

N. Thompson, Jr.

Life Boat.

N^o 10,766. Patented Apr. 11, 1854.

Fig. 1.

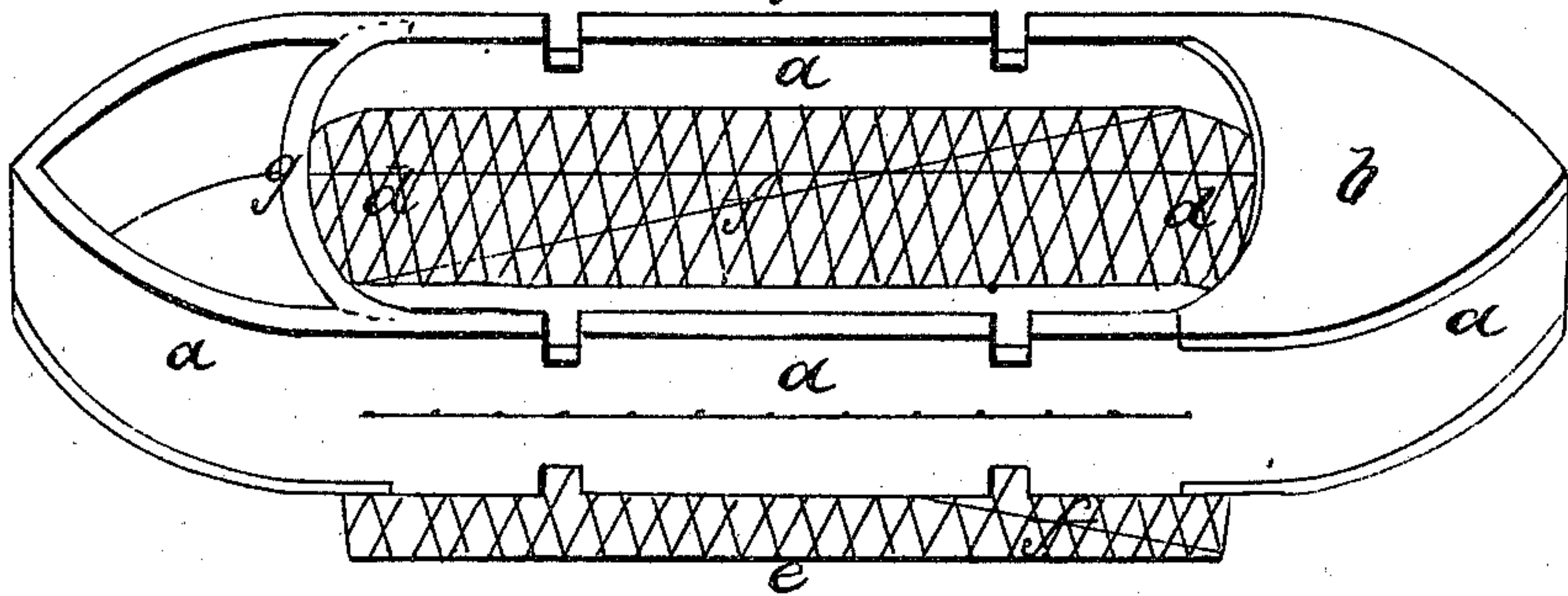


Fig. 2.

