J. L. MASON.

FOLDING LIFE-RAFTS.

No. 176,024. Patented April 11, 1876.

Fig. 1.

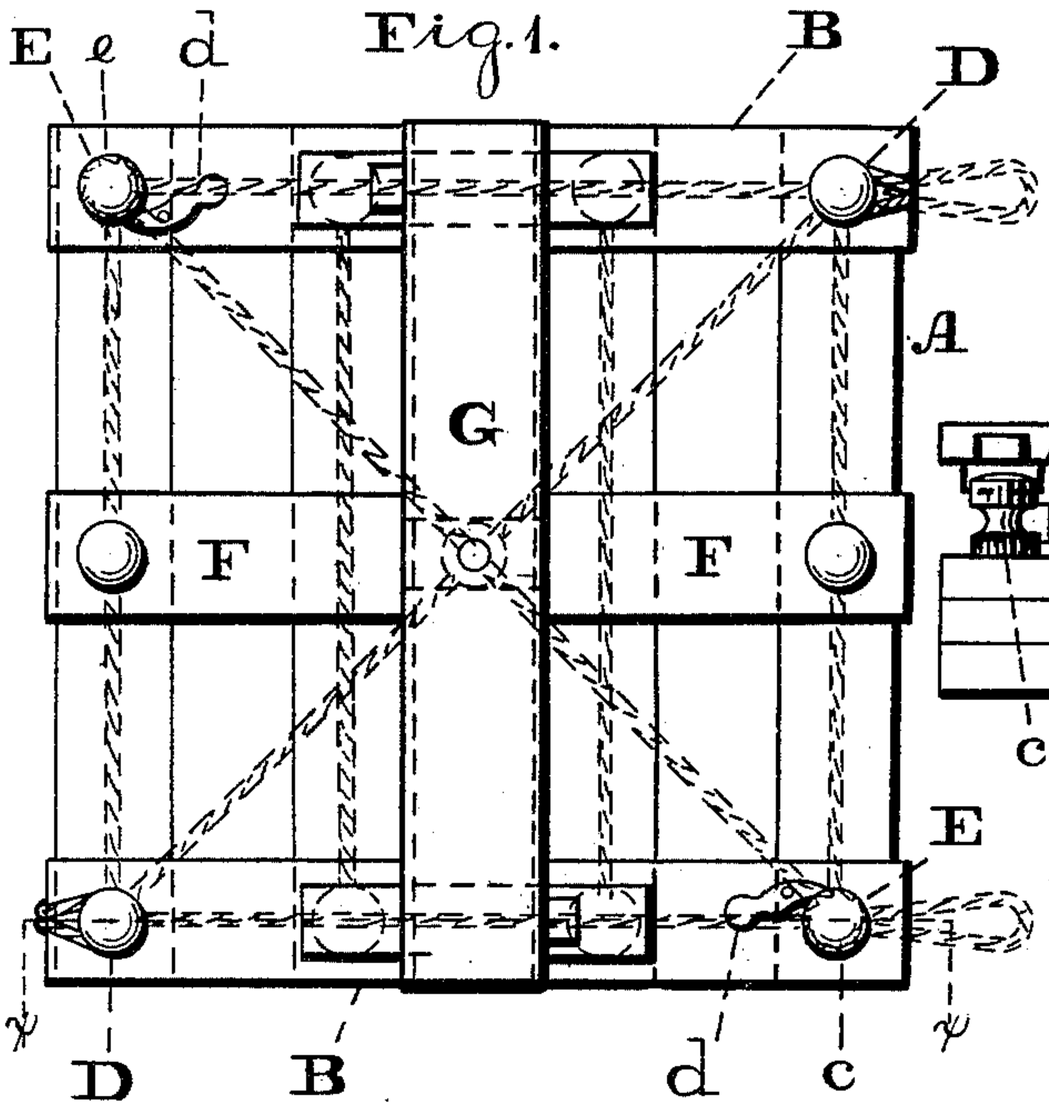


Fig. 2.

