## J. J. MOULE.

Improvement in Center-Boards for Vessels.

No. 116,079.

Patented June 20, 1871.

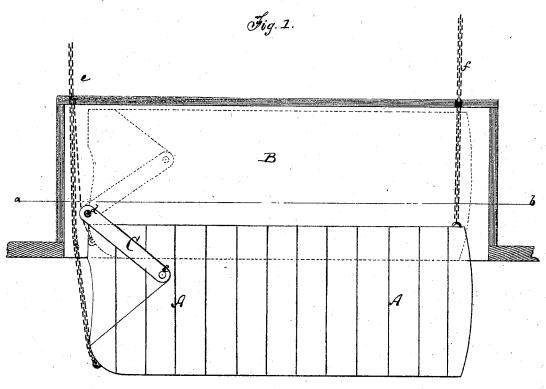
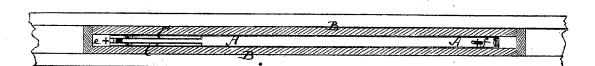


Fig. 2.



Witnesses:

ym 86.6. Smith, alex F. Roberts

**Inventor:**4. J. Morie

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Attorneys.

## UNITED STATES PATENT OFFICE.

JOHN J. MOULE, OF HUNTINGTON, NEW YORK.

## IMPROVEMENT IN CENTER-BOARDS FOR VESSELS.

Specification forming part of Letters Patent No. 116,079, dated June 20, 1871.

To all whom it may concern:

Be it known that I, John J. Moule, of Huntington, in the county of Suffolk and State of New York, have invented a new and Improved Center-Board for Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side view of my improved center-board. Fig. 2 is a horizontal section of its trunk and top view of the board, the line  $a\ b$  in Fig. 1 indicating the plane of section.

Similar letters of reference indicate corre-

sponding parts.

This invention has for its object to so secure the center-board of a vessel that it can be let down evenly at both ends, or more or less at either end, as may be desired. The invention consists in connecting one end of the center-board by a pivoted strap with the trunk, the said strap holding its end of the board securely in every position to which it may be vertically adjusted. The objections to ordinary center-boards, which are merely suspended at the ends, are entirely overcome, as the board will be stiff and rigid both in a horizontal and inclined position.

A, in the drawing, represents the center-

board. B is the trunk in the vessel, within which it plays. C is a metal rod or strap, pivoted with one end at c to the side of the center-board, near the end of the same. The other end of the strap C is pivoted at d to the trunk. Both ends of the center-board are suspended by ropes or chains e f, the chain e being new and not heretofore applied. The strap permits the end of the center-board, with which it is connected, to be freely raised or lowered, but braces it securely in every position. It permits either end of the center-board to be lowered so that the same may be inclined at a suitable angle, or held as may be desired. The center-board may be composed of transverse or longitudinal boards, as may be desired.

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

Patent, is-

1. The combination of the center-board A with the end strap C, substantially as and for the purpose herein shown and described.

2. The second chain e, combined with the strap C and center-board, substantially as begin shown and described

herein shown and described.

The above specification of my invention signed by me this 30th day of March, 1871.

JOHN J. MOULE.

Witnesses:

GEO. W. MABEE, ALEX. F. ROBERTS.