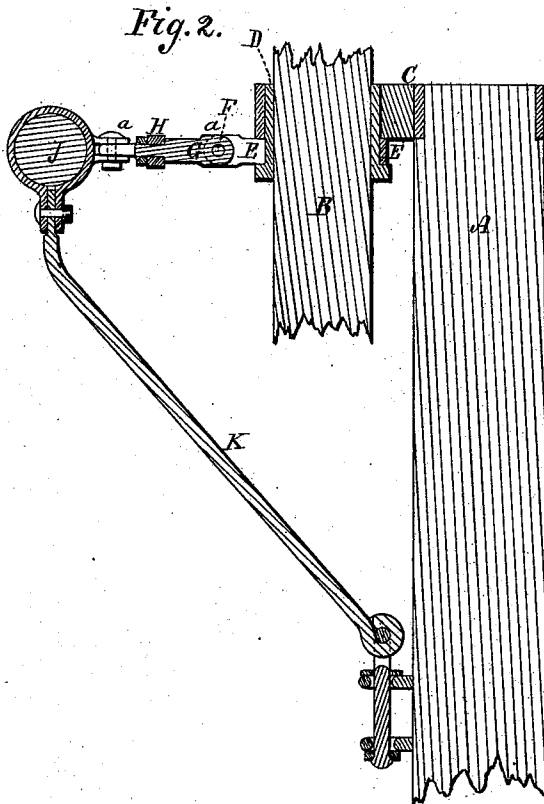
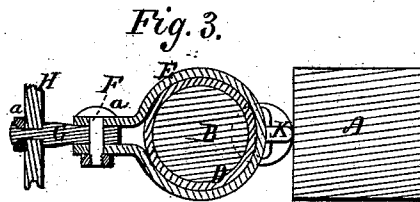
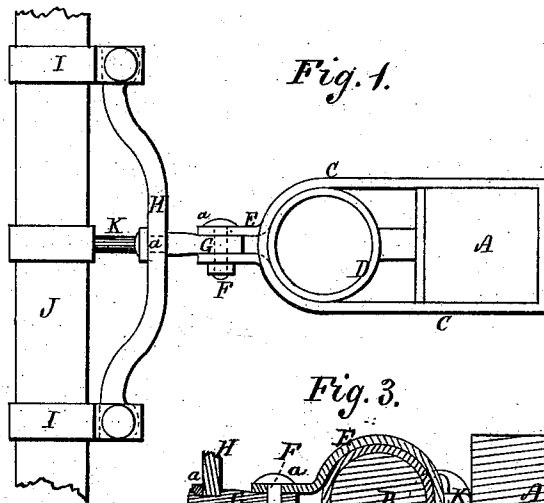


S. S. JORDAN & J. C. STEVENS.

Truss for Ships' Yards.

No. 168,159.

Patented Sept. 28, 1875.



WITNESSES.

Emilio Sick
Jno. D. Patten,

S. S. Jordan and John C. Stevens.

J. Curtis. Atty.

UNITED STATES PATENT OFFICE.

SAMUEL S. JORDAN AND JOHN C. STEVENS, OF BATH, MAINE.

IMPROVEMENT IN TRUSSES FOR SHIPS' YARDS.

Specification forming part of Letters Patent No. **168,159**, dated September 23, 1875; application filed August 24, 1875.

To all whom it may concern:

Be it known that we, SAMUEL S. JORDAN and JOHN C. STEVENS, of Bath, Sagadahoc county, Maine, have invented an Improvement in Ships' "Caps," of which the following is a description:

This invention has reference to the construction of caps, so called, of navigable vessels, or the device which constitutes a support to the yards, and a clasp to confine the ends of the upper and lower masts.

The method heretofore generally adopted has been to weld a stout boss or stud centrally to the face of the ring which clasps and traverses the mast, the truss which supports the yard being pivoted directly to this stud.

The drawing accompanying this specification represents, in Figure 1, a plan, and in Fig. 2 a vertical section, of our invention, while Fig. 3 is a horizontal section of a portion thereof.

In carrying our improvement into practice we proceed as follows: A in the said drawing represents the upper end of the lower mast, and B the lower end of the upper mast, of a navigable vessel, while C represents a metallic clasp or frame, which confines the said ends of the masts together. The portion of the clasp C which embraces the upper mast is a metallic tube, D, which is secured to the said clasp or formed upon it. E represents the traveler-ring, composed of a strap passed about the circumference of the tubular guide or support D, and having its ends confined together by a bolt, F, and clasping between them one end of a swivel-link, G, whose opposite end is pivoted within an arched brace or truss, H, the extreme opposite ends of such truss being, in turn, confined between the ends of bands or straps I I, which inclose the yard J. The tube D, ring E, and truss H serve to

retain the yard in its proper place with respect to the mast, and permit the yard to play freely in a horizontal direction about the mast, and to be susceptible of such slight vertical play as may be requisite, the two joints *a* and link G effecting this result.

To suspend the yard from the mast it has been customary heretofore to employ a chain connected from above to the center of the yard. We discard this plan and support the yard from below by employing a brace or rod, K, the lower end of which is swiveled or pivoted to the mast below the yard, and the upper end swiveled to the center of the yard.

This means of supporting the yard possesses a marked advantage, as it presents no obstacle to the furling of the sail, while the sling-chain heretofore in use presents a great obstruction.

Our invention, though susceptible of universal application, is more especially intended for the lower yards. Among the advantages it possesses is the fact that we are enabled to sail closer to the wind with square-rigged vessels than has heretofore been possible, for the reason that we can brace the yards round much sharper—that is, fore and aft the vessel—as the mast does not obstruct such yard, as has heretofore been the case.

We claim—

The combination of the clasp C and its cylindrical bearing-tube D with the shaft E, arranged to rotate on said tube, the swivel G, truss H, brace K, and yard J, for joint operation, as shown and set forth.

S. S. JORDAN.
J. C. STEVENS.

Witnesses:

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