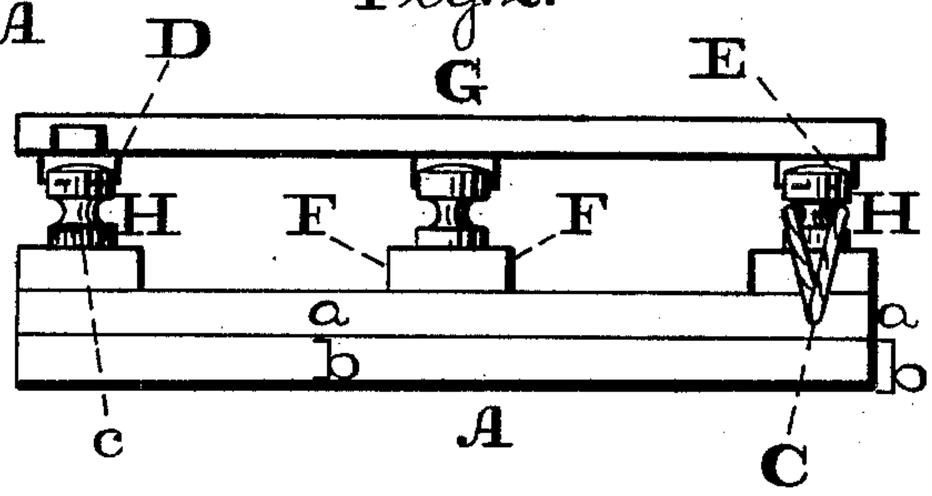


Fig. 3.

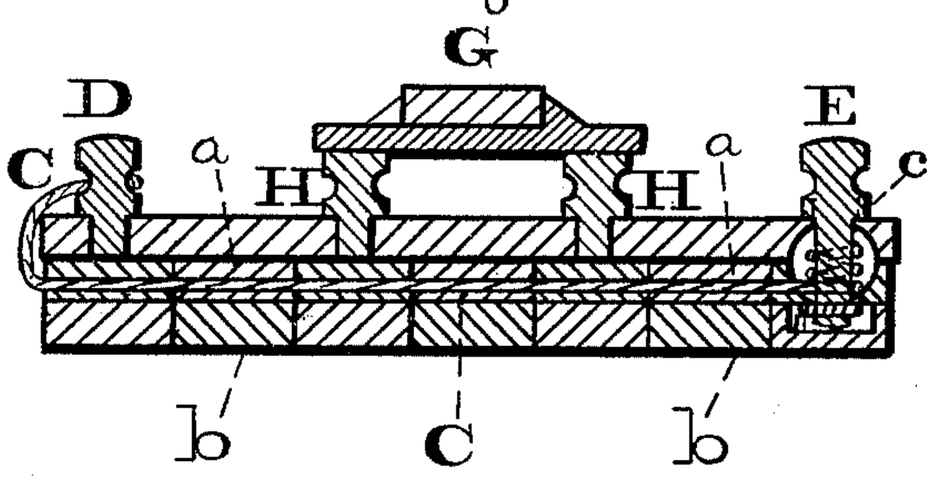


Fig. 4.

