

No. 700,520.

Patented May 20, 1902.

R. LUNDQUIST.
SAIL FOR MARINE VESSELS.

(Application filed July 24, 1901.)

(No Model.)

Fig. 1.

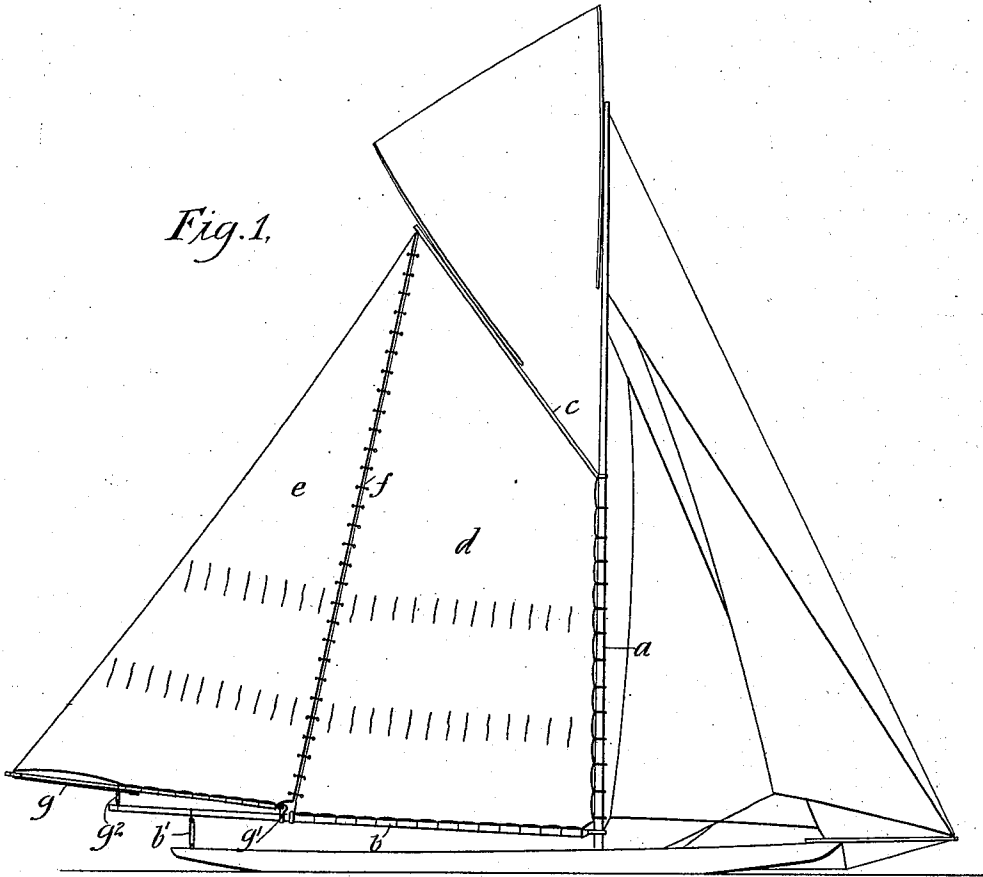
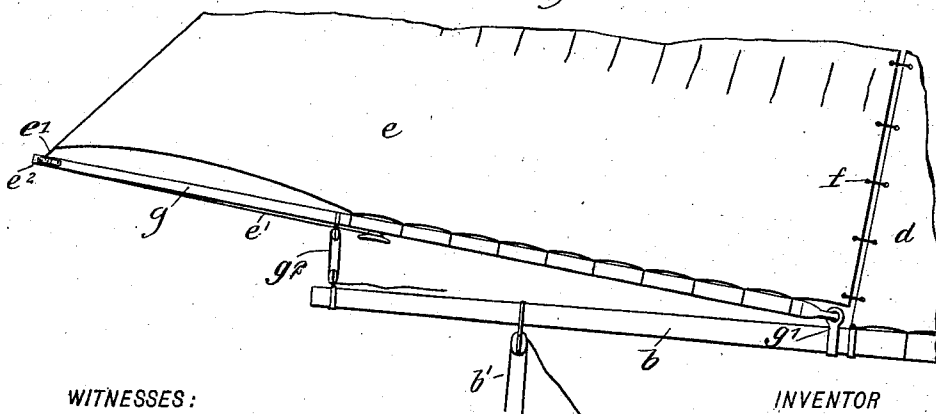


Fig. 2.



