

D. P. Nickerson
Centre Board.

N^o 61,351.

Patented Jan. 22, 1867.

Fig. 1.

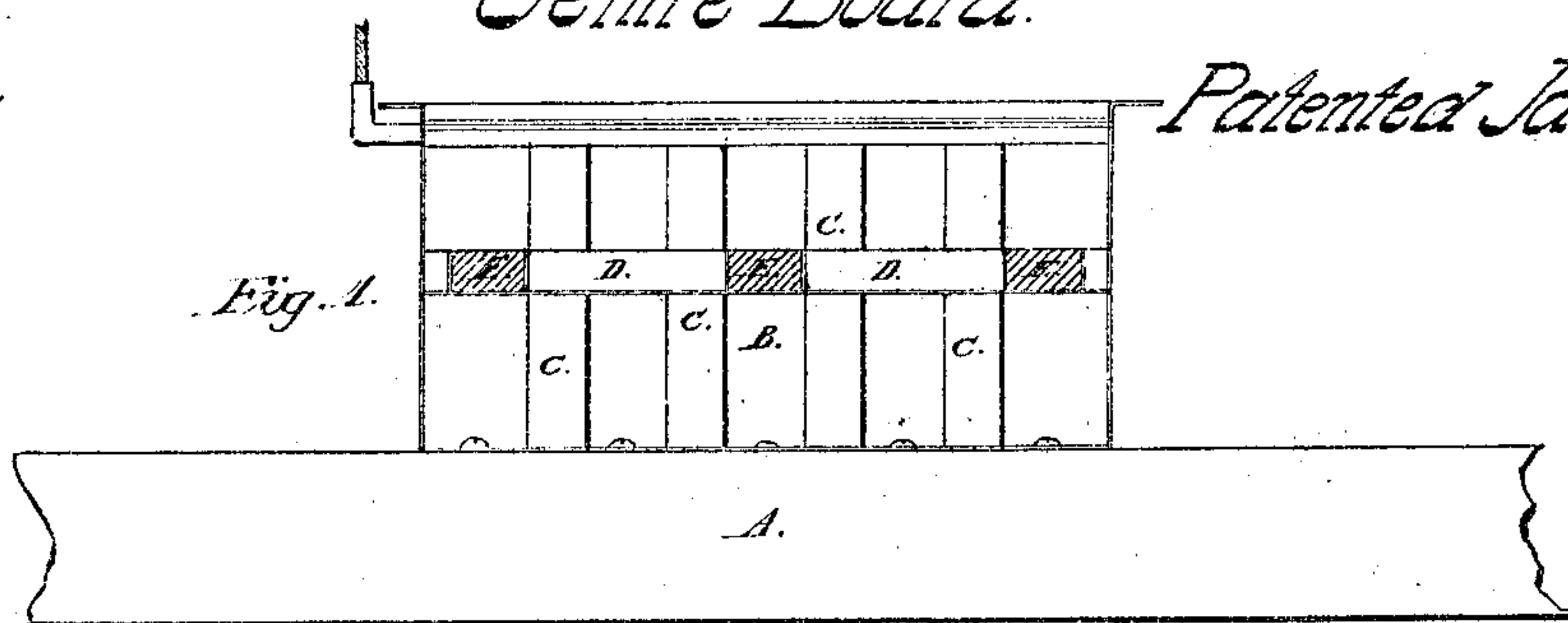


Fig. 2.