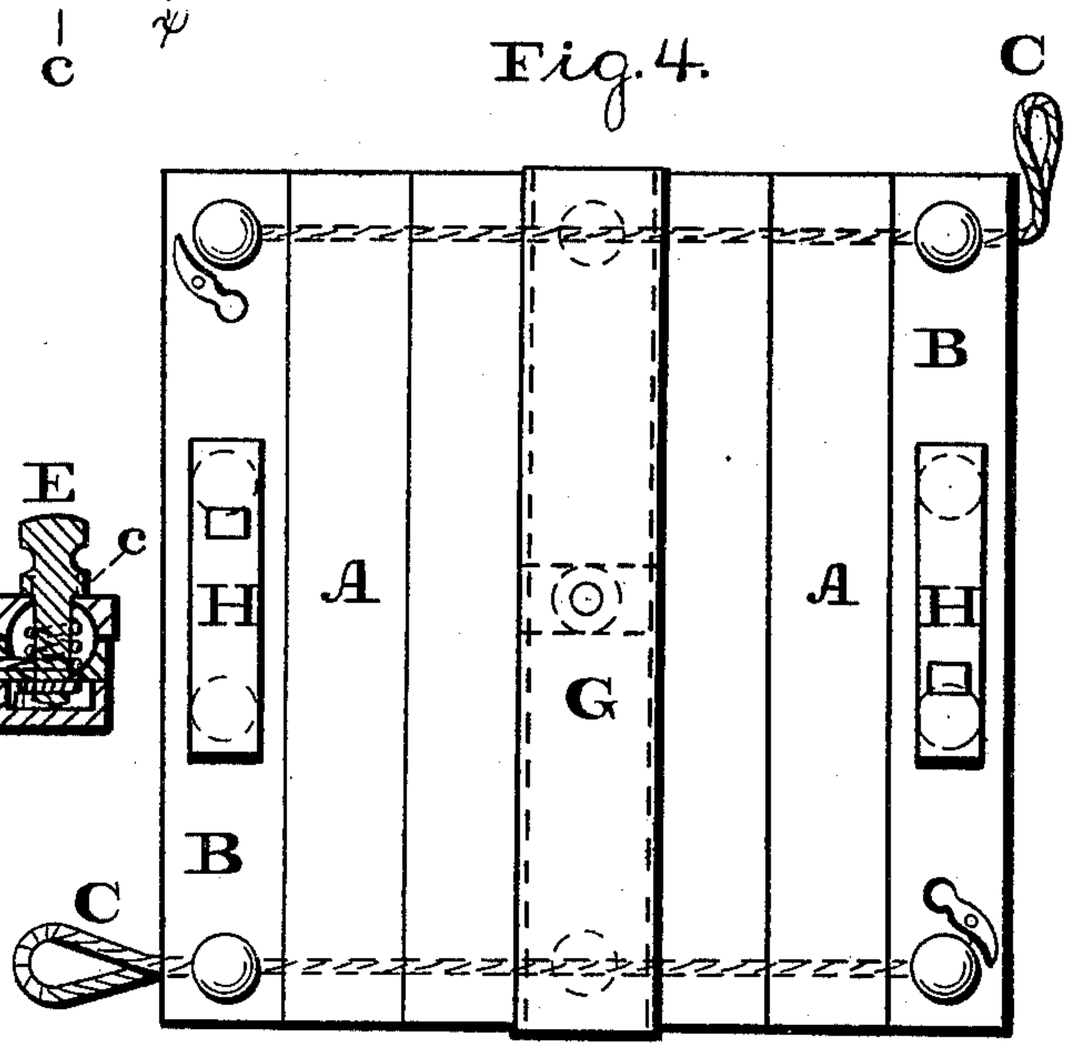
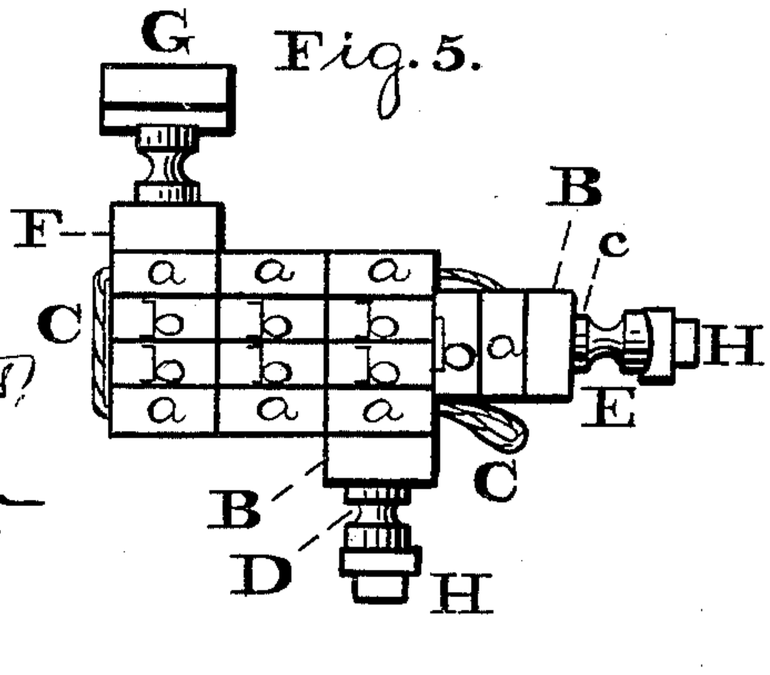


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN L. MASON, OF CAMDEN, NEW JERSEY.

