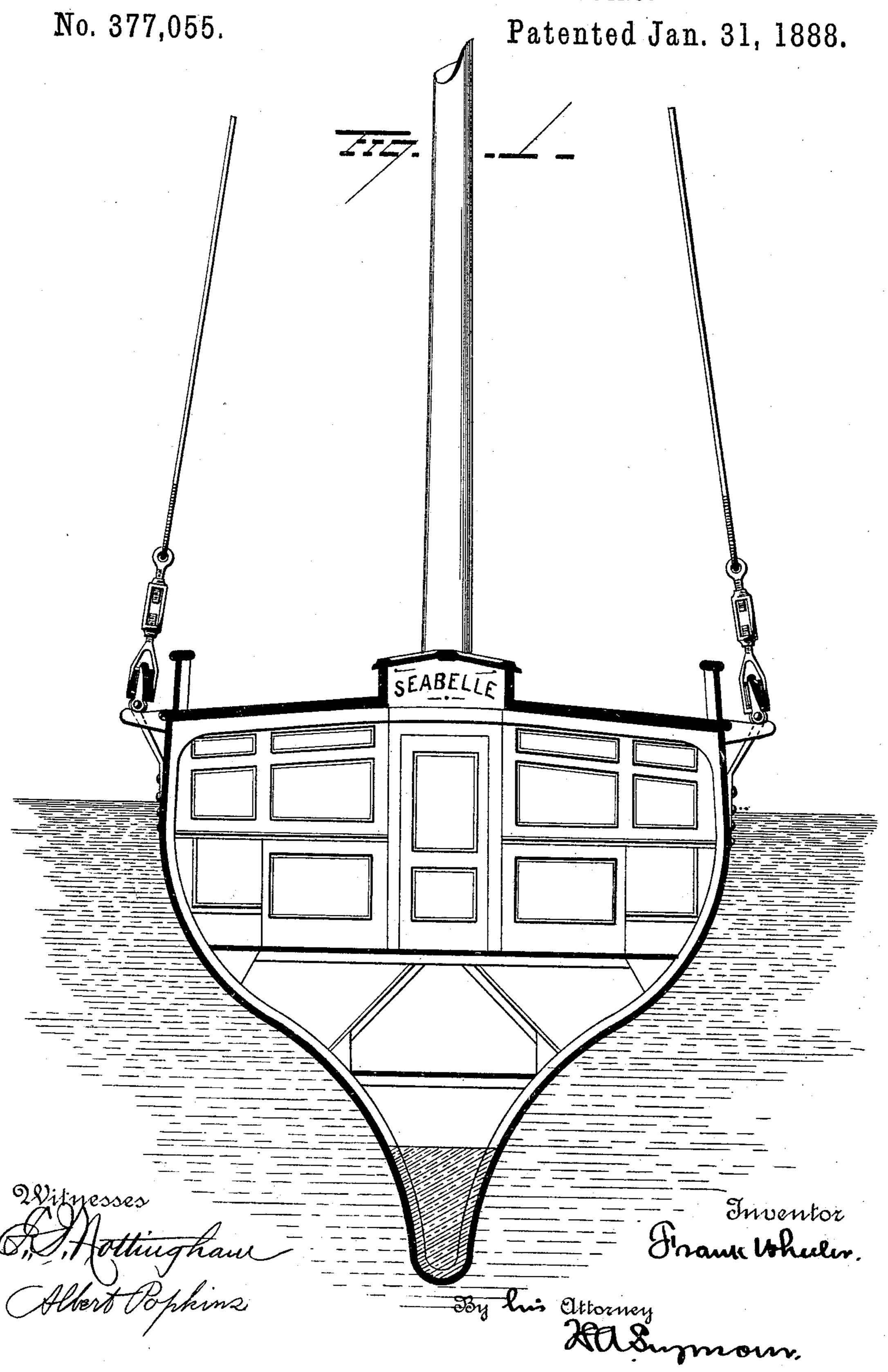
## F. WHEELER.

DEVICE FOR SETTING UP RIGGING.

