

18 1897

985,871.

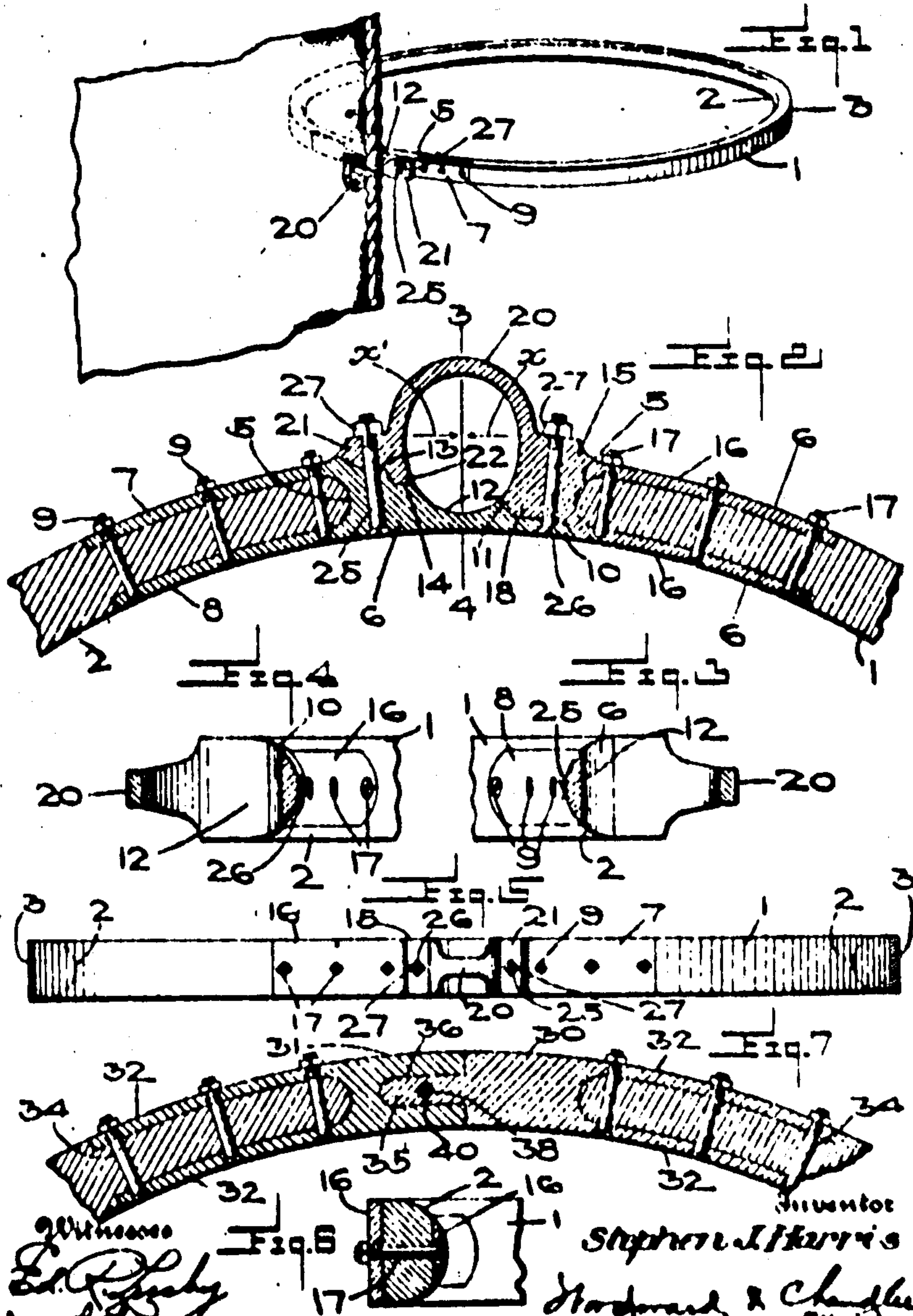
985,871.

B. J. HARRIS.

MAST HOOP.

APPLICATION FILED OCT. 9, 1909.

Patented Feb. 28, 1911.



Witness
Ed. J. Gandy
M. E. Low

Inventor
Stephen J. Harris

Howard & Chandler
Attorneys

985,671. MAST-HOOP. STEPHEN J. HARRIS, Honolulu, Hawaii. Filed Oct. 6, 1909. Serial No. 521,203.

To all whom it may concern:

Be it known that I, STEPHEN J. HARRIS, a citizen of the United States, residing at Honolulu, in the county of Honolulu and Territory of Hawaii, have invented certain new and useful Improvements in Mast-Hoops, of which the following is a specification.

This invention relates to certain new and useful improvements in mast hoops.

The primary object of my invention is to provide an open seam mast hoop, constructed so that the same may be forced apart and forced upon a mast and be securely held thereto.

Another object is to provide a mast hoop with a readily operated means for attaching a sail thereto.

With these and other objects in view, the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described and particularly pointed out in the appended claims, it being understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a part of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 shows a perspective view of a mast hoop constructed according to my invention secured to a fragmentary portion of a sail. Fig. 2 shows an enlarged fragmentary portion of the hoop disclosing the securing means in section. Fig. 3 is a section on the line 3—4 of Fig. 2 in the direction of the arrow α . Fig. 4 is a section on line 3—4 of Fig. 2 in the direction of the arrow α' . Fig. 5 is an edge view of the mast hoop. Fig. 6 is a section on line 6—6 of Fig. 2. Fig. 7 is a sectional view of a modified form of the device.

In the use of mast hoops, it is highly desirable that the same should be free of hinges, but still be so constructed that the same may be readily sprung upon the mast without interfering with the rigging. In my present invention I construct a mast hoop which may be attached or removed while the sail is in use and which lies snug to the mast and prevents any undue chafing of the mast.

In the accompanying drawings, the numeral 1 designates a mast hoop of suitable size and made of wood in the form of an open seam resilient annulus having the inner rounded edge 2, and the comparatively flat outer edge 3, as disclosed in Fig. 6. The ends of this hoop are rounded as is shown at 5 and are arranged to receive the ends of a metallic coupling so arranged

that the hoop may be readily attached to or removed from a mast. One of the coupling members comprises the body portion 6 which has the two similar arcuate sleeve straps 7 and 8 held in parallel spaced relation, each having suitable bolt apertures to receive the securing bolts 9 by means of which this coupling member is secured to the end of the mast ring 1. This coupling member has the extending loop 10 from which extends the rib 11, from which is continued the fragmentary bolt rope seat 12, the coupling ending in the shoulder 13 within which is centrally positioned a notch 14, as clearly disclosed in Fig. 2. To the opposite end of the hoop I secure the remaining coupling member comprising the head 15 from which extend the two similar arcuate sleeve straps 16 held in parallel spaced relation and provided with suitable bolt apertures arranged to receive the bolts 17 by means of which this coupling member is secured to the end of the mast hoop. This coupling member is provided with the recess 18 arranged to receive the rib 11 the lower inner portion of the head being recessed to receive the extending lip 10 of the opposite coupling member, as is clearly disclosed in Fig. 2. This head is continued in an outstanding curved bolt rope keeper 20 carrying at its end the bolt ear 21 arranged for coaction with the shoulder 13. This bolt ear 21 is provided with the lug 22 arranged to seat within the notch 14. As is disclosed, this head 15, the bolt rope keeper 20, the bolt ear 21 and the body portion 6 form an oblong bolt rope seat.

The body portion 6, as well as the ear 21 are provided with a registering bolt aperture arranged to receive the securing bolt 25. The extending lip 10 as well as the head 15 are also provided with a bolt aperture or opening arranged to receive the oppositely positioned securing bolt 26. These bolts 25 and 26 are held to the coupling members by means of the nuts 27.

The operation of attaching or detaching a mast hoop constructed according to my invention is very simple. The nuts 27 are removed so that the securing bolts 25 and 26 may be withdrawn. The coupling members are then carried apart so that the hoop may be sprung upon the mast which is possible owing to the resilience of the hoop 1. The coupling members are then carried toward one another so that the lug 22 and the rib 11 will find a seating after which the bolts 25 and 26 are properly secured. It is of course understood that the sail is provided with a suitable gromet slot to receive the bolt ear 21 and the bolt-rope keeper 20 so that the mast hoop may be properly held to the bolt rope and sail.

In Fig. 7 I disclose a modification of an

open seam annulus, the two ends of which are provided with the coupling members 30 and 31 each having the arcuate sleeve straps 32 held in parallel spaced relation and between which the ends of the mast hoop are secured by means of the bolts 34, as shown. The coupling member 30 is provided with the extending tenon 35 having a pin aperture arranged to work into a mortise or seat 36 within the opposite member 31, this seat member being provided with a transverse pin opening 38 within which is held the cotter pin 40 so that the ends of this open seam mast ring are securely connected. This attachment may be effected in any suitable workmanlike manner whether the hoop be provided with the bolt-rope seat or be in the form of the modification referred to.

The mast hoop is simple and inexpensive in construction, and durable and efficient in operation, and the adjustments in attaching or detaching the mast hoop can be made with ease, accuracy and despatch.

And having thus described my said invention, what I claim as new and desire to secure by United States Letters Patent is:

1. An open seam mast hoop having in combination, a coupling member comprising two arcuate sleeve straps held in parallel spaced relation and having registering bolt openings, bolts within said openings to secure said coupling to one end of said hoop, said coupling having an extending lip near its end, a fragmentary portion of a bolt rope seat and a lug socket and shoulder seat, a second coupling member having two arcuate sleeve straps held in parallel spaced relation provided with bolt apertures, bolts to secure said last mentioned coupling to the remaining end of said mast hoop, said second coupling having a head provided with a recess to receive said lip, said head continuing in an outstanding curved bolt-rope keeper carrying a bolt ear having a lug arranged for coaction with said shoulder seat, and lug socket, said head, bolt-rope keeper, and bolt ear together with said first mentioned coupling member forming a bolt rope seat, said extending lip and head having registering bolt openings, a bolt within said openings, said coupling and said bolt ear having registering bolt openings, and a securing bolt within said last mentioned opening.

2. A mast hoop consisting of an open ring the end portions of said ring being provided with members adapted to interlock, one of said members being adapted to form a split ring, the other member being adapted to close the opening in said ring, each of said members carrying projections adapted to enter recesses formed in the other member, said members being connected by a plurality of bolts.

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

STEPHEN J. HARRIS.

Witnesses:

ABRAHAM K. HARRIS,
STEPHEN ROWE.