WITNESSES:

Edward Thorpe
J. R. Owens

INVENTOR

Richard Lundquist
BY Mum
ATTORNEYS

UNITED STATES PATENT - OFFICE.

RICHARD LUNDQUIST, OF LAGUNA DE TERMINOS, MEXICO.

SAIL FOR MARINE VESSELS.

SPECIFICATION forming part of Letters Patent No. 700,520, dated May 20, 1902.

Application filed July 24, 1901. Serial No. 69,493. (No model.)

To all whom it may concern:

Be it known that I, RICHARD LUNDQUIST, a subject of the King of Sweden and Norway, and a resident of Laguna de Terminos, State of Campeche, Mexico, have invented a new and Improved Sail for Marine Vessels, of which the following is a full, clear, and exact description.

This invention relates to a new form of boom and gaff sail by which the efficiency of the sail when hauled on the wind is increased.

This specification is a specific description of one form of the invention, while the claims are definitions of 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 represents the sail plan of a sloop or cutter to which my invention is applied, and Fig. 2 is an enlarged detail view of the same.

a indicates the mast, b the boom, and c the gaff. The mainsail is formed of two parts d and e . The part d is permanently laced to the gaff and to the boom and is hooked on the mast at the luff of the sail in the usual manner, the head of said part d being square. The part e is jib-headed and is laced to the part d , as indicated at f . The head of the part e is fastened to the peak of the gaff. The foot of the part e is laced to an auxiliary boom g , which is pivoted on the boom b at the point g' and which has a sheet-tackle g^2 extending between it and the end of the main boom b .

b' indicates the sheet-tackle of the main boom, which tackle extends to the traveler on the stern of the vessel, as usual. If desired, the clue of the part e of the mainsail may be fastened by a line e' , rove through a cheek-block e^3 on the end of the auxiliary boom g . This arrangement avoids lacing the outer part or clue of the sail e and enables this part of the sail to be hauled inboard, as may be desired.

In using the invention, assuming that the vessel is going large, the booms g and b are

trimmed so as to extend in a line with each other, thus disposing the parts d and e of the mainsail in the same manner as in the ordinary fore-and-aft sail. When, however, the vessel is hauled on the wind, the sheet-tackle should be slacked away, thus permitting the part e of the mainsail to slack off to leeward and lie in the wind. The part d of the mainsail then is the only active part. The advantage of this arrangement is due to the following-mentioned conditions. I have found by practical experience that when a boom and gaff sail is hauled on the wind the part of the sail near the mast and the head of the sail along the gaff are the only parts which actually exercise a propelling effect on the vessel. The other parts merely lie across the course of the wind and tend to heel or tilt the vessel over. Therefore by slacking away the part e of the sail I avoid this tilting effect, and I enable the vessel to carry her full mainsail longer than otherwise, thus getting more propelling power out of the sail.

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

1. The combination with a mast, a boom and a gaff, of a sail in two parts, connected at their adjacent vertical edges, the main part of the sail being fastened to the boom and mast and having a square head running along and fastened to the gaff, and the other part having a jib-head fastened to the peak of the gaff, and an auxiliary boom adjustably mounted on the main boom, to which auxiliary boom the foot of the said other sail part is fastened.

2. The combination of a boom, an auxiliary boom arranged to swing thereon, means for independently trimming said booms, and a sail formed in two parts respectively connected with the said booms.

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

RICHARD LUNDQUIST.

Witnesses:

I. B. OWENS,
JNO. M. RITTER.