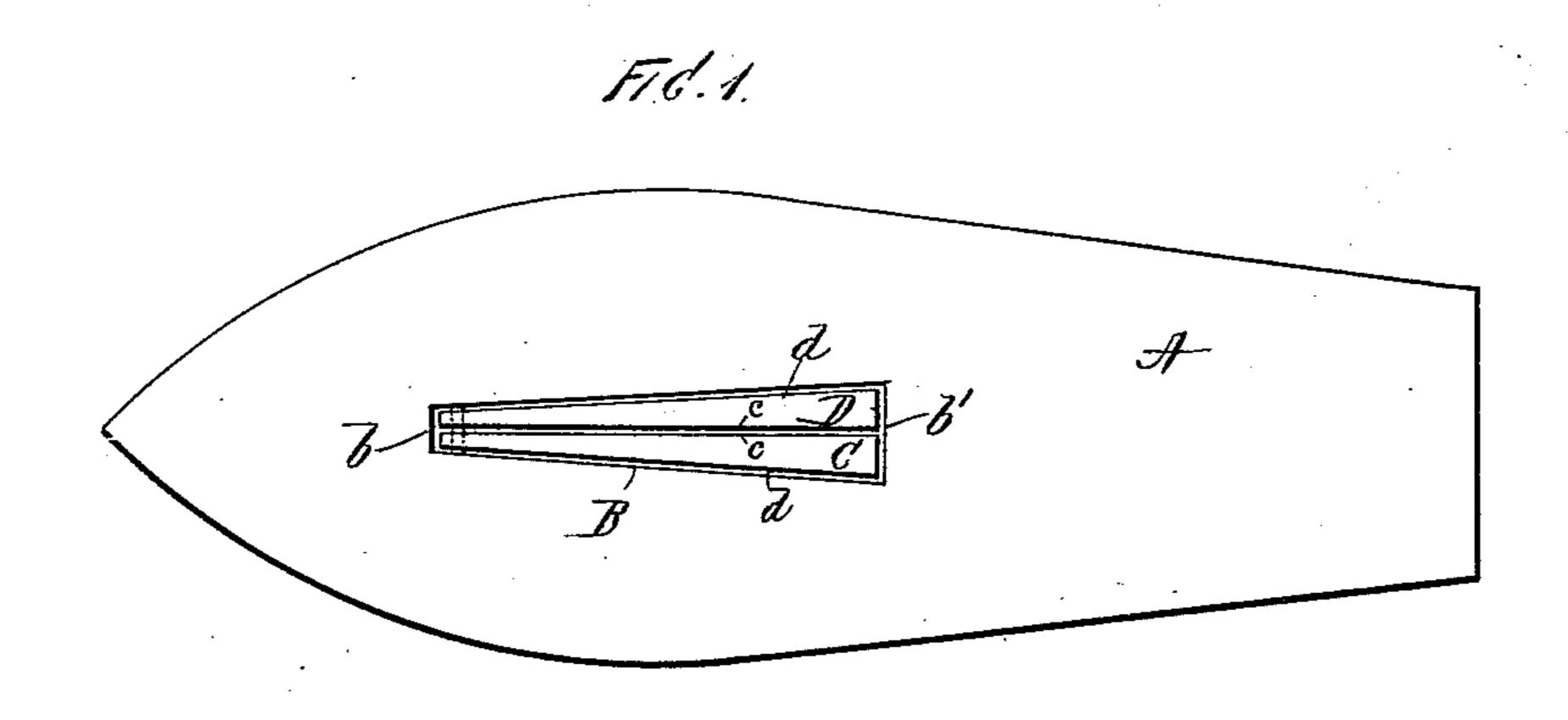
(No Model.)