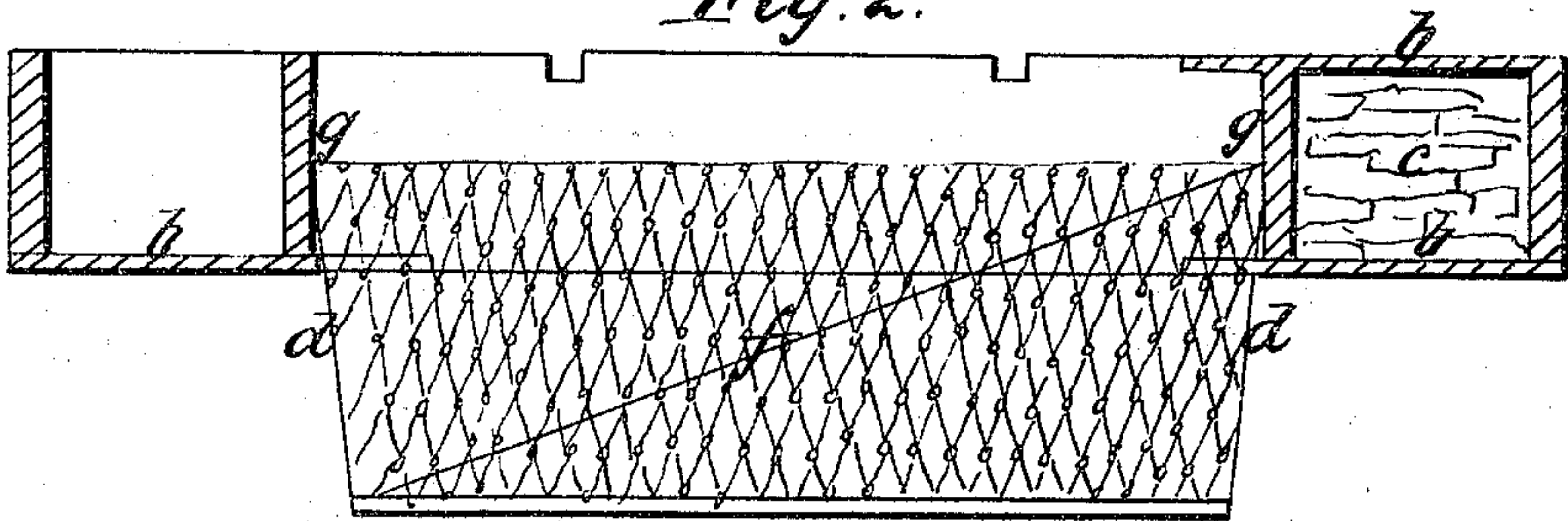


Fig. 3.

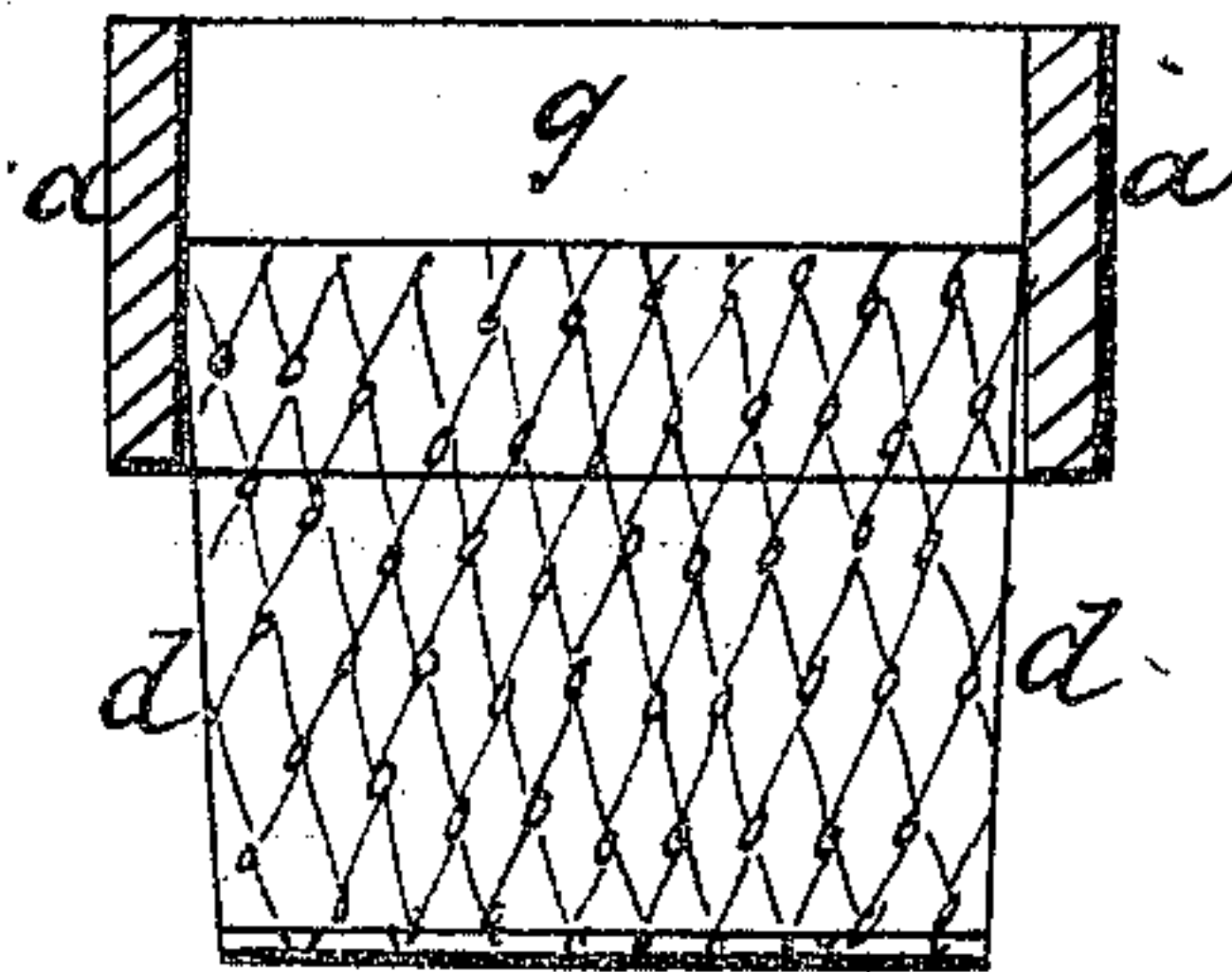
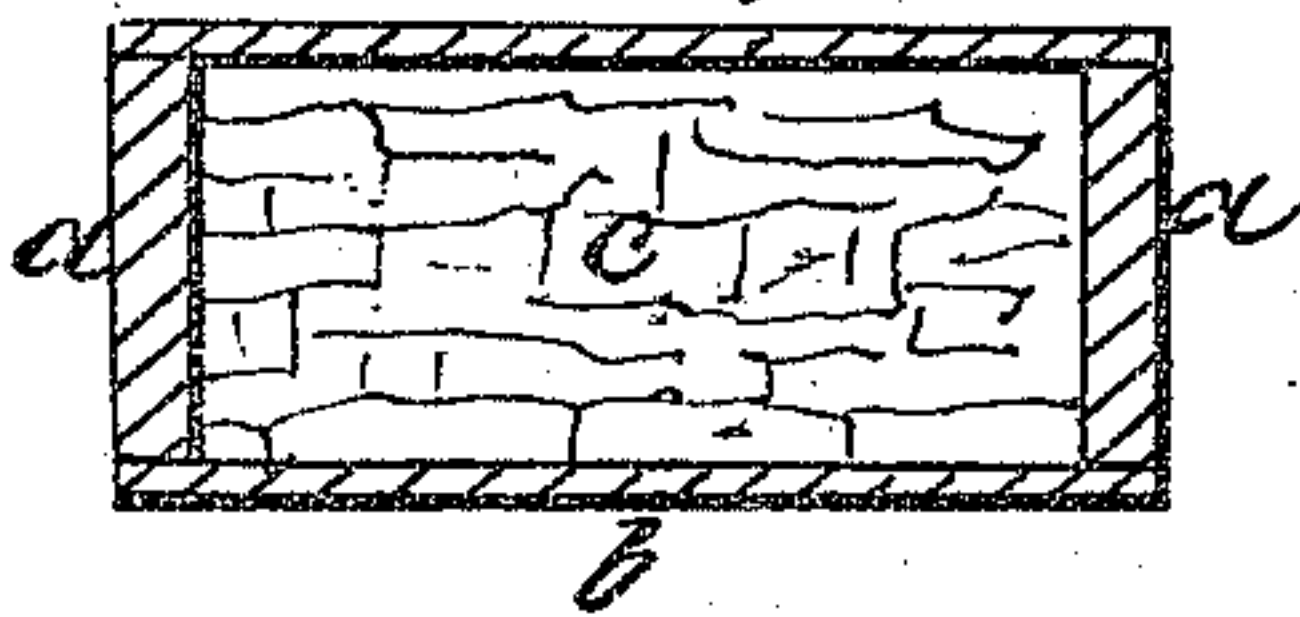


