No. 855,246. PATENTED MAY 28, 1907.

P. J. HANSEN.

MAST HOOP.

APPLICATION FILED AUG. 10, 1906.

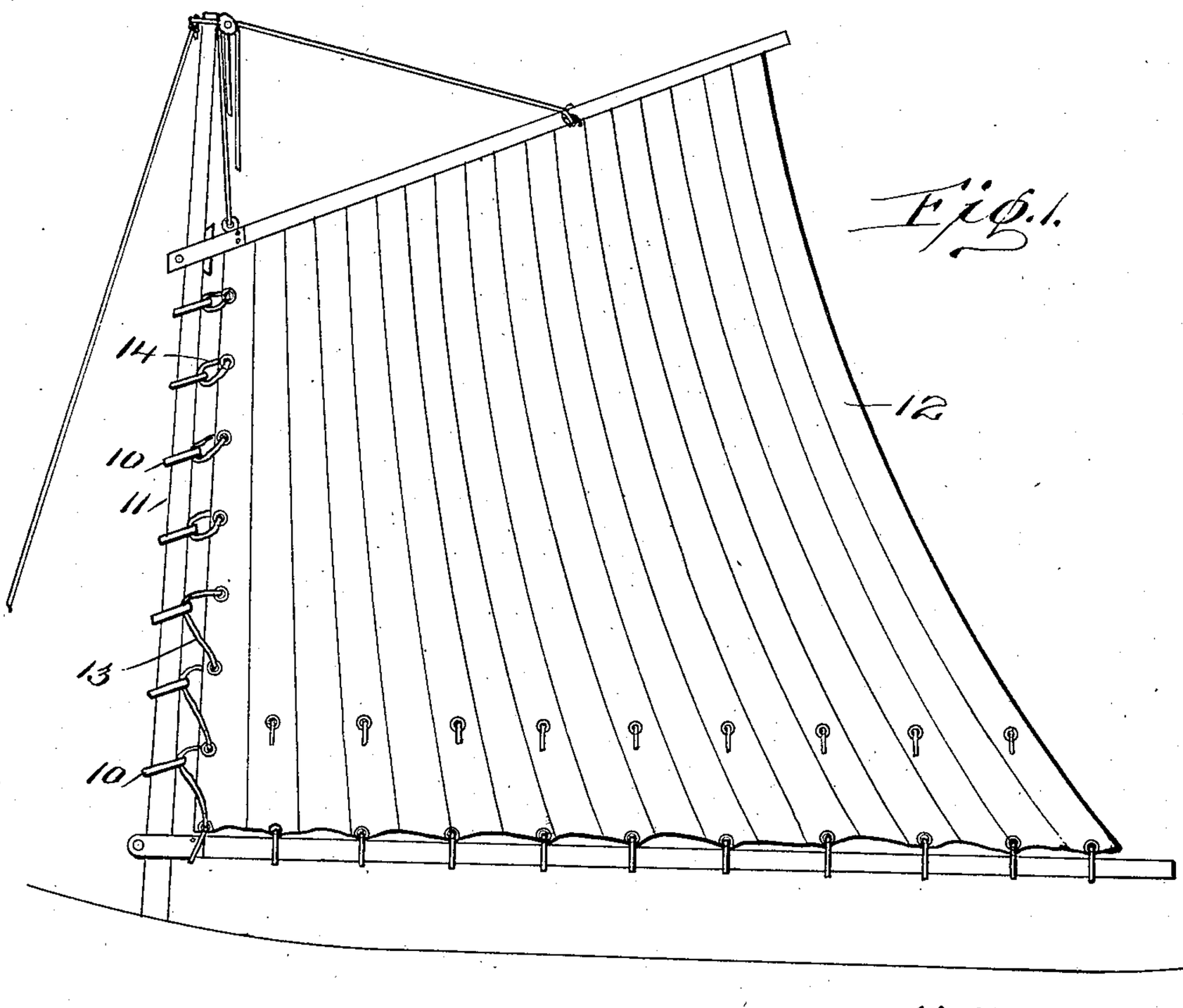


Fig. 1.

Fig. 2

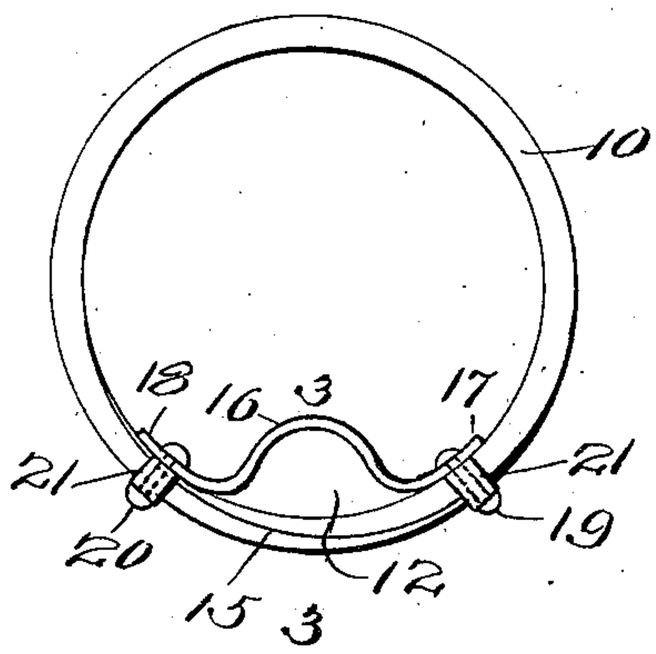


Fig. 4.