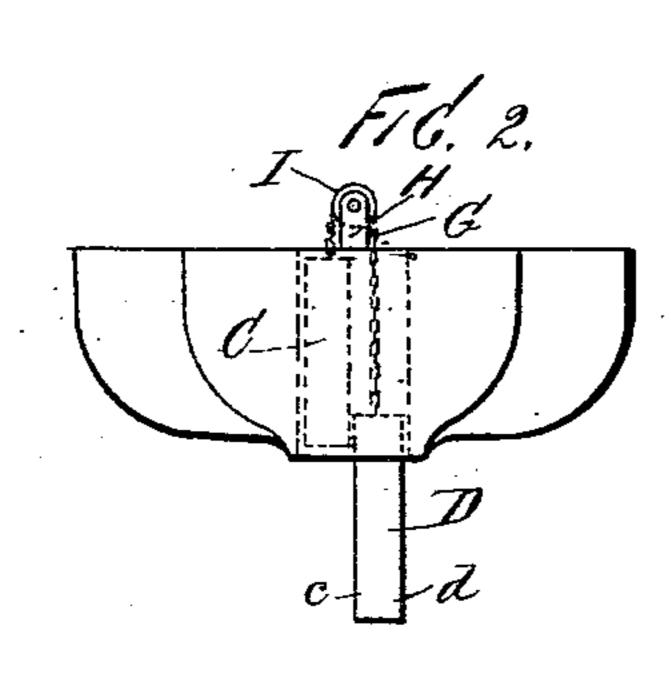
## F. R. KRUSE.

CENTERBOARD FOR YACHTS OR OTHER VESSELS.

No. 555,250.

Patented Feb. 25, 1896.





WITNESSES:
Solu Buckler,
Gerest

Frederick R. Kruse,
BY

Odgar Tates 60

## United States Patent Office.

FREDERICK R. KRUSE, OF PIERMONT, NEW YORK.

## CENTERBOARD FOR YACHTS OR OTHER VESSELS.

SPECIFICATION forming part of Letters Patent No. 555,250, dated February 25, 1896.

Application filed June 5, 1895. Serial No. 551,734. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK R. KRUSE, a citizen of the United States, and a resident of Piermont, county of Rockland, and State of New York, have invented certain new and useful Improvements in Centerboards for Yachts or other Vessels, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

The object of the present invention is to provide a new and improved construction of centerboards for boats; and it consists in the peculiar adaption and arrangement of parts whereby an improved result may be secured by simple and inexpensive means.

In the accompanying drawings I have shown two preferred forms of my invention, refer20 ring to which—

Figure 1 is a bottom plan view of a boat with any improved duplicate centerboard applied thereto. Fig. 2 is an end view of the boat, showing one of the centerboards down and the other up.

Referring particularly to the drawings, A designates an ordinary boat provided with a well B, which is narrow at its forward end b and wide at its rear end b'. This well extends longitudinally and vertically through the bottom of the boat, and is constructed substantially in the usual form with the exception of the particular features of construction herein referred to. Two centerboards C D are suitably supported in the well and arranged and adapted to be elevated and lowered as desired. Each centerboard has one straight side c and an inclined side d, the straight sides being adjacent, so that the two boards conjointly conform, substantially as shown and described.

In Fig. 2 the board D is shown lowered and the board C elevated; but the position of the two boards may be changed as desired by any of the well-known means now employed for that purpose.

The two centerboards are preferably connected together, as shown in Fig. 2, by means of a chain G, which operates over a pulley I, mounted on the support H. As one centerboard is lowered the other is elevated, and 50 vice versa.

In the practice of my invention only one of the centerboards is used at a time. When beating to windward the lee-board is lowered to prevent the boat drifting to leeward, and 55 the other centerboard is lowered when necessary or desirable.

I am aware that my improved device presents many points of advantage which are not herein particularly referred to; but these advantages are apparent to those skilled in the art and will be availed of. I would also have it understood that I reserve the right to make all such changes in the form and proportion of parts as fairly fall within the scope of the 65 invention.

Having thus fully described the invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination with a boat having a well 70 B, therein provided with two inclined sides, whereby said well is wider at its rear end than at its forward end, of two centerboards pivotally secured in the forward end of said well, each of said centerboards being tapered from 75 the forward to the rear ends, the inner sides being arranged adjacent to each other and in line with the keel, and the outer sides at an inclination thereto, substantially as described.

In testimony that I claim the foregoing as 80 my invention I have signed my name, in presence of the subscribing witnesses, this 3d day of June, 1895.

## FREDERICK R. KRUSE.

Witnesses:

L. M. MÜLLER,

C. GERST.