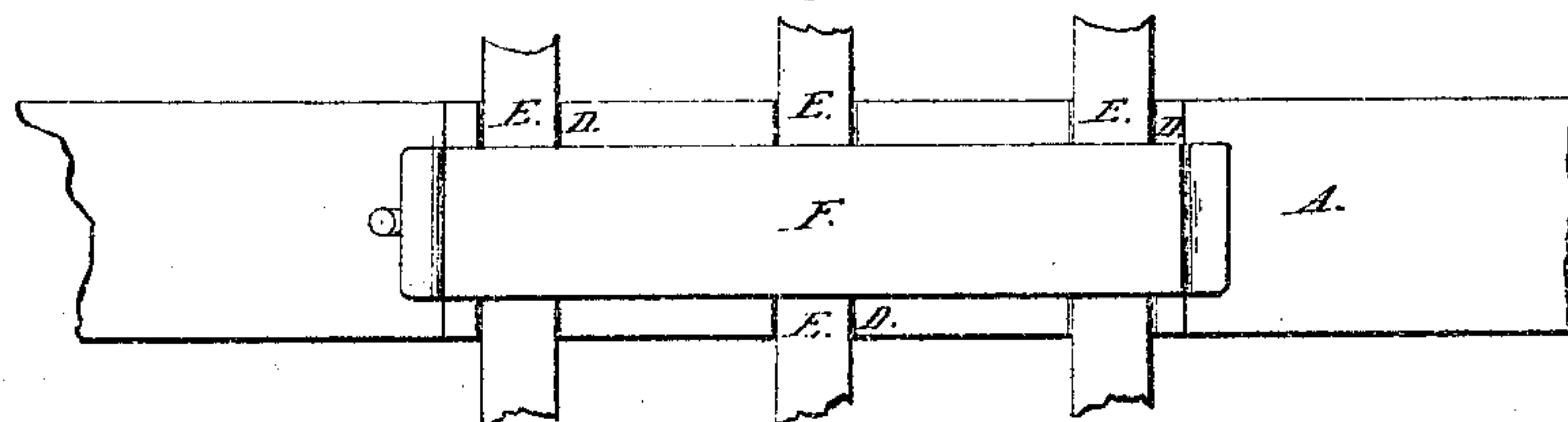


Fig. 3.