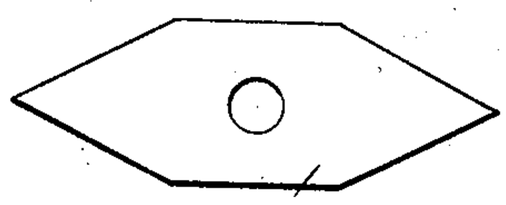
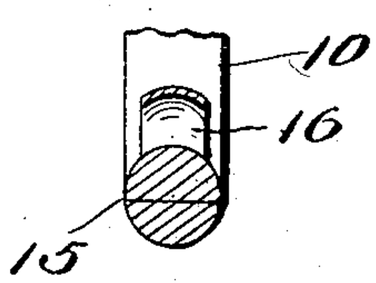


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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MAST-HOOP.

No. 855,246. Specification of Letters Patent. Patented May 28, 1907.

Application filed August 10, 1906. Serial No. 330,064.

To all whom it may concern:

Be it known that I, PETER J. HANSEN, a citizen of United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Mast-Hoops; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to means for attaching a sail to the mast of a water craft and has for an object to provide improved means so arranged that undue friction is not exerted upon the mast to abrade the surface.

A further object of the invention is to provide means applicable to the usual and ordinary wooden hoops which encircle a mast and to which the sails are bent, which said means prevent the contact of the bolts or other means for securing the ends of the hoop with the mast.

A further object of the invention is to provide an improved hoop for encircling the mast and embodying the means for engagement by the cordage or lacing means whereby said cordage or lacing is not abraded by the bolts joining the ends of the hoops.

With these and other objects in view, the invention comprises certain novel constructions, combinations, and arrangement of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a view in elevation of a conventional sail and mast with the improved hoop associated therewith. Fig. 2 is a view in top plan of the improved hoop forming the subject matter of this invention. Fig. 3 is a transverse sectional view through the hoop and guard taken on line 3—3 of Fig. 2. Fig. 4 is a view in plan of the washer associated with the improved device and adapted to bind the extremities of the wooden hoop.

Like characters of reference designate corresponding parts throughout the several views.

The invention forming the subject matter of this application, is applicable to the usual and ordinary hoop represented at 10, which encircles the mast as 11 of any usual and ordinary water craft and to which the sail as 12, is bent by the usual means as the lacing 13 adjacent the bottom of the sail, or the loops 14 adjacent the top.

The hoop 10 is constructed in substantially the usual manner having its ends tapered and overlapped, as indicated at 15. Within the hoop is disposed a curved or bulged member 16 having its opposite ends as 17 and 18 curved to conform to the arc of the hoop and secured within the hoop by means of the bolts or rivets 19 and 20, by which the overlapped ends of the hoop proper are secured together. The bolts 19 and 20 are also provided with washers 21 formed as shown in Fig. 4 and embracing the rivets before they are inserted through the hoop and headed, and after being so headed have their ends bent over the thin tapered ends of the hoop to prevent the tapered ends from splitting and springing away from the adjacent hoop.

The member 16 is curved inwardly and so proportioned that it will contact with the surface of the mast and hold the surface of the mast out of contact with the heads of the bolts 19 and 20, and thus prevent the said bolt heads from abrading or otherwise marring the surface of the mast.

The curved member 16 is formed convex upon its surface adjacent the mast as shown particularly in Fig. 3 and whereby a smooth surface is presented to the surface of the mast even when the hoop hangs at an angle relative to the mast, as is customary, and as is shown in Fig. 1. The curved member 16 also defines a space as 22 between the said curved member and the hoop proper wherein is secured the lacing or cordage by which the sail is bent to the mast.

In use the engagement of the lacing or cordage within the space 22 prevents the hoop 10 from turning upon the mast to any considerable extent except with and under action of the sail, so that the hoop contacts with the mast during the greater part of the time at the side opposite the joined ends and the wear occasioned between the hoop and the mast is at that side and away from the bolts or rivets joining the ends of the hoops. The curved member 16, however, holds the hoop in such position relative to the mast that if the hoop turns upon the mast, it is yet held from contact with the bolt by reason of the curved member being of such inwardly disposed curvature that the mast will not engage the inner ends of the bolts.

As the cordage by which the sail is bent to the mast is disposed within the opening from between the curved member 16 and the hoop,

it is retained within said space and will not slide about the hoop and into contact with the bolt or rivets and be by such bolts or rivets abraded to cause breakage.

What I claim is:

1. In a device of the class described, a hoop having over lapped tapered ends, and a curved member disposed within the hoop and having its curvature disposed reversely to the curvature of the hoop, and its opposite ends secured to the hoop adjacent the extremities of the overlapped tapered ends.

2. In a device of the class described, a hoop comprising tapered overlapped ends, a curved member within the hoop disposed with its opposite ends adjacent the tapered ends and means rigidly securing the curved member to the hoop and the ends of the hoop rigidly together.

3. In a device of the class described, a hoop comprising tapered overlapped ends, a member disposed within the hoop, and curved reversely thereto, and with its opposite ends adjacent the ends of the tapered portions, and means rigidly securing the opposite ends of the curved member to the hoop and the ends of the hoop rigidly together.

In testimony whereof I affix my signature in presence of two witnesses.

PETER J. HANSEN.

Witnesses:
G. WARD KEMP,
CLYDE D. POTTER.