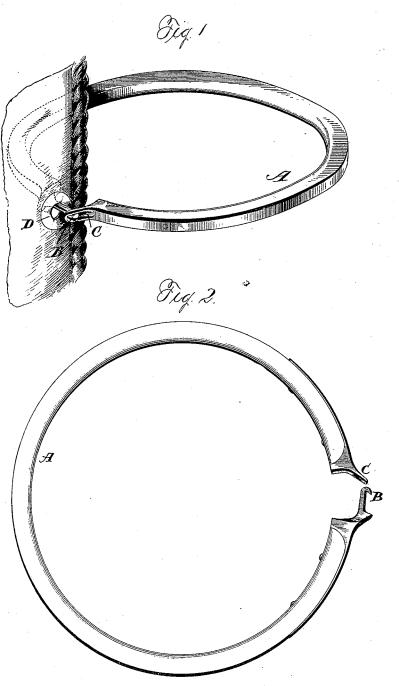
(No Model.)

H. T. HUTCHINGS. MAST HOOP.

No. 419,448.

Patented Jan. 14, 1890.



Witnesses/ Chas Williamson. Um 19. Scott.

Henry I. Hatchings. per Chat H. Faules. Heroney.

UNITED STATES PATENT OFFICE.

HENRY T. HUTCHINGS, OF BOSTON, MASSACHUSETTS.

MAST-HOOP.

SPECIFICATION forming part of Letters Patent No. 419,448, dated January 14, 1890.

Application filed August 21, 1889. Serial No. 321,462. (No model.)

To all whom it may concern:

Be it known that I, HENRY T. HUTCHINGS, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Mast-Hoops; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of mast-hoops provided with means for the ready attachment of the sail thereto or removal therefrom; and the object thereof is to improve such hoops in their general construction, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 illustrates a perspective view of a mast-hoop constructed in accordance with my invention with a portion of a sail connected thereto, and Fig. 2 a plan view of the hoop with the fastening device made separate and afterward connected to the ends thereof.

In describing the construction of my invention, A designates the mast-hoop, which may be formed of wood or metal possessing the necessary elasticity, or a material of such resolution as to permit of the ready springing of the hoop over the mast, spar, or stay.

In Fig. 1 I have shown the hoop as having its ends forged or otherwise formed with the fastening device, constituting in the present instance a catch or hook B and a recess or eye C, which serves as a keeper for the catch or hook. It is not essential that such fastening device be made integral with the ends of the hoop, as in some cases it may be preferable to construct them separate and afterward rivet or securely fasten them in any well-known manner to the ends of the hoop, which construction I have shown in Fig. 2, and when thus made separately gun-metal or phosphor-bronze is preferably used, so as not to be affected by the salt air.

In practice the ends of the hoop are disengaged from their fastenings, which will admit of said hoop being sprung over the mast, of after which the ends are made to engage each

other, as shown in Fig. 1, the resilient tendency of the hoop, resulting from the material of which it is constructed, keeping the hoop closed. The sail is united to the hoop, as shown, the eye or ring D of the sail being 55 engaged by the hook or catch of the fastening device and fitting in the space between the extremities or ends of the hoop, thus bringing the sail closer to the mast, and the straining of the sail having a tendency by 60 pressure outward upon the catch or hook to hold the ends of the hoop securely in engagement with each other.

As will be understood from the foregoing description, the hoop, as constructed in ac- 65 cordance with my invention, has no hinged sections, it being formed from a single piece of material without any hinged joints, and provides a hoop in which the seizing of the sails thereto is dispensed with, the sails be- 70 ing bent or unbent in a comparatively short time. The hoop has a further advantage over the old form of hoop, in that it can be placed on the mast without interfering with the rigging and readily removed during the winter. 75 In case of yachts a new sail can be substituted during a race in case of accident, or if a different-sized sail by reason of wind or storm needs to be substituted. These several advantages together provide a mast-hoop pos- 80 sessing all the requirements necessary without any material increase in the cost of manufacture, while it is both strong, durable, and also practical, the sail when furled lying snug to the mast and when hoisted very close 85

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A mast-hoop formed of a ring of spring 90 material and provided at its ends with a fast-ening device, the shank of the hook of which traverses the space between the ends of the ring and forms a means of attaching the sail, substantially as described.

2. A mast-hoop consisting of a ring of spring material, a hook or catch formed separate and afterward attached to one end of the ring, and a keeper for the hook, also formed separate and attached to the opposite end of the 100

ring, substantially as and for the purpose

specified.

3. An improved mast-hoop constructed of springy material, which is capable of being 5 sprung over a mast, spar, or the like and locked by a fastening device at its ends of non-corroding metal, said fastening device having a hook whose shank forms a bearing for the eye of the sail to hold it in the recess to between the ends or extremities of the hoop,

thereby bringing the sail close to the mast or spar, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence 15

of two witnesses.

HENRY T. HUTCHINGS.

Witnesses:

Francis S. Hesseltine, J. Albert Brackett.