(No Model.)

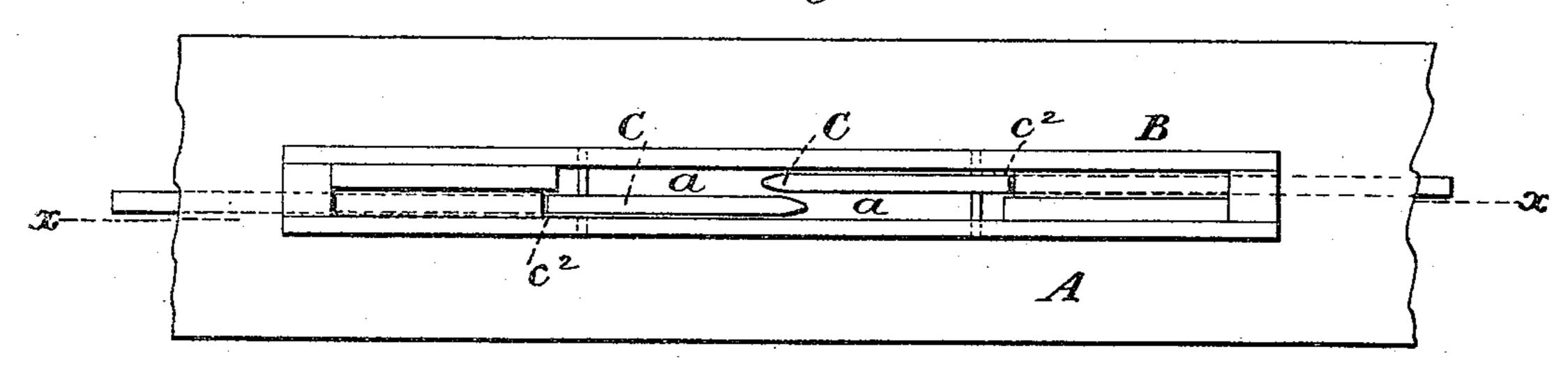
J. A. SQUIRES.

CENTER BOARD FOR BOATS, YACHTS, &c.

No. 438,199.

Patented Oct. 14, 1890.

Fig. 1.



Hig. 2.

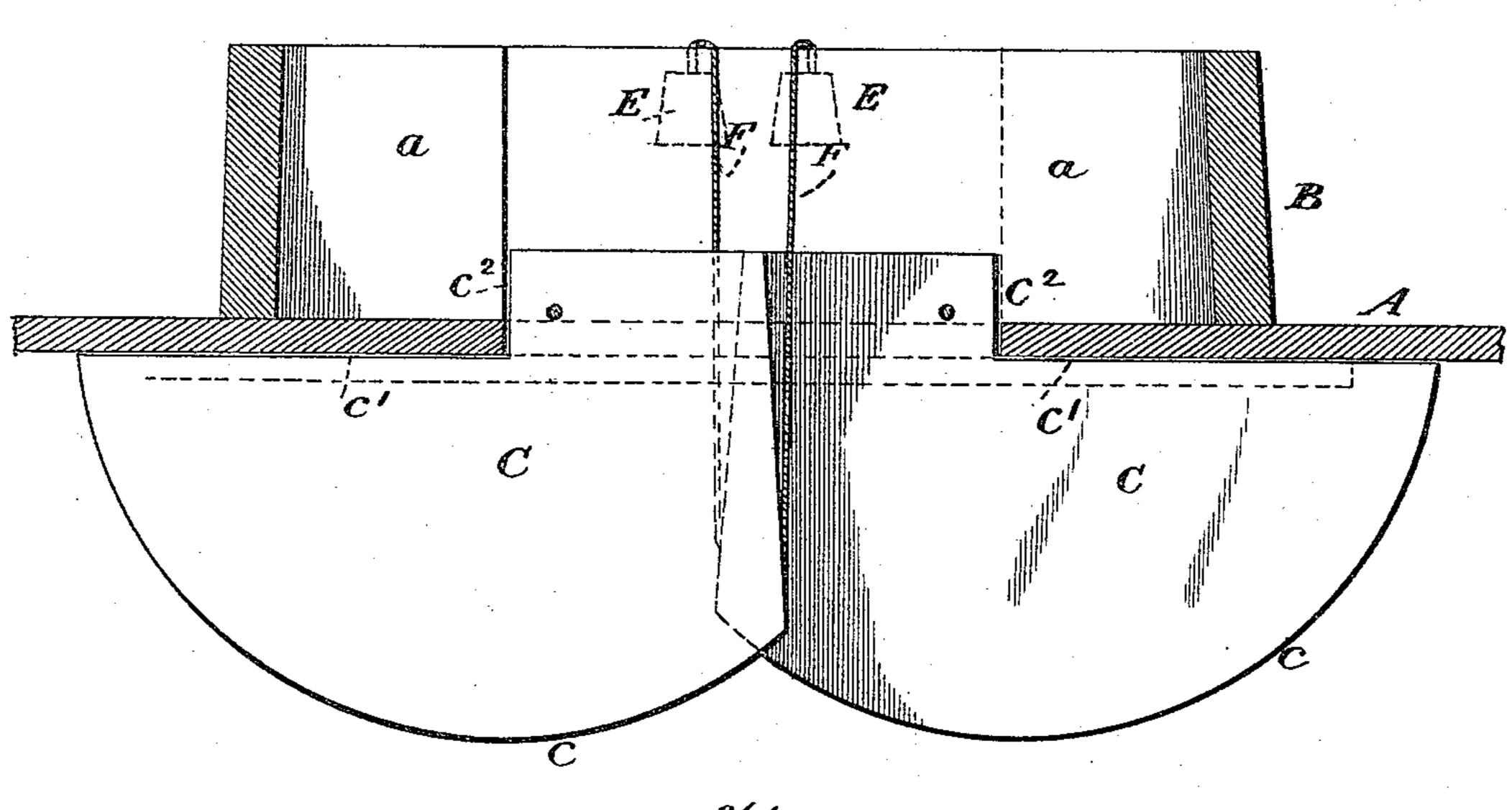
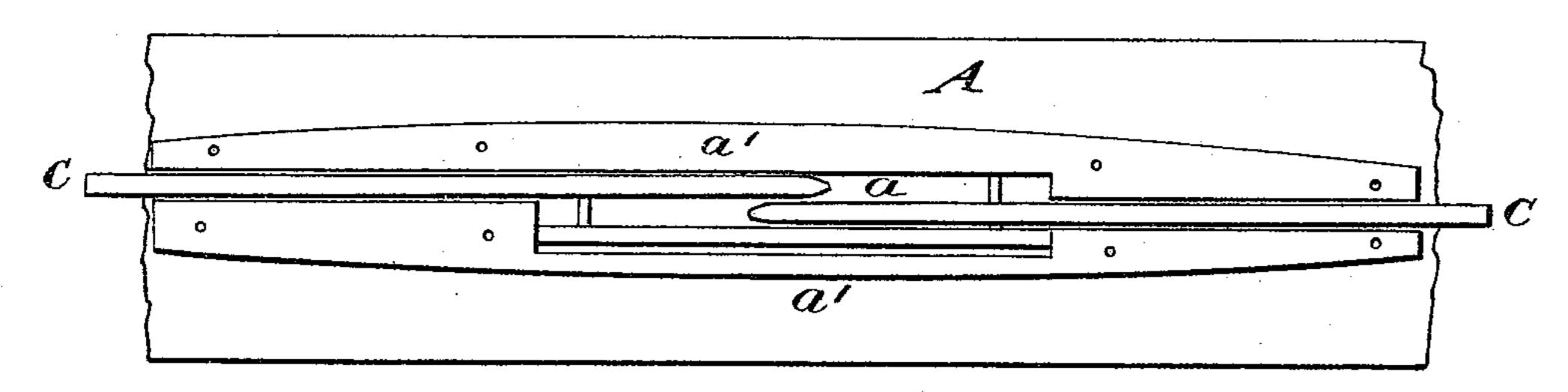


