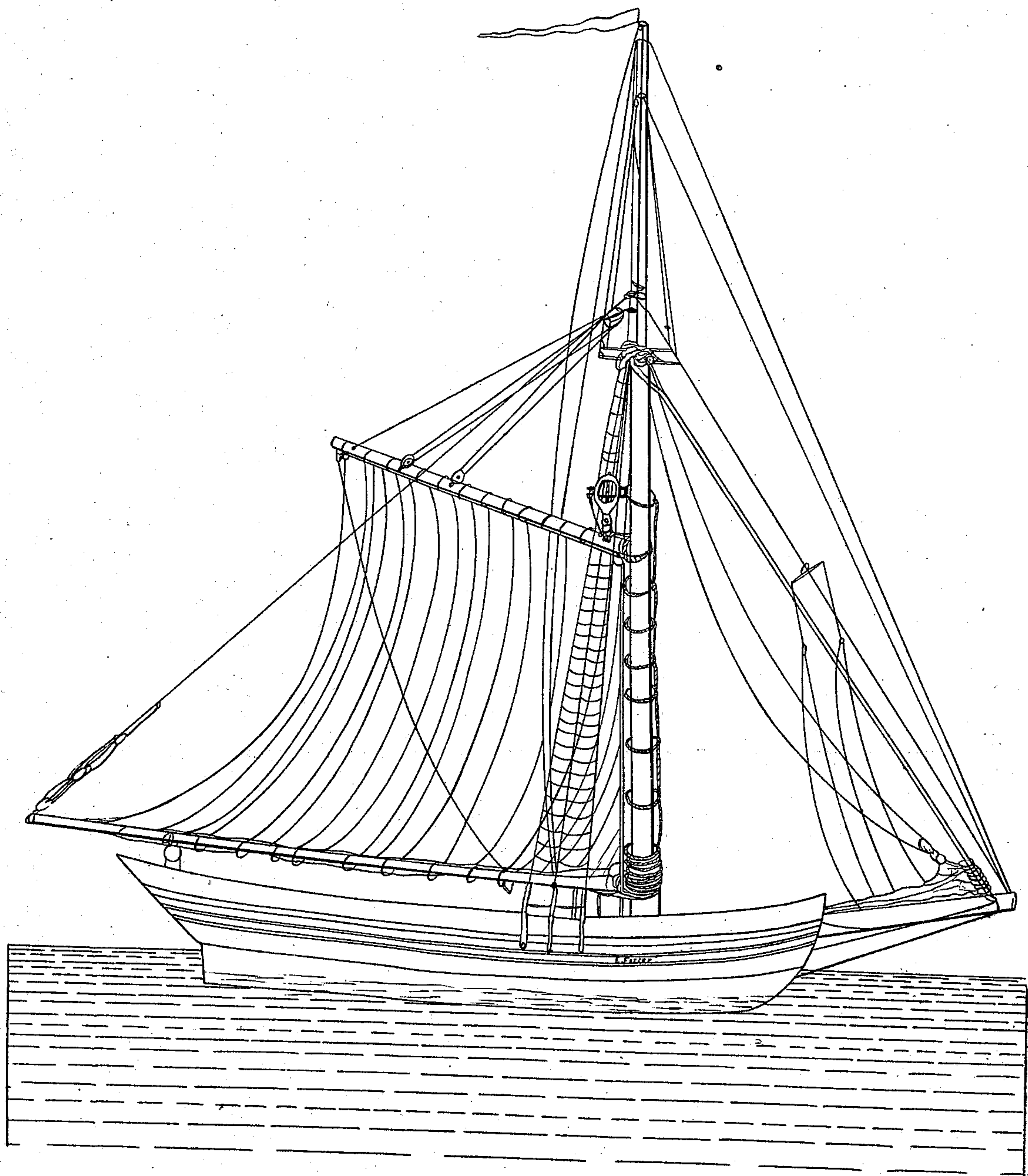
Sheet 2. 2 Sheets.

E. Foster.

Ship's Mast Hoops.

Nº 12,506.

Patented Mar. 13, 1855.



Witnesses.

William D. Davis
Ephraim F. Whelan

Inventor.

Olmer Foster

UNITED STATES PATENT OFFICE.

ELMER FOSTER, OF FAIRTON, NEW JERSEY.

HOOP-JACK FOR SAILING VESSELS.

Specification of Letters Patent No. 12,506, dated March 13, 1855.

To all whom it may concern:

Be it known that I, ELMER FOSTER, of Fairton, in the county of Cumberland and State of New Jersey, have invented a new and useful Improvement in Rigging for Hoisting and Preventing the Hoops from Binding on the Forward Part of the Mast, called "Hoop-Jack;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is the circular space for the mast; Fig. 2, the openings of the arms or jack when it is put on or taken off the mast; letter A, the space for the lower throat halyard block, in which it is clamped by means of screw bolts and burs on each side, and bedded in the edges or sides, as circumstances require, enough below the pivot on which the sheaves run, to let the halyards operate freely, being clamped, firmly to the block, by screwing the bolts, passing hard to each side of the block. Fig. 3 is the forward arms of the band or jack, closed by a screw bolt. Fig. 4 includes the arms and circle of the jack made of iron similar to the hoops, being rounded inside the longer arms being bedded in the edges or sides of the throat halyard block. Fig. 5 the rollers forward and aft of the mast to prevent the jack from binding and to play or run on the mast, to be made of hard wood or other material, the pivots or axles in which the rollers turn are shouldered on the inside, to prevent the arms of the jack closing at the mast or burring the screws. Fig. 6 is the line to which the hoops are to be seized, as they are in length on the mast rope of the sail, that the forward part of the hoops may be lifted or hoisted with the after part, horizontally, and at the same moment; this hoop line, or part of the hoop jack, is connected with the band by a clevis hung on the forward bolt

to which it is properly rigged. Fig. 7 is the brace line and hook connected to the after screw bolt, the same as Fig. 6, this brace line prevents the halyards from binding against the edges of the block or shell, by keeping the block perpendicular, while being hoisted. The hook of the brace line, is passed into the same eye on the gaff that the throat halyard is hooked into, thereby, putting the weight of hoisting the hoops, on the brace line or partly so. Fig. 8 is the clevis, to put the weight near the end of the bolts, to prevent them from bending. Fig. 9 the screw bolts, to clamp the band together and the arms on the block. Fig. 10 plate 2 is a bolt hinge and clevis pin, connecting the forward part of the hoop as in hoop line of Fig. 6, to which the hoops are seized which may be substituted in place of the clevis and roller attached to Fig. 6. Fig. 11 shows the hoop line as connected to the hoops on the mast by being seized to the hoops in equal distance on the hoop line as the hoops are seized to the sail so rigged with hoops. This hoop line may be fastened to the hoops in different ways, the one in the drawing is suggested to be knotted at the proper length apart for the hoops as on the sail, with two single round knots at the place of seizing to the hoop, that the bending twine may not slip up or down on the hoop line.

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

The arrangement of the hoop jack with the lower halyard block, the brace line, clevis and gaff-hook, clevis and hoop line extending down to the foot of the mast and connected to each sail hoop, as herein set forth.

ELMER FOSTER.

Witnesses:

WILLIAM D. BARRETT,
EPHRAIM H. WHITICAR.