(No Model.)

J. PATERSON.

TRUSS ROD AND SUPPORT FOR SHIPS.

No. 263,572. Patented Aug. 29, 1882.

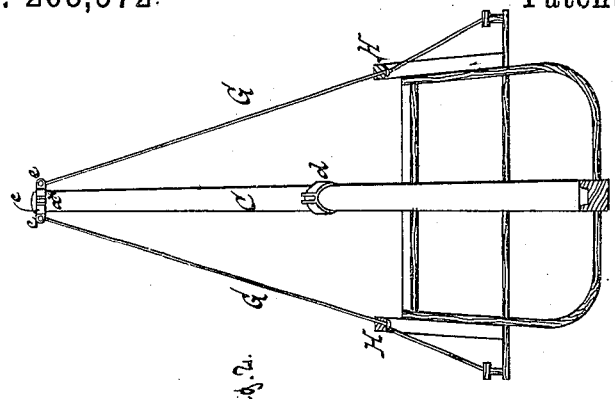

Fig. 2.

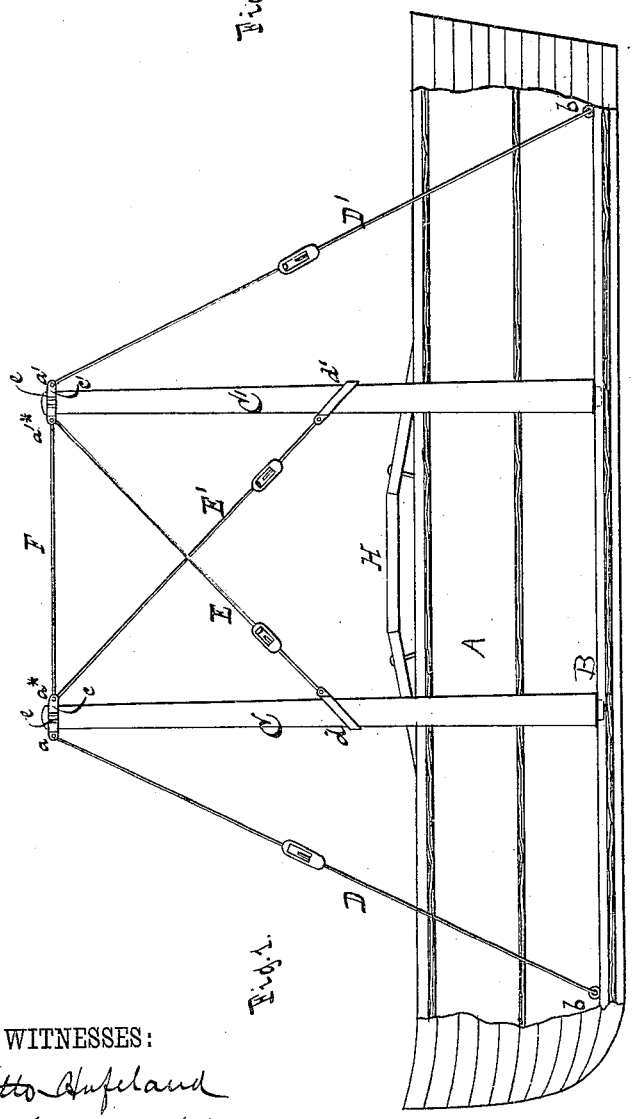

Fig. 1.

WITNESSES:

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TRUSS-ROD AND SUPPORT FOR SHIPS.

SPECIFICATION forming part of Letters Patent No. 263,572, dated August 29, 1882.

Application filed May 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN PATERSON, a citizen of the United States, residing at Weehawken, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Rodding Vessels, of which the following is a specification.

This invention consists in the combination, with a vessel, of two or more upright spars rising from the keelson, rings or collars secured to the upper ends of said spars, braces extending from the outer sides of these collars to eyebolts secured in the keelson, near its ends, intermediate fastenings secured to the spars at about the middle of their length, and cross-braces extending from the top collars to the intermediate fastenings, so that the ends of the vessel are prevented from drooping, while the space between the spars below the deck remains unobstructed.

In the accompanying drawings, Figure 1 represents a longitudinal section of a vessel rodded according to my invention. Fig. 2 is a transverse section of the same.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates the hull of a vessel, and B is the keelson. From this keelson rise two or more upright spars, C C′, to the upper end of which are secured the rings or collars *c c′*, respectively. These collars are provided with eyes *a a* a′ a′**, respectively, and in the keelson, near its ends, are firmly secured eyebolts *b b′*. From the eye *a* of the collar *c* extends a brace, D, to the eyebolt *b*, and from the eye *a′* of the collars *c′* extends a brace, D′, to the eyebolt *b′*. On the spars C C′, at or near the middle of their length, are secured the intermediate collars, *d d′*, and the collar *d* connects by a brace, E, with the eye *a′** of the collar *c′*, while the collar *d′* connects by a brace, E′, with the eye *a** of the collars *c*. All the braces D D′ and E E′ are provided with turn-buckles, so that their tension can be adjusted. The eyes *a* a′** of the collars *c c′* are connected by a rod, F. The spars C C′ are steadied in a lateral direction by braces G, which extend from eyes *e e* in their top collars to the hog-frames H, as shown in Fig. 2.

By the above-described arrangement of the braces D D′ E E′ and the spars C C′ the ends of the vessel are effectually prevented from drooping, while at the same time the cross-bars E E′ do not obstruct the space below the deck. In vessels of great length the upright spars C C′ are moved apart and an additional spar is placed between them, which is connected to the spars C C′ by cross-braces in the same manner in which the spars C C′ are connected in the example shown in the drawings.

It is obvious that instead of the intermediate collars eyebolts may be used, which pass through the bodies of the spars, and to which the cross-braces are secured.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, substantially as hereinbefore described, of the spars C C′, rising from the keelson, the collars *c c′* on the top end of these spars, the intermediate fastenings, *d d′*, the cross-braces E E′, and the braces D D′.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JOHN PATERSON. [L. S.]

Witnesses:
W. HAUFF,
WILLIAM MILLER.