Fig. 4.



UNITED STATES PATENT OFFICE.

NATHAN THOMPSON, JR., OF WILLIAMSBURG, NEW YORK.

REVERSIBLE LIFE-BOAT.

Specification of Letters Patent No. 10,766, dated April 11, 1854.

To all whom it may concern:

Be it known that I, NATHAN THOMPSON, Jr., of Williamsburg, Kings county, New York, have invented certain new and useful
5 Improvements in Life Boats or Cars, and that the following specification, taken in connection with the drawings, is a full and fair description thereof.

The object of my invention is to produce
10 a cheap and reliable life boat, serviceable but of so small cost that it comes within the means of owners of small coasting vessels while it is so constructed that it will carry many persons and still take up but
15 little room when stowed on deck, and be at the same time so strong as to be incapable of being injured while in use. It will of course be useful to others than those specially named and may be employed to good
20 advantage as a float such as is set forth in the present steam boat law. In its general appearance it resembles one or two well known life boats, but its distinctive feature and that which gives it great capacity is
25 its extensible bottom, and in this and one other necessary adjunct is comprised the whole of my invention.

Perfect reliability in time of danger, ease in launching, lightness, and strength are
30 qualities required in all lifeboats, and mine possesses these and in addition another quality, viz, that it will support, without danger of being thrown out of it more persons than can be carried by any life boat
35 which is of the same size when stowed.

