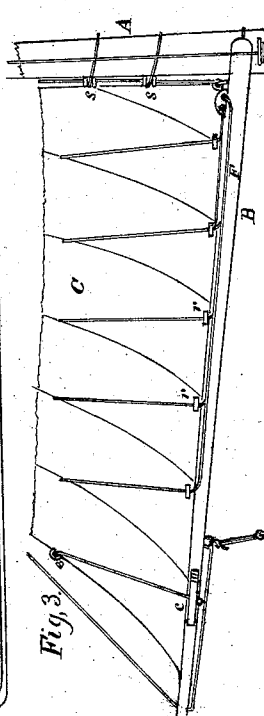
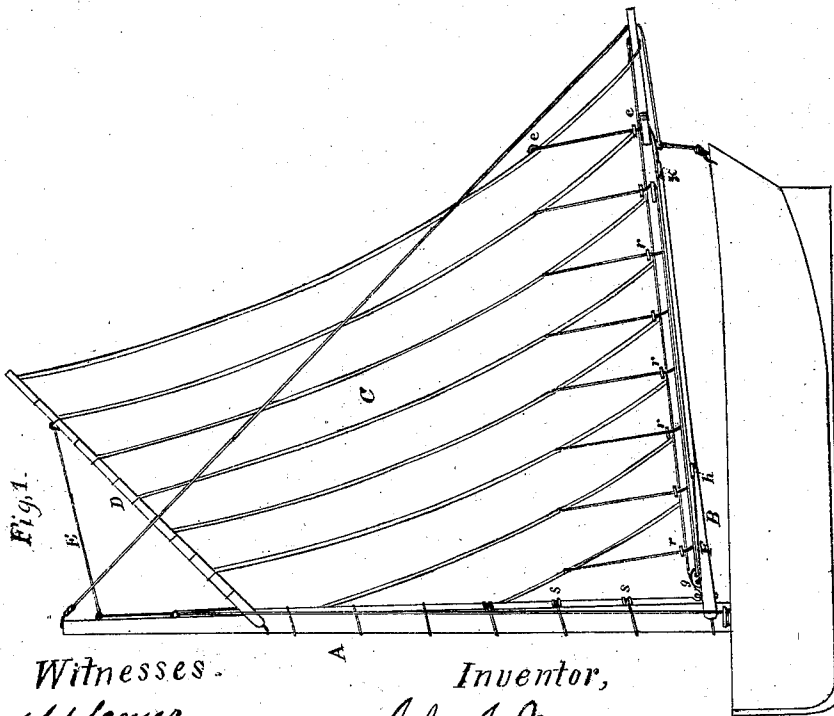
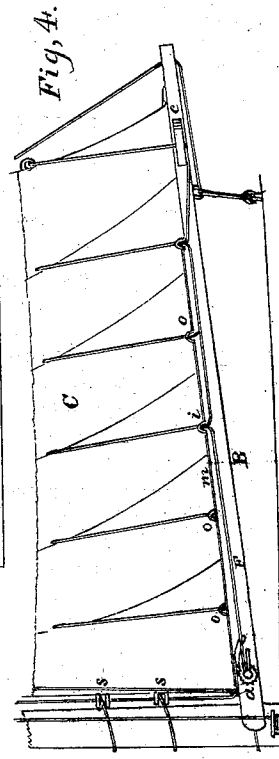
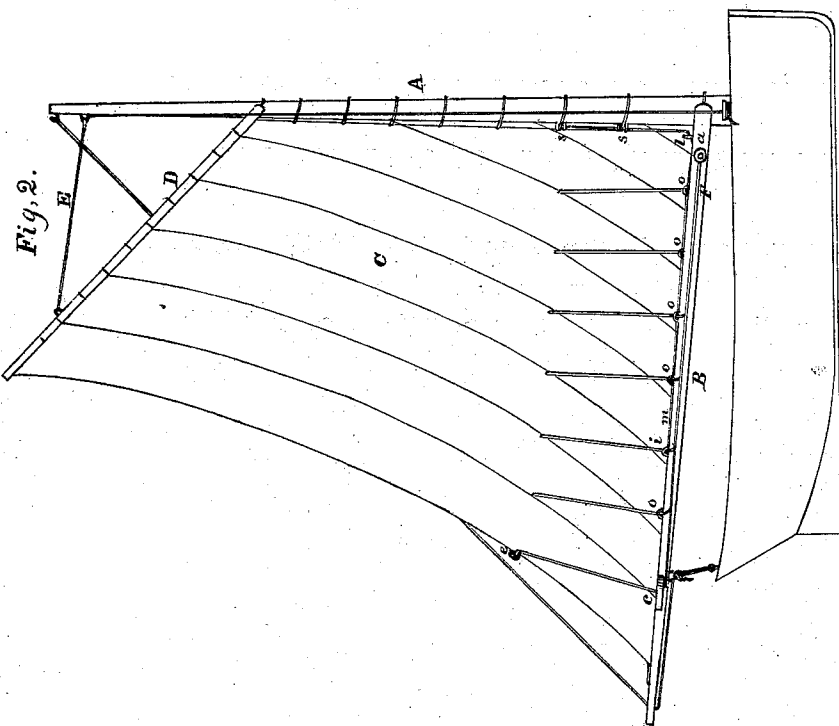