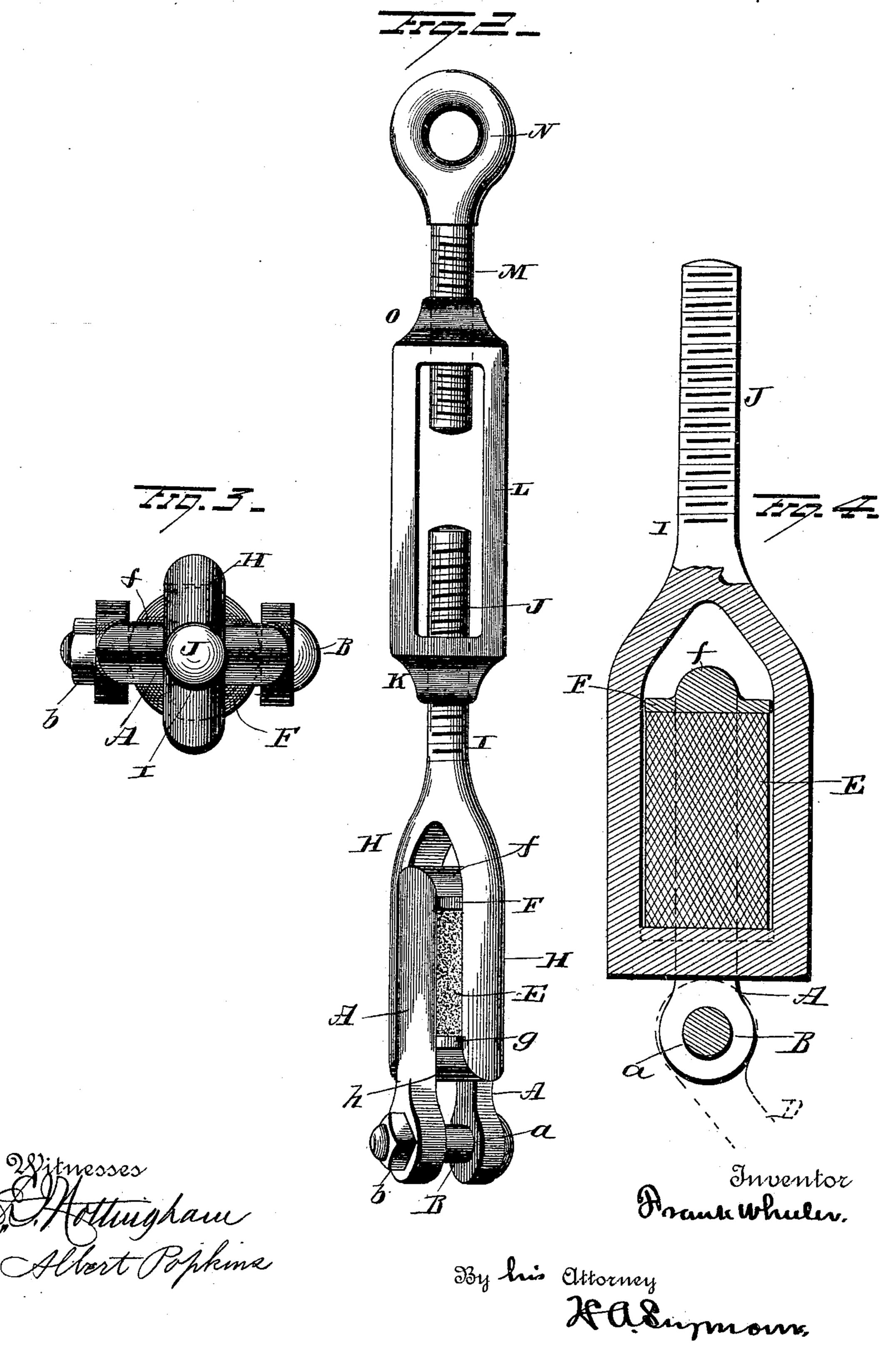


## F. WHEELER.

DEVICE FOR SETTING UP RIGGING.

No. 377,055.

Patented Jan. 31, 1888.



## United States Patent Office.

FRANK WHEELER, OF MERIDEN, CONNECTICUT.

## DEVICE FOR SETTING UP RIGGING.

SPECIFICATION ferming part of Letters Patent No. 377,055, dated January 31, 1888.

Application filed September 30, 1887. Serial No. 251,108. (No model.)

To all whom it may concern:

Be it known that I, Frank Wheeler, of Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Devices for Setting Up Rigging; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in

devices for setting up rigging.