The nature of the first part of my invention therefore consists in an extensible bottom, constructed and applied to a life boat substantially in the manner and for the
40 purposes hereinafter described. And the nature of the second part of my invention consists in bracing said bottom in such a manner that it will when in use apply itself vertically under the cavity of the boat
45 to which it is attached substantially as hereinafter described.

Those life boats and balsas which can be launched either side up, and have a bottom in the middle of their height measuring up
50 and down their sides, are most convenient in use first for the reason that when upset they are again right side up and second because no care is required in launching them. But in such boats there must, unless the boat
55 is of uncommon and inconvenient height be but little room for passengers and that in a

shallow cavity where they are but ill protected from being washed out by a breaking sea. The center of gravity of the load is moreover on the same level or nearly so as
60 the center of buoyancy of the boat and it is therefore unstable. My boat is of this class in so far as it is reversible, but my improvements render it capable of carrying safely
65 a large load in proportion to its size while they at the same time render it stable, or as seamen term it stiff.

In the drawings—Figure 1 is a perspective view of the boat complete, with the exception of the deck over one of the buoyants, and the buoyant itself. Fig. 2 is a
70 longitudinal section through Fig. 1. Fig. 3 is a transverse section through the center of the boat and Fig. 4 is a transverse section through one of the buoyant chambers and
75 the decks over it and sides of the boat.

My boat is usually constructed by taking two stout planks and bending each of them substantially as represented in the drawings and uniting their ends firmly, two other
80 pieces of the same height are then bent in a semicircular shape and so secured as to make a sort of second bow and stern inside of the other bow and stern with sufficient spaces between them to hold buoyants. The
85 buoyants are then inserted and decked over on top and bottom. This forms a boat without a bottom. A piece of netting or its equivalent like a bag without a bottom is then secured by one edge all along the cen-
90 ters of the inside bow and stern and all along the inside of each side, and to the other edge or bottom of the sides of the bag is attached a piece of plank of smaller area than that inclosed by the sides and inner
95 bow and stern, but of similar shape. Two strong lines or cords are now attached by one end to one corner of the bag's bottom, and by the other to the boat proper near the center of its depth and at the junction of
100 the inner bow or stern with the sides. These lines are so arranged that each leads in an opposite direction as shown in the drawings, and four or more of them may be applied if
105 deemed necessary.

In the drawings *a a*, represent the sides of the boat, *g g*, the inner bow, and stern, *c c* the buoyants, *b b* the decks, over them
110 *d d* the bag of netting, *e e* the bottom attached thereto, and *f f* the diagonal bracing cords.

The buoyants may be masses of cork, or

sheet metal boxes, or their equivalents, and may be without, or with decks.

The boat may in some instances be made wholly of sheet metal. The netting may have substituted for it a bag of cloth, canvas, or india rubber or their equivalents and may inclose or go under the wooden bottom, or the wooden bottom may have substituted for it a piece of metal, or may be dispensed with entirely when the bag has a bottom of the same stuff as itself is formed of. This latter plan however would be very inconvenient for the passengers. When thrown overboard the bottom drops below that edge of the sides which may happen to be lowermost and the passengers jump in, their feet then rest on the bottom proper *e e*, draw the netting taut and also the lines *f f*, and these latter prevent the sagging of said bottom toward either bow or stern. The center of gravity is low down, the boat is stiff, will hold many people securely and may be propelled either by oars, or paddles, and if it be by any accident upset, admits of the bag and its bottom being pushed through the cavity so that it is in fact right side up again without being righted.

When it is stowed on deck the bag and bottom are stowed inside of the cavity and the boat requires no more room than if its capacity to inclose passengers was no larger than that inclosed between its sides and interior bow and stern.

If the bag be made of india rubber the

passengers will remain dry until a sea is shipped, but as this always happens to small boats in rough water, I think it best to use netting as the passengers must in any event be thoroughly wet.

I would state in conclusion that I intend to use any known kind of life boat provided its bottom be taken out, and then when my bottom is applied thereto it will constitute my invention, and further I would state that I do not claim as of my own invention a boat whose bottom is secured near the middle of its height, or depth, nor one whose bottom slides up and down from the lower to the upper edge of the sides and vice versa—neither do I limit myself to the use of any special materials in constructing my extensible bottom or bracing thereto. But

I do claim as my own invention:

1. The extensible bottom which may be stowed within the boat or when in use drop below either side of it, constructed and applied to a life boat substantially in the manner and for the purposes herein described.

2. I claim in combination with such an extensible bottom the diagonal bracing cords applied in the manner and for the purposes substantially as described.

NATHAN THOMPSON, JR.

Witnesses:

HENRY C. BANKS,
J. DRIGGS.