IMPROVEMENT IN FOLDING LIFE-RAFTS.

Specification forming part of Letters Patent No. **176,024**, dated April 11, 1876; application filed August 26, 1875.

To all whom it may concern:

Be it known that I, JOHN L. MASON, of the city and county of Camden and State of New Jersey, have invented a new and useful Improvement in Life-Rafts; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invetion appertains, to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figures 1 and 4 are top or plan views of the device embodying my invention. Fig. 2 is a side view thereof. Fig. 3 is a transverse section in line *x x*, Fig. 1. Fig. 5 is an end view thereof folded.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in a life-raft constructed of bars or slabs of floating material, which are confined in position by folding brace-bars and tightening-cords. It also consists in constructing the body of the raft of combined bars and slabs of wood and cork, so that it possesses strength with the necessary degree of flotation, the tightening cords being passed through the wood, which will bear the strain. It also consists in a raft constructed of a series of bars, and provided with a pivoted seat, whereby it may be folded in compact form.

Referring to the drawings, A represents a series of bars, which are made of pieces of wood and slabs of cork, as shown at *a b*, connected together, and forming compound bars, of which the wood is on the upper side, the series forming the body of the raft. It will be seen that by this construction the upper face of the raft will be enabled to stand the weight of the persons placed thereon and not break, as is customary with cork, and the cork under surface will provide the necessary flotation. To the end pieces of the raft there are hinged brace-bars B, which are adapted to be swung over the said pieces transversely to the length thereof, and in order to tighten or close the series of pieces cords C are passed through the pieces in the direction of the bars B, and one end of each cord is looped, so as to be placed on a button, D, at one end of the bar B, and the other end is connected to a rotating button, E, which is journaled in the other end of the bar B, so that by turning the buttons E the cords will be wound thereon, thus drawing together the series of bars and holding them tightly in position. In order to prevent the loosening of the cords the buttons E are formed with ratchets *c*, with which engage pawls *d* attached to the bars. F represents a bar, which is pivoted to the central bar of the body of the raft, and on the upper face thereof there is jointed a seat, G, whose ends are adapted to rest on supports H rising from the end bars B, as shown in Figs. 1 and 2, in which position of parts the raft is in operative condition. It will be seen that the body of the raft will be firmly held together by the cords C, and braced by the bars B. The persons on the raft occupy the seat G, and in order to prevent them falling from the seat or body of the raft, they may be lashed to cords extending in various directions, as shown by the dotted lines, Fig. 1.

When the raft is not in service it may be readily folded. To accomplish this, the cords C are released from the buttons D, and the bars B swung out from their positions, (the buttons E acting as axes) so that the bar F, which carries the seat, may be turned in the direction of the bars A, and when the said bar is thus turned, the bars E are turned on the bars A at a right angle to that they formerly occupied, all as shown in Fig. 4. The bars A being thus relieved the entire device may be folded or bundled, as shown in Fig. 5, and thus compactly folded away. To again form the raft the slats are unrolled, the bars E and F turned to their proper positions at right angles to the length of the bars A, the cords C hitched or looped to the buttons D, the buttons E rotated, thus tightening the cords C, and the seat G swung around so as to rest on the supports H on the bars. The main lengths of the cords C are inclosed in the bars A and thus protected from cutting from the outside, and said cords provide flexible connoctions for the bars A. Loops, straps, or other appliances may be attached to the sides of the raft, so that a series of rafts may be formed and constitute a bridge, or an extended raft for reaching from the ship to shore.

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

1. The series of buoyant bars A, brace-bars B, and brace-bar F, in combination with the tightening-cords C, substantially as and for the purpose set forth.

2. The series of buoyant bars A and brace-bars B, in combination with the tightening-cords C, and operating buttons E, substantially as and for the purpose set forth.

3. The bars A *a b*, formed of wood and cork, in combination with tightening-cords C, passed through openings in the wood, substantially as and for the purpose set forth.

4. The folding seat G, pivoted to the pivoted bar F, in combination with the series of of bars A, substantially as and for the purpose set forth.

JOHN L. MASON.

Witnesses:
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