Heretofore the standing rigging of ships, yachts, and other vessels has usually been con-15 nected with the channel-irons attached to the hull by means of lanyards made of hemp rope; but such means are defective and objectionable, owing to the fact that the lanyards will stretch and cause the rigging to become slack 20 after comparatively short usage, thereby requiring the rigging to be set up again, which operation requires an outlay of considerable time and labor, as the lanyards must be taken off and rove through the dead-eyes and set up 25 by block and tackle. Various devices have been suggested with the object of overcoming these objections by substituting for the lanyards some device capable of being adjusted quickly, so as to set up the rigging, and among 30 such some have made no provision to allow of the yielding of the mast or rigging, while in others provision has been made for the yielding of the rigging and mast; but in the latter type of such devices other objections have 35 been met with which have prevented their adoption, and hence at the present time lanyards are in ordinary use.

The object of my invention is to provide a device which shall be simple and durable in its construction and applicable to any vessels, large or small, and capable of being adjusted instantly, so as to set up the rigging to the required tension and yet allow of a slight yielding of the rigging or mast to prevent the breakage or carrying away of the mast by sudden shocks, to which it is often subjected; and with these ends in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in section of a yacht having my rigging-

adjuster attached thereto. Fig. 2 is a detached view in perspective of one of the improved adjusting devices; and Figs. 3 and 4 55 are detached views, in plan and section, of my improved device.

A represents a link, open at its lower end, the ends being provided with holes a a, through which is inserted a bolt, B, one end of which 50 is screw-threaded and provided with a nut, b. By means of the bolt B the link A is detach-

ably secured to the channel-iron D.

E represents a rubber cylinder, which is preferably made solid, the upper end resting 65 against a circular plate, F, attached to or made integral with the upper cross-bar, f, of the link A, while the lower end is seated upon a circular plate, g, which is attached to or made integral with the lower cross-bar, h, of the 70 link H, the latter being arranged at right angles to the link A. The upper end of the link H converges into a rod, I, which is screwthreaded at J, and with which engages the lower nut, K, of the turn-buckle L. Another 75 screw-threaded rod, M, provided at its upper end with an eye, N, engages in the nut O at the upper end of the turn-buckle. The standing rigging is secured at its lower end to the eye N by means of a loop or an eye formed So in the end of the rigging.

From the foregoing it will be observed that my improved rigging-adjuster may be readily applied as a substitute for lanyards, and when once applied the rigging may be readily set 85 up to any desired tension by simply turning the turn-buckle L, which operates to draw the two screw-threaded rods toward each other, and at the same time the rubber cylinder will allow of a yielding movement to the mast and 90 rigging, so as to obviate the breakage of the mast or rigging by any sudden shocks to which they may be subjected. The rubber cylinder is afforded extended end bearings on the circular plates, and is also afforded extended 95 lateral bearings on the four inner faces of the arms of the links A H, and thus prevented from bulging outwardly and cracking or becoming impaired for use. The links A H are so arranged that they may assume any desired roo angle, the rubber cylinder serving as a yielding bearing for the upper link, H, and hence it is impossible for the links to become jammed or cramped while in use.

My improvement may be applied and is equally applicable to bowsprit stays, or, in fact, any part of a vessel's rigging which requires to be set up from time to time. Instead 5 of being attached to the end of a stay, it may be applied to the center, should occasion require.

As there are so many uses to which my improvement is applicable, it would practically to be impossible to enumerate all of them; but I would have it understood that I do not limit myself to its application for any particular purpose, nor do I restrict myself to the particular construction and arrangement of parts; 15 shown and described.

Instead of using a rubber cushion, I may use any construction of metal spring for the same purpose, and in some cases the spring may be dispensed with, if desired, and a rigid block 20 substituted therefor.

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

1. In a rigging-adjuster, the combination, 25 with the interlocking links, substantially as described, one of which is provided with a screw-threaded shank, and a yielding cushion separating the cross-bars of said links, of a turn-buckle mounted at one end on said screw-

threaded shank and a screw-threaded rod en- 30 gaging the opposite end of said turn buckle,

substantially as set forth.

2. In a rigging-adjuster, the combination, with the interlocking links, each carrying a circular plate, one of said links having a screw- 35 threaded shank, and a yielding cushion interposed between the plates of the links, of a turn buckle attached at one end to said screwthreaded shank and a screw-threaded rod engaging the opposite end of the turn-buckle, 40 substantially as set forth.

3. The combination, with the interlocking links, one of which is loop-shaped and provided with a screw-threaded shank and the other open at one end and provided with a re- 45 movable bolt, and a yielding cushion separating the cross-bars of said links, of a turnbuckle mounted at one end upon said screwthreaded shank and a screw-threaded rod engaging the other end of the turn buckle, 50 substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

FRANK WHEELER.

Witnesses:

L. L. SAWYER, GEO. W. SMITH.