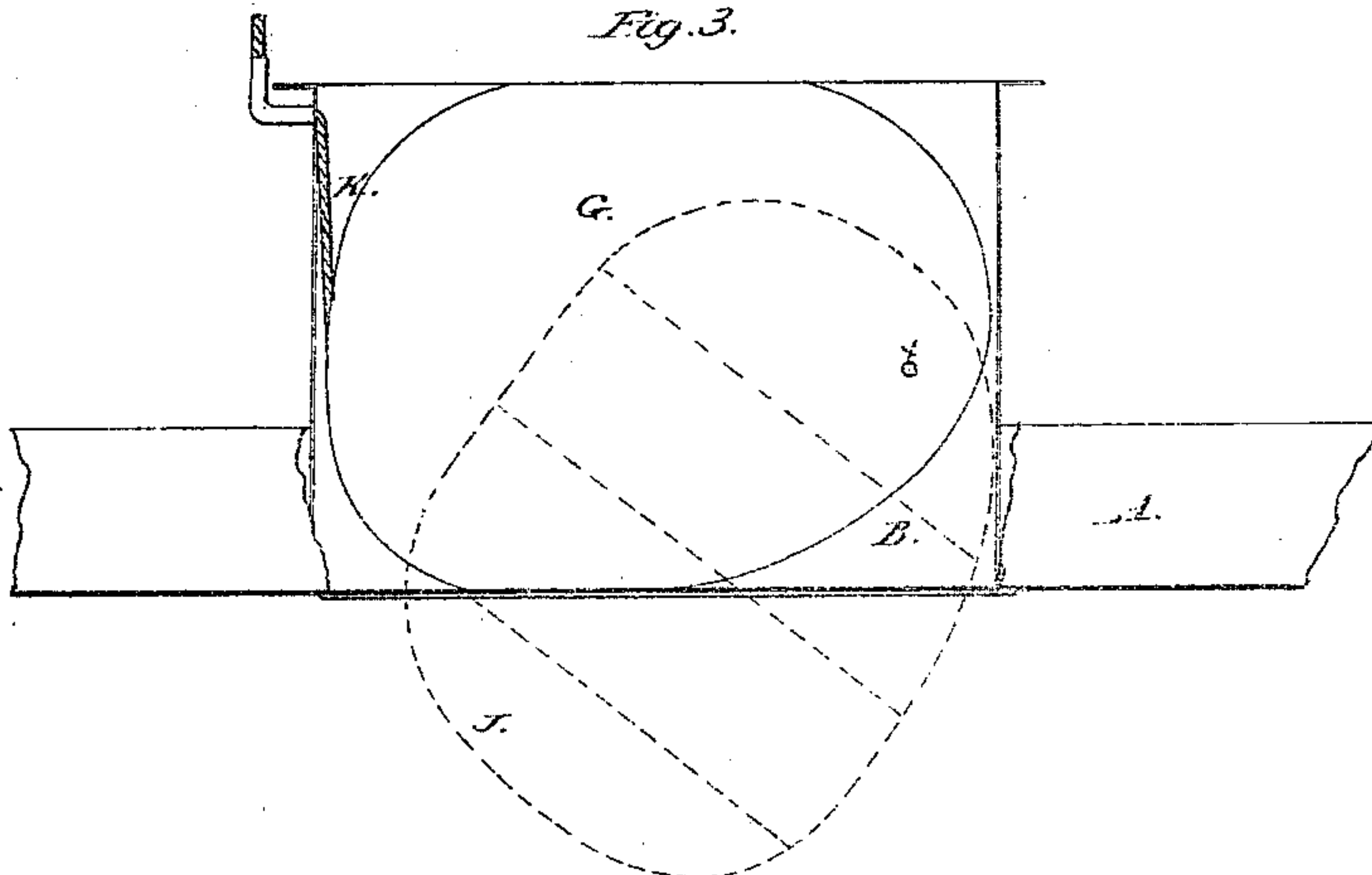
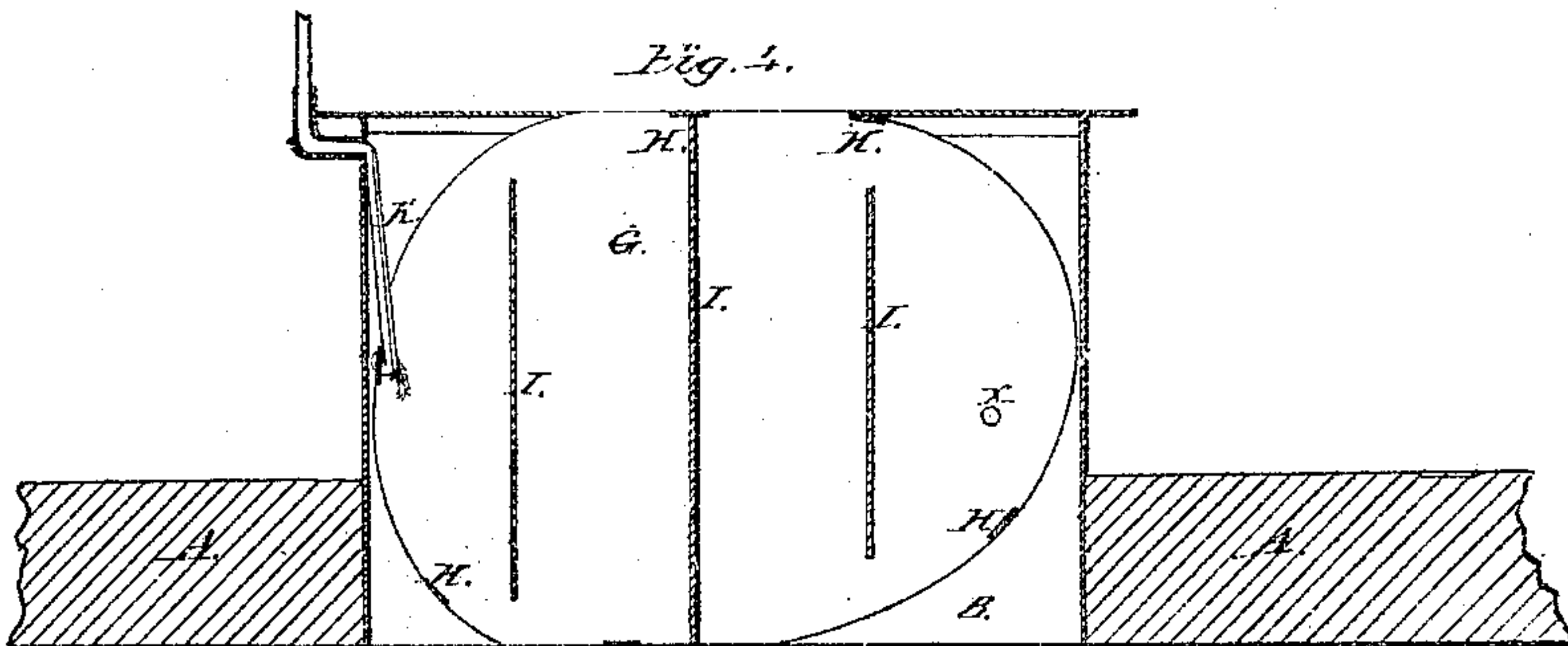