Fig. 3.



Witnesses. A. Ruppert,

Inventor.
Tohn a . Squires
Per
Thomas P. limpson
atty

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United States Patent Office.

JOHN A. SQUIRES, OF PIERPONT, NEW YORK.

CENTER-BOARD FOR BOATS, YACHTS, &c.

SPECIFICATION forming part of Letters Patent No. 438,199, dated October 14, 1890.

Application filed February 6, 1890. Serial No. 339, 397. (No model.)

To all whom it may concern:

Be it known that I, John A. Squires, a citizen of the United States, residing at Pierpont, in the county of Rockland and State of New York, have invented certain new and useful Improvements in Center-Boards for Boats, Yachts, and other Vessels; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The special object of the invention is to give a boat or yacht an increased power under the water to resist the effect of winds, waves, and currents, which tend to make the vessel roll and have its course impeded.

Figure 1 of the drawings is a plan view of the keel and hollow trunk with the center-boards on the inside; Fig. 2, a longitudinal section on the dotted line x x of Fig. 1, and Fig. 3 a bottom view of the keel of a vessel.

In the drawings, A represents a part of the keel of a vessel longitudinally slotted at a, and B the well or hollow trunk through which the center-board is let down into the water below the keel. In this trunk I pivot the heel 30 or rear end of two center-boards CC, one near each end of the keel-slot a. The edge c is curved on a radius, which will allow its free passage through the slot, while the straight edge c' is the long side of a rabbet, which en-35 ables it to lie flat between the braces a'a' on the bottom of the keel. I also cut off the rear end to form a straight edge c^2 , which will bear squarely against the ends of the trunk when the center-board is drawn within it. The dis-40 tance between the fulcrums or pivots on which

the center-boards turn is such that when

turned down out of the trunk their respective

heels or rear ends will overlap each other.

Each or both of the center-boards may be extended to a greater or less degree below 45 the boat or yacht, so as to give the desired resistance under all contingencies, and may be so held by counterbalance-weights E and chains or ropes F, connecting with the lower part of the rear end of the center-board or by 50 any other suitable moons.

any other suitable means.

The counterbalance-weights E bear the same relation to the center-boards as those of a window do to the sashes—namely, to hold them at any adjustment. By simply raising the 55 weights in the hand the center-boards will gradually sink as the hand yields until they come against the bottom of the keel, while by pulling the ropes F the weights will automatically take up the slack and hold the cen-60 ter-boards wherever they are raised to.

It will be seen that the two reversed and interlapping center-boards make practically, when in position under the vessel, one long center-board whose area greatly exceeds what 65 has been heretofore possible.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

The combination, with the hollow trunk and slotted keel of a boat or yacht, of the two center-boards C C, both pivoted near one end in said trunk and having the curve c, the longitudinal straight edge c', and the straight 75 edge c^2 at right angles to the edge c', whereby both center-boards may be manipulated in one trunk or well, as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN A. SQUIRES.

Witnesses:
PATRICK LILLY,
JOHN W. RIDDERHOFF.