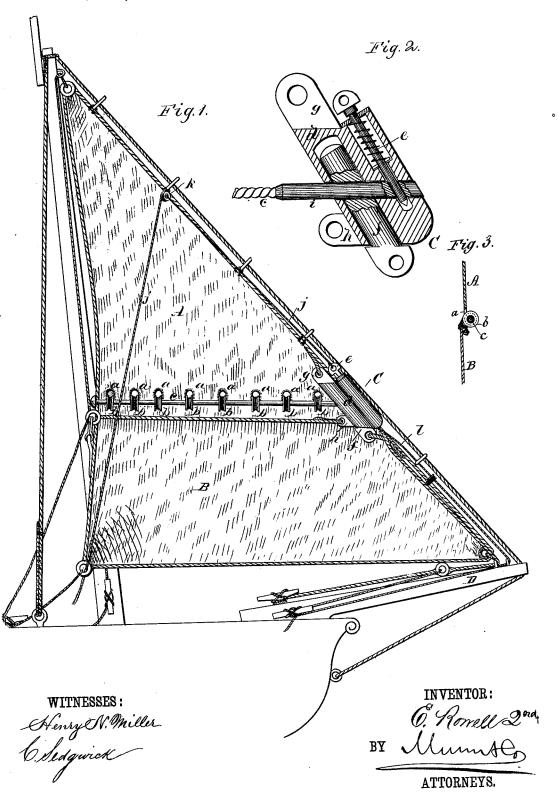
E. ROWELL, 2nd. Device for Reefing Jibs.

No. 200,766.

Patented Feb. 26, 1878.



## UNITED STATES PATENT OFFICE.

EDWARD ROWELL, 2D, OF SALEM, MASSACHUSETTS.

## IMPROVEMENT IN DEVICES FOR REEFING JIBS.

Specification forming part of Letters Patent No. 200,766, dated February 26, 1878; application filed January 15, 1878.

To all whom it may concern:

Be it known that I, EDWARD ROWELL, 2d, of Salem, in the county of Essex and State of Massachusetts, have invented a new and Improved Life-Saving Jib, of which the following is a specification:

Figure 1 is a side elevation of my improved life-saving jib. Fig. 2 is a detail view of the tack-lock. Fig. 3 is a sectional detail view, showing the overlapping connections of jib

and bonnet.

My invention relates to the jibs of schooners, sloops, and other vessels; and it consists in an arrangement of eyelets in the foot of the jib, and bull's-eyes attached to the upper edge of the bonnet, which are fitted to the eyelets in the jib, and are secured by means of a lace-line, which runs through all of the bull's-eyes, and is provided with a metallic end piece, that is fitted to a tack-lock that is connected with the bolt-rope and with the bonnet.

Similar letters of reference indicate corre-

sponding parts.

Referring to the drawing, A is the jib, in the foot of which there are eyelet-holes a, and B is the bonnet, which is provided at its upper edge with bull's-eyes b, which are capable of passing through the eyelets a and of receiving the lace-line c. The tack-lock C consists of a casting, d, which contains a spring-bolt, e, and is bored to receive the bonnet-bolt f, which is attached to the bonnet B. The casing d is provided with ears g h, by which it is secured to the jib.

The casing d and bolt f are apertured diagonally to receive the metallic end piece i of the lace-line c, and the end of the end piece is drilled transversely to receive the end of

the spring-bolt e.

The lace-line may be in one continuous piece, as shown in Fig. 1, or with the end piece i, as shown in Fig. 2.

The spring-bolt e is operated by a rope, j, that passes through a bull's-eye, k, secured to the bolt-rope near the top of the jib. The rope j is secured to the lower corner of the bonnet.

A rope, *l*, is fastened to the upper and outer corner of the bonnet B, and extends through an eyelet in the jib, thence downward, passing through thimbles on the luff of the sail, and through hanks on the stay, through a block or bull's-eye at the outer end of the bowsprit D, and backward to the deck of the vessel.

When the bonnet is to be taken off, slack the halyards, and haul the upper tack taut, haul on the line j, that leads to the spring-bolt e, and while the spring-bolt is up draw the lace-line e out of the bull's-eyes b. The bonnet-bolt f is now released. The hooks on the after leech are unhooked, and the lower tack and luff lace-line are retacked, and the bonnet hauled on board. The halyards are then lowered, and the upper tack hauled down, thus hauling the jib down into place.

The advantages claimed for my improvement are, that it is not necessary to go out on the bowsprit to furl the bonnet, as it clears itself and can be hauled in on board, the bonnet can be taken off the jib without taking the jib down, and it requires little time to op-

erate it.

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

The tack-lock consisting of the casing d, spring-bolt e, bonnet-bolt f, and end piece of lace-line i, in combination, substantially as herein shown and described.

EDWARD ROWELL, 2D.

Witnesses:

JAMES W. AVERILL, SAMUEL W. BOND.