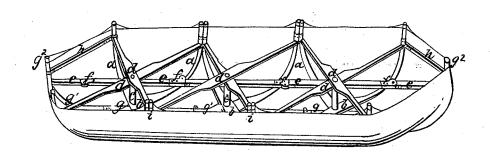
## S. C. Batchelor. Life Boat. