

E. B. BEACH.

MEANS FOR ATTACHING MAST-HOOPS AND SAILS.

No. 176,504.

Patented April 25, 1876.

Fig: 1.

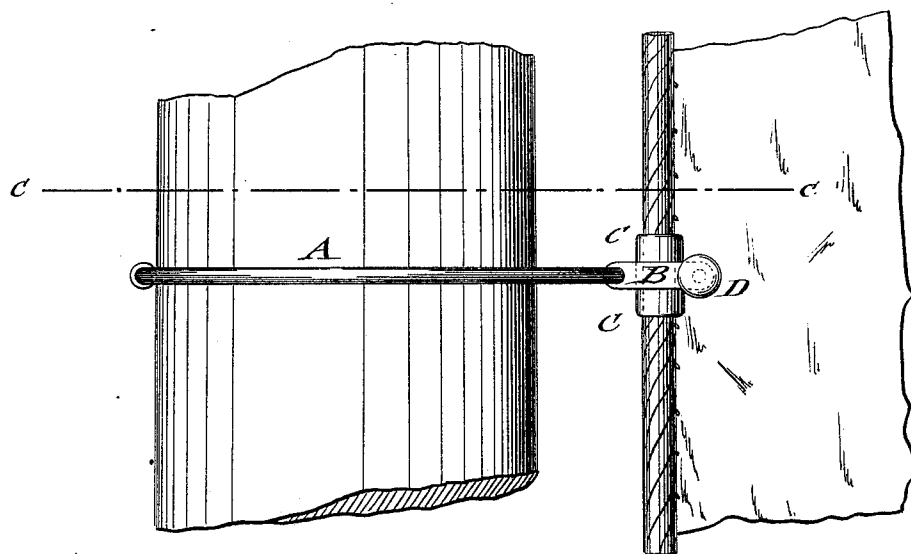
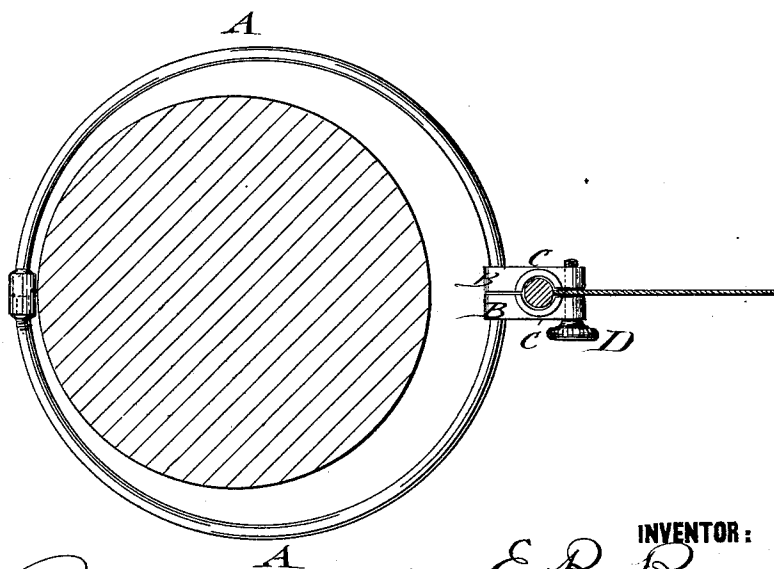


Fig: 2.



WITNESSES:

Chas. N. ...
A. F. Terry

INVENTOR:

E. B. Beach
BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDGAR B. BEACH, OF WEST MERIDEN, CONNECTICUT, ASSIGNOR TO HIMSELF
AND H. B. BEACH, OF SAME PLACE.

IMPROVEMENT IN MEANS OF ATTACHING MAST-HOOPS AND SAILS.

Specification forming part of Letters Patent No. **176,504**, dated April 25, 1876; application filed
March 20, 1875.

To all whom it may concern:

Be it known that I, EDGAR B. BEACH, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new and Improved Combined Mast-Hoop and Sail-Clamp, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view of my improved mast-hoop and sail-clamp combined, shown as applied to a mast and sail, and Fig. 2 a horizontal section of the same on the line *c c*, Fig 1.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved device for connecting the mast and sails in such a manner that any of the hoops may be readily taken out without difficulty, and be attached in such a manner to the sails that an intimate connection, without chance of tearing out, is produced, and an easy running of the hoops along the mast obtained.

The invention consists in connecting a sail and mast-hoop by means of a screw and two half-tubes, the latter set out on end extensions of the hoop, as hereinafter described.

In the drawing, A represents a mast-hoop, which is made of suitable strength, according to the application of the same. The hoop A may be made of one piece of spring-wire, so as to be readily applied to the mast by springing it around the same, or of two semi-circular pieces, connected by a swivel-joint, as shown in the drawing, which construction facilitates greatly the application and removal of the hoops. The adjoining ends of the hoops A are provided with extension-

pieces B, having semi-circular shells or sleeves C at right angles to the same and the hoop, the shells fitting, when connected, over the sail-cord, and binding firmly around the same. A lateral clamping screw, D, passes through the pieces C, and through a perforation or eye of the sail, and connects thereby hoop and sail firmly with each other, without the least possibility of tearing out, as the combined binding surfaces of the sleeve and the clamping-screw bear on the sail and cord. The mast-hoops are retained thereby in fixed position at about right angles to the sail, and slide thereby readily along the mast, instead of the jerky movements of the present slanting hoops.

A broken hoop may be quickly taken off and repaired without requiring the lifting out of the whole mast, which forms a very annoying feature of the solid hoops at present in use.

The same construction may be employed for boom-sail clamps, the ring or hoop being in this case made of detachable sections that open by swinging around the clamping screw.

I am aware that hoop-ends have been provided with ferrules, having end concavities and apertured lip to receive a screw with button on it; but

What I claim is—

The half-tubes C C, set out on the end extensions of hoop A, and held together by a screw, D, to connect a mast-hoop and sail, as set forth.

EDGAR B. BEACH.

Witnesses:

GEO. W. SMITH,
ROLAND G. SMITH.