

D. R. Proctor, Mast Hoops.

N^o 37,872.

Patented Mar. 10, 1863.

Fig. 2.

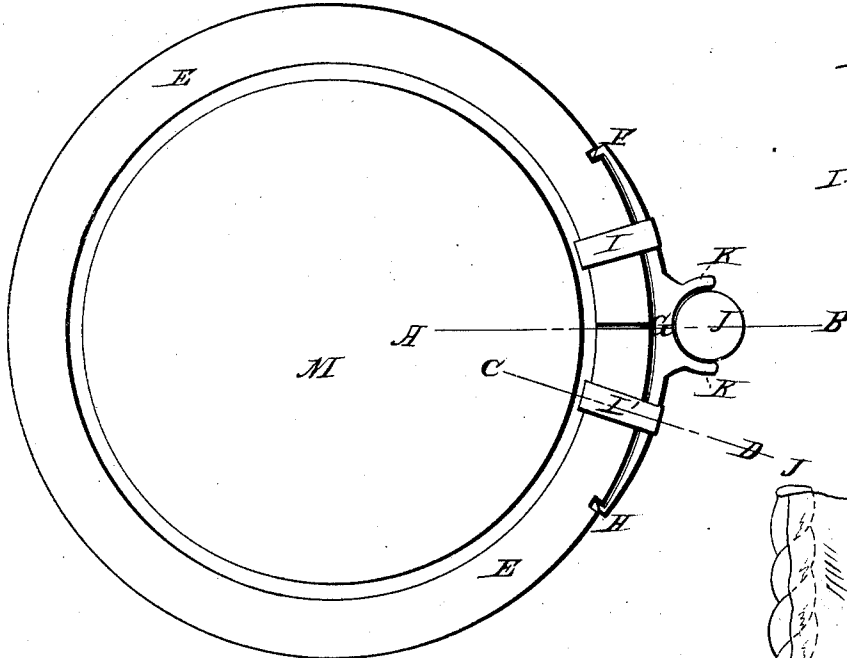


Fig. 4.

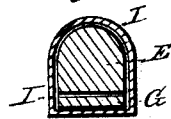


Fig. 1.

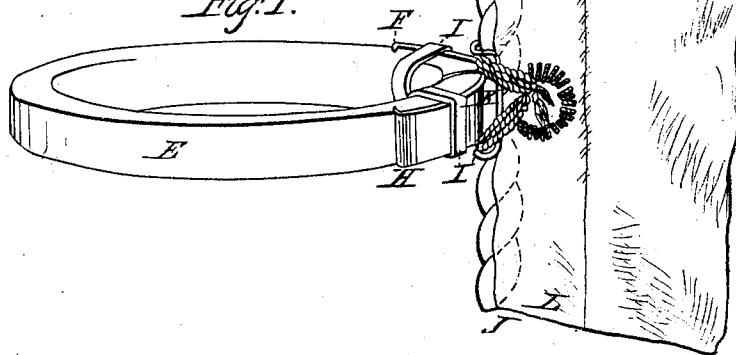
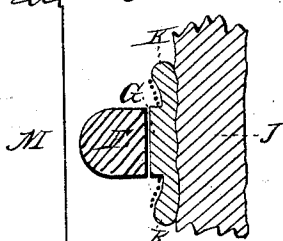


Fig. 3.



Witnesses.

A. P. P. P.
Charles Fitz

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UNITED STATES PATENT OFFICE.

DAVID R. PROCTER, OF GLOUCESTER, MASSACHUSETTS.

IMPROVED MAST-HOOP.

Specification forming part of Letters Patent No. 37,872, dated March 10, 1863.

To all whom it may concern:

Be it known that I, DAVID R. PROCTER, of Gloucester, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Mast-Hoops; and I do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings, and to the letters and figures marked thereon.

Figure I is a perspective view of the hoop, having the leech-rope and portion of the sail attached. Fig. II is a top view of the hoop. Fig. III is a section on the line A B. Fig. IV is a section on the line C D.

The mast-hoops heretofore made are scarfed down, and after being steamed are bent to the form of a ring or hoop and the scarfed ends lapped upon each other and held in place by iron rivets. When the hoop is to be placed upon the mast, the rivets are drawn and the hoop is "sprung" onto the mast. It is then riveted firmly together, forming a simple ring. By my improvement the hoop can be readily put on or taken off the mast. The lashings that hold the hoop to the leech-rope are not liable to be worn, and the leech-rope is so attached that the opposite side of the hoop is slightly elevated, and friction upon the mast while the sail is being hoisted is very much diminished.

The same letters refer to like parts in all of the figures.

The position of the mast is shown at M, encircled by the hoop E, the ends of which abut against each other. They are held in place by the iron clamp F G H, made in the form of a double wedge, about six or eight inches in length, and of the same width as the hoop. The ends F and H of the clamp are turned inward at right angles a short distance and enter a saw-cut or recess made on the outside of the hoop. From these ends the iron clamp increases in thickness toward the middle G, and upon the two arms F G and H G are placed the rings or bands I I'. These rings

are slipped upon the hook, the clamp is then put in place, and the rings driven toward the center. As the clamp is wedge-shaped, the rings bring it firmly in contact with the hoop and retain the bent ends F and H in the recesses cut in the hoop, which is thus prevented from opening or spreading.

I will now describe that part of the clamp which receives the leech-rope.

At the center of the clamp, and forming one piece with it, a semicircular holder, K, is placed. It is about three inches in length and is at right angles with the clamp. The leech-rope J is placed within it and secured by suitable lashings. This gives support to the sail L. As the lashings are passed around the part K, and not around the hoop itself, (which is the common practice,) they are much more durable, as they are not exposed to friction. It will also be observed that when the sail is being hoisted, and the leech rope is drawn taut, the upper part of the projection K is drawn toward the sail L, while the lower part is carried from it. This elevates the opposite side of the hoop and brings it more nearly to a horizontal position, thus reducing the friction upon the mast, and consequently the power required to hoist the sail.

My improvement also applies to the "hanks" or smaller-sized hoops that traverse upon stays or ropes.

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

1. A mast-hoop having the ends that abut against each other closed and held firmly together by the wedge-shaped brace or tie, secured to the hoop by the two iron rings or bands I I'.

2. In combination with the above, the attached concave piece K, that holds the leech-rope and prevents the friction of the opposite side of the hoop upon the mast.

DAVID R. PROCTER. [L. s.]

In presence of—

A. PRESSON,
CHARLES FITZ.