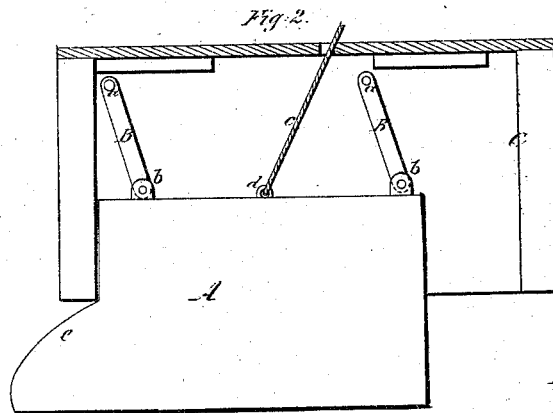
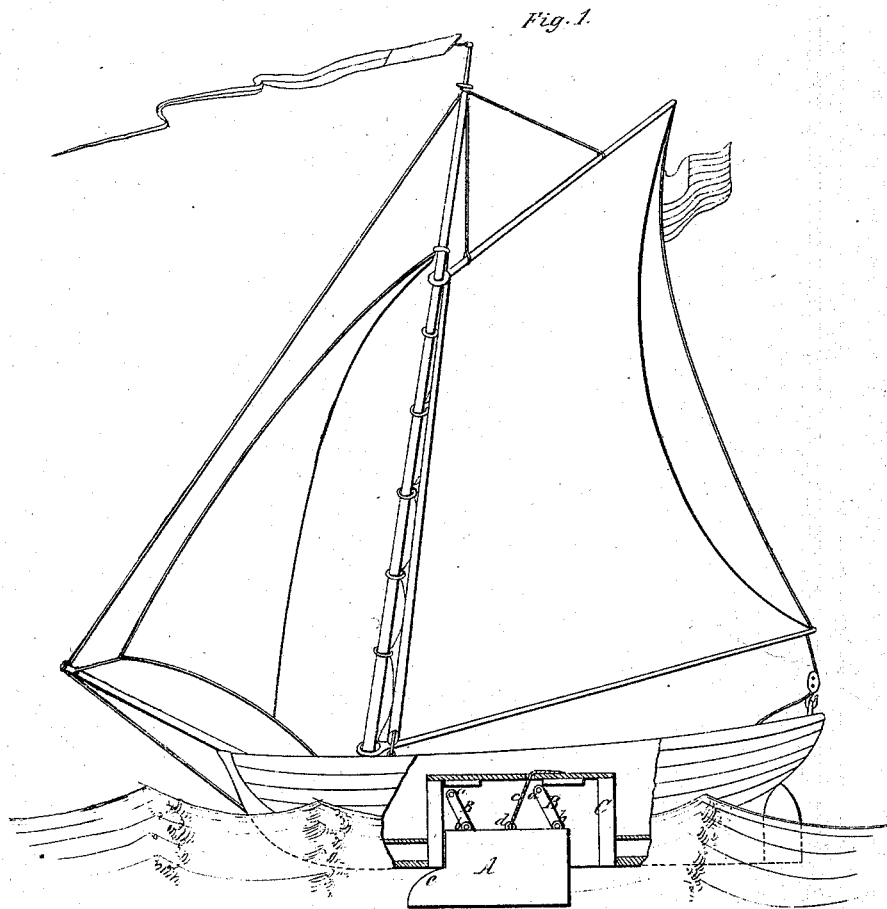


G. M. Fay,
Center Board.

No. 12514.

Patented Aug. 22, 1865.



Witnesses.

M. Ahearn Jr
Theo. Tuck

Inventor.
G. M. Fay
per Munn & Co.
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE M. FAY, OF EUREKA, CALIFORNIA.

IMPROVED CENTER-BOARD.

Specification forming part of Letters Patent No. **49,514**, dated August 22, 1865.

To all whom it may concern:

Be it known that I, GEORGE M. FAY, of Eureka, in the county of Humboldt and State of California, have invented a new and Improved Center-Board; 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 drawings, forming part of this specification, in which—

Figure 1 represents a sectional side elevation of a yacht with my improved center-board. Fig. 2 is a longitudinal vertical section of the center-board in a larger scale than the previous figure.

Similar letters of reference indicate like parts.

This invention consists in the application of two parallel hinged bars to a center-board of peculiar form in such a manner that said center-board rises and falls parallel, and when it is lowered the full width of the center-board, equaling the whole length of its case, is brought into action.

Center-boards of the ordinary construction are hung on pivots at or near one of their corners, and in lowering the same the corner opposite to the pivot descends first, and that portion of the center-board which projects below is triangular, reducing the effective surface of the center-board exposed to the action of the water just one-half what it would be if said center-board were lowered parallel. In many cases, however, the safety of the vessel depends upon the effective surface of the center-board, and it is desirable, therefore, to lower the center-board in such a manner that the same, whether lowered wholly or partially, will offer the largest possible effective surface to the action of the water. This object is obtained by my invention.

The center-board A is suspended from two parallel bars, B, the upper ends of which are connected by pivots *a* to the case C, and their lower ends are secured by pivots *b* to the top

edge of the center-board. The two parallel bars are at such a distance apart as may be convenient, and by their action the center-board is compelled to rise and fall parallel. A rope, *e*, which is secured to staple *d* in the top edge of the center-board, extends up through the case C and serves to raise and lower the center-board. The staple *d* is situated at about the middle, between the pivots *b b*, which secure the parallel bars to the top edge of the center-board, so that an upward strain on the rope acts with equal force on both parallel bars. A shoulder, *e*, on the front edge of the center-board, is so arranged that the length of that portion of the center-board projecting below the case is equal to the inner length of the case itself, and at the same time the front edge of the center-board, by striking the front side of the case, prevents said center-board from descending to such a distance that the parallel bars will come in a vertical position, whereby the raising of the center-board by pulling the rope would be rendered difficult or almost impossible.

It must be remarked that instead of the rope *e* other devices might be employed for raising or lowering the center-board, such as screws, levers, &c.

By the application of the parallel bars the center-board rises and falls parallel, and the best possible effect is obtained under all circumstances, whether the same is lowered entirely or only partially.

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

The combination of the center-board A, constructed with a shoulder or projecting end, *e*, the parallel bars B B, and the case C, within which the board fits, all constructed and arranged to operate as specified.

GEORGE M. FAY.

Witnesses:

AMOS HANSELL,
W. T. SWEASEY.