Fig. 4.



Witnesses:

W. H. Burridge

J. Holmes.

Inventor:

Capt. D. P. Nickerson

United States Patent Office.

D. P. NICKERSON, OF CLEVELAND, OHIO.

Letters Patent No. 61,351, dated January 22, 1867.

IMPROVED CENTRE-BOARD AND BOX FOR VESSELS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Captain D. P. NICKERSON, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in a Combined Ship Centre-Board and Box; and I do hereby declare that the following is a full and complete description of the construction of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the board.

Figure 2 is a top view.

Figure 3 is a vertical section of the box.

Figure 4 is a longitudinal vertical section of the board.

Like letters refer to like parts.

A, fig. 1, is the keelson upon which the centre-board box or case, B, is placed and secured to the same in any suitable manner. This keel-box or case is constructed of iron, and is of the shape and size as those in ordinary use. C are braces for the purpose of giving additional strength to the side of the case. D are angle-irons fixed to the sides of the box, in which are placed and secured the ends of the beams E, fig. 2, and by the means of which the box is supported in a vertical position. F is the top or cover of the box fitted and secured to the same in any desirable manner. G G', fig. 3, is the centre-board, which, with the box, is in size according to the burden of the vessel. This board is also constructed of iron, which are two plates so arranged as to have their planes parallel to each other, and are connected together by stay-bolts, H, which reach across from one to the other, and which serve also as braces for the support of the two sides. I are also braces placed transversely between the sides of the board, and by the means of which the two sides are kept from being pressed together, giving by this means additional strength to the board. The board is placed within the case and pivoted to the same at the point x, and is operated in the following manner: When required, it is dropped from the position shown in the drawing to that indicated by the dotted lines J, fig. 3, which is below the bottom of the vessel, and which distance may be more or less, according as circumstances may require, and is again drawn back into the box by the rope or chain K, to which it is attached. This chain passes through the end of the box, and from thence to the deck, where it may be operated by any convenient means. The advantages resulting from the use of a centre-board constructed in this manner are as follows, viz: The case or box being constructed of iron is much stronger than one made of wood, and will not rot out as in the case of wooden ones. It is also being fixed to the keels on in such a way that it can be easily removed or detached and placed in another vessel without injury, hence by its portability it can be saved should a ship go to pieces or be worn out. In placing this board in a vessel, the keelson is cut or mortised through in order to allow the board to drop into the water; hence the keelson can be made in one piece, and is therefore stronger than a keelson provided with a wooden box and board in the ordinary way. The board being made double, having thereby a space between the sides, it offers less resisting surface to the water in the direction of the course of the boat, increasing by this means the speed of the vessel. It also gives a double action or resistance to the careening of the vessel by presenting two surfaces at once to the water. By the introduction of the braces I between the sides of the boards, they not only prevent the sides from being pressed together, but by their broad surface presented to the water they lessen the rocking of the vessel when in short seas, which, in a vessel lightly laden, is of great importance, at the same time effecting no obstruction to the speed of the vessel.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The arrangement of a metallic centre-board constructed with the two sides G G', the braces I, and stay-bolts H, in combination with the metallic box B, for the purpose and in the manner set forth.
2. The portable metallic centre-board box, constructed with braces C and angle-irons D, as and for the purpose set forth.

D. P. NICKERSON.

Witnesses:

W. H. BURRIDGE,

J. HOLMES.