

No. 670,288.

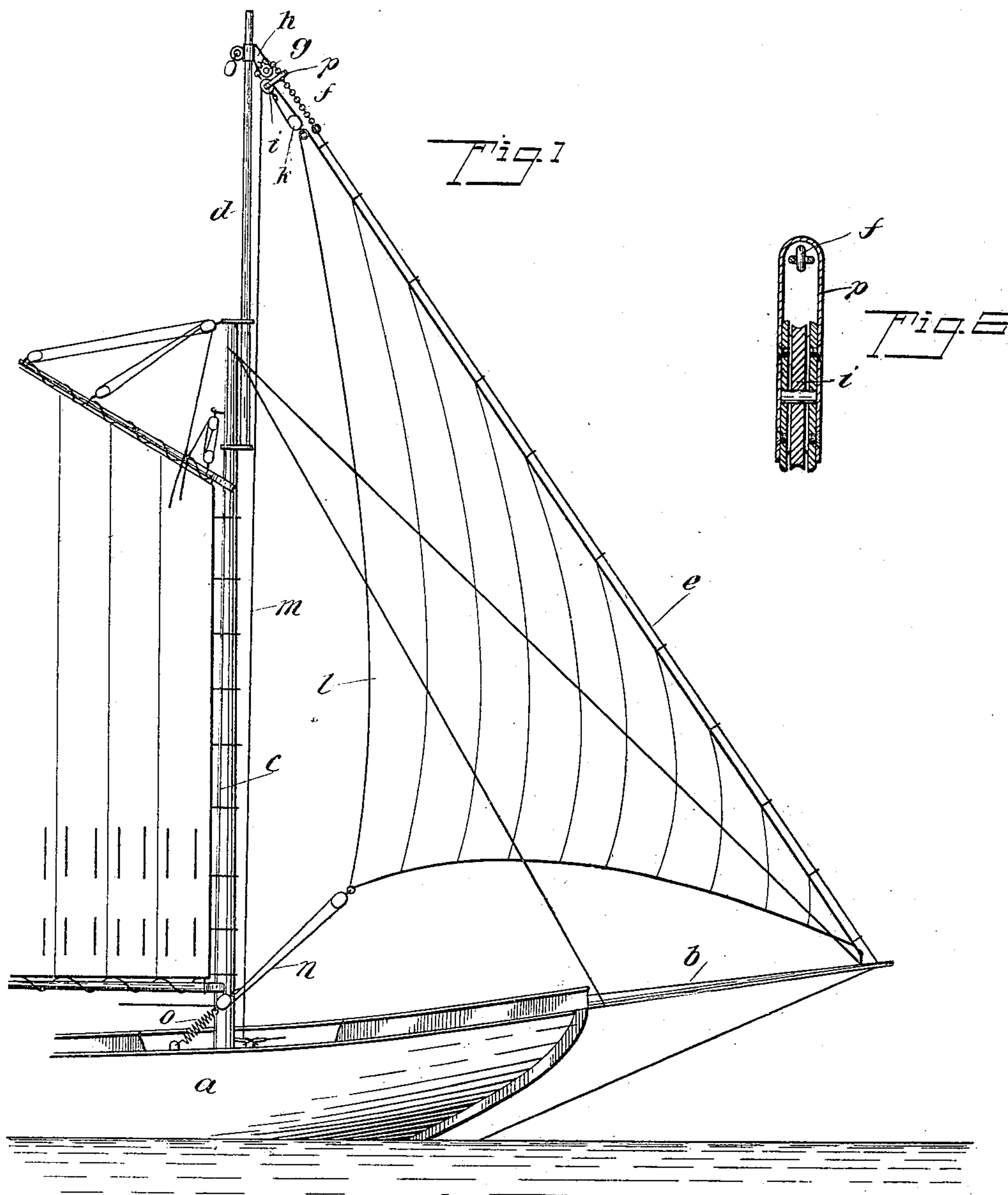
Patented Mar. 19, 1901.

P. J. MACDONALD.

STAYSAIL RIGGING.

(Application filed July 14, 1900.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

PETER J. MACDONALD, OF NOANK, CONNECTICUT.

STAYSAIL-RIGGING.

SPECIFICATION forming part of Letters Patent No. 670,288, dated March 19, 1901.

Application filed July 14, 1900. Serial No. 23,613. (No model.)

To all whom it may concern:

Be it known that I, PETER J. MACDONALD, a citizen of the United States, and a resident of Noank, in the county of New London and State of Connecticut, have invented a new and Improved Staysail-Rigging, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide means for mounting staysails on marine vessels, particularly the jib-topsails of fore-and-aft vessels, so that the sail may be set firmly at the luff and held at the clew in such a way that it will be allowed to yield to unusual strain, thus easing the rigging and spars, and particularly the topmast of a fore-and-aft vessel.

This specification is the disclosure of one form of the invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a fragmentary side view of a fore-and-aft vessel equipped with my invention, and Fig. 2 is a sectional view of one of the blocks hereinafter more fully described.

In the drawings, *a* represents the hull of a vessel, and *b* the bowsprit.

c represents the mast, and *d* the topmast.

The jib-topsail stay *e* is fastened at its lower end to the bowsprit in the usual or any other preferred manner, and the upper end of this stay is provided with a chain or other flexible connection *f*, which passes over a sheave *g*, mounted in a suitable shell or other fixture *h*, attached to the head of the topmast. At its other end the chain *f* carries the standing-block *i* of the jib-halyard tackle, the running-block *k* being fastened to the head of the jib *l* and the fall *m* of the jib-halyard being passed over the block *i* and down to the deck in the usual manner. The block *i* carries a yoke *p*, which passes around the chain *f* and serves to prevent the block from jamming against the shell *h*. When the fall *m*

of the jib-halyard is drawn down, the jib is raised in the usual manner, and the strain on the block *i* is communicated to the chain *f*, thus drawing the chain over the sheave *g* and tightening the stay *e*. It will therefore be seen that by means of my invention when the jib is set the sail is not only hove taut in the usual manner, but the stay itself is drawn taut, so as to properly hold the luff of the sail. This insures keeping the jib-stay taut. For yieldingly holding the clew of the sail I provide the sheet-tackle *n*, which may be of any desired sort, with a retractile spring *o*, fastened to the tackle and to the hull of the vessel. Should the jib be subjected to a squall of wind, the spring *o* will yield and permit the clew of the jib to give to leeward, thus spilling the wind out of the jib and relieving the topmast and rigging of the strain which would otherwise be borne by these parts.

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

1. A sailing vessel having a stay, one end of which is movably held, and a halyard-tackle connected with said end of the stay, so that when strain is applied to the halyard-tackle the stay is drawn taut.

2. A sailing vessel having a stay, and a halyard-tackle in connection therewith and arranged so that the strain on the tackle is communicated to the stay to draw the same taut.

3. A sailing vessel having a stay, a block around which an extended part thereof runs, and a halyard-tackle connected with said extended part of the stay, so that when strain is placed on the halyard-tackle the stay is drawn taut.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PETER J. MACDONALD.

Witnesses:

WILLIAM F. MCEACHERN,
W. A. FRASER.