JOHN J. MASON.

Improvement in Modes of Reefing Sails.

No. 115,972.

Patented June 13. 1871.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN J. MASON, OF GIRDLETREE, MARYLAND.

IMPROVEMENT IN MODES OF REEFING SAILS.

Specification forming part of Letters Patent No. 115,972, dated June 13, 1871.

I, JOHN J. MASON, of Girdletree, in the county of Worcester and State of Maryland, have invented certain Improvements in Reefing Sails, of which the following is a specification:

My invention consists in providing the sail with a guy-rope or series of cords extending along the main boom, to which it is adjusted, and the reef-nettles, being attached to the guy-rope and to the sail on both sides thereof, are drawn with it when operated, and thus the sail is contracted so that a single movement of the guy-rope causes a simultaneous drawing of the sail fore and aft on both sides.

In the accompanying drawing, forming part of this specification, Figures 1 and 2 are side views of a sailing-vessel with my improved reefing attachments. Figs. 3 and 4 are detached portions, partially showing the reverse sides of Figs. 1 and 2.

General Description.

In the drawing referred to, letter A represents the mast of a vessel. B designates the main boom extending therefrom along the lower edge of the sail C, loosely attached to the mast in the usual manner by the mast-hoops. D represents the gaff or yard to which the upper edge of the sail is attached, and which is raised or lowered by means of the peak-halyard E. The guy-rope F is attached to a bolt or small crank-shaft, *a*, passing through the main boom near the mast; from thence it passes along the boom toward the outer end to the block *c*; thence, passing up through an aperture in the block to the eyelet *e* on the outer edge of the sail, through the eyelet and a corresponding block on the opposite side of the boom to the bolt or crank-shaft *a*, as shown in Figs. 2 and 4. At a point near the loop on the boom, designated by the letter *i*, at the lower edge of the sail, and on either side thereof, a branch cord, *m*, is attached to the guy-rope, which passes through loop *i*; thence along the boom through the loop *l* near the mast; thence upward on the inner edge of the sail, to which the cord is fastened above. The cords known as reef-nettles being attached to the sail, as appears in the drawing, pass through the loops *o o* to

the main guy-rope, to which they are fastened, excepting the two nearest the mast, which are attached to the cord *m*. The guy-rope is operated by turning the crank-shaft *a*, upon which it is wound, and is thus drawn forward, all its attachments being drawn with it through loops or eyelets, and thus the sail is contracted. The guy-rope may also be constructed and arranged without the crank-shaft *a* by substituting the eyebolt *g*, which has two apertures, and is rigidly attached to the main boom near the mast. The guy-rope, being adjusted by means of the block *c* and eyelet *e*, as shown in Figs. 1 and 3, extends along the boom on both sides to the eyebolt *g*, and, passing through its apertures in opposite directions, the ends are joined to the eyebolt *h*, as seen in Fig. 1. The eyebolt *h* is connected by a small cord to the eyebolt *k* at the opposite end of the guy. Instead of the loops *o o* on the boom the eyelets *r r* may be used, the same being fastened to the edge of the sail, the reef-nettles passing through them to the guy-rope. The eyelets *s s* on the inner edge of the sail serve to allow the free passage of a cord running from the main boom or the guy-rope up the edge of the sail, to which it is fastened above. The guy-rope thus constructed is operated by winding the connecting the eyebolts *h* and *k* upon the knob or button *u* attached to the boom.

Claim.

I do not claim the devices shown in patent of N. W. Rich, reefing sails, April 19, 1870; but

I claim—

The rope F, in combination with main boom, reef-nettles, and eyelets, when arranged and operated by power applied at one point, as described.

In testimony of this my application for Letters Patent for the within-described device for reefing sails I hereunto subscribe my name the day and year first above written.

JOHN J. MASON.

Witnesses:

M. LARNER,
H. DANIELS.