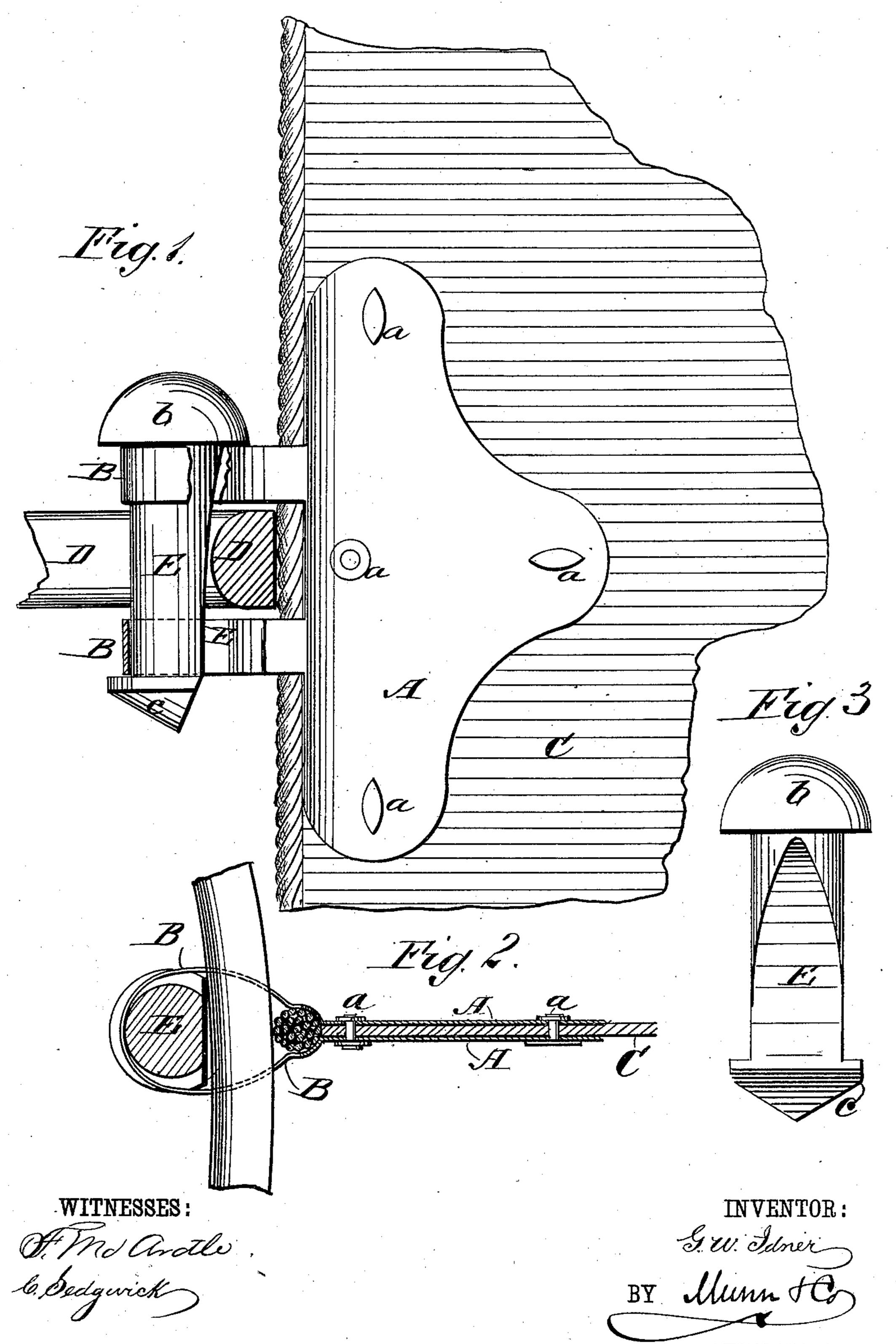
## G. W. IDNER.

SAIL CLAMP.

No. 300,078.

Patented June 10, 1884.



## United States Patent Office.

GEORGE WILLIAM IDNER, OF THOMASVILLE, GEORGIA, ASSIGNOR TO HIM SELF AND ADAM D. RIKE, OF SAME PLACE.

## SAIL-CLAMP.

SPECIFICATION forming part of Letters Patent No. 300,078, dated June 10, 1884.

Application filed March 22, 1884. (Model.)

To all whom it may concern:

Be it known that I, George W. Idner, of Thomasville, Thomas county, Georgia, have invented a new and Improved Sail-Clamp, of which the following is a full, clear, and exact description.

The object of my invention is to provide a clamp for securing sails to the mast-hoops without the use of eyelets or grommets, thereto by avoiding the cutting of the sail, at the same time facilitating the attachment and removal of the sails.

My invention consists of a clip formed of sheet metal, riveted to the sail, and carrying two loops, between which the mast-hoop is received, and in which is inserted a pin for retaining the mast-hoop in a horizontal position to prevent the mast-hoop from sticking or getting fast in hoisting or lowering sail.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improved sail-clamp. Fig. 2 is a sectional plan view, and Fig. 3 is a detail view of the fastening-pin.

A clip formed of two end plates, A, connected by two loops, B, is secured to the edge of the sail C by means of rivets a, or by sewing, or in any other suitable manner, with the edges of the end plates inside the leech-rope. The edges of the clip A next to the leech-rope are bent outwardly slightly to fit closely against the leech-rope, thereby giving a long bearing on the leech-rope and distributing the strain over a large surface. The loops B are separated a sufficient distance to receive between them a mast-hoop, D, which touches the leech-tope, and is retained in place by a pin, E. The

pin E has upon one end a head, b, and upon the other end a conical head, c. A portion of one side of the pin E and the conical head c is cut away, giving the pin a wedge shape. The pin E passes through the loops B and binds 45 the hoop D against the leech-rope, and the conical head c engages the lower loop B and prevents the pin from accidentally escaping from the loops.

My invention is applicable to the sails of all 50 vessels, but is designed more particularly for yachts and light sailing vessels, in which it is often necessary to quickly shift the sails, and with it the sail will set better and lie flat to the wind.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A sail-clamp formed of end plates, A, connecting-loops B at right angles to said plates, and a pin, E, having a head, b, at one end and 60 a conical head, c, projecting beyond the side of the bolt at the other end, whereby when the bolt is inserted in the loops the conical head will prevent its vertical displacement, as specified.

2. The combination of the sail C and mast-hoop D with a sail-clamp formed of end plates, A, and connecting-loops B, and a pin, E, having a conical head, c, and cut away on one side, as described.

3. As an improved article of manufacture, a sail-clamp composed of end plates, A, and loops B, and a pin, E, having a head, b, and a conical head, c, and cut away upon one side, as described.

GEORGE WILLIAM IDNER.

Witnesses:

ISAIAH DEKLE, JAMES A. LINTON, W. P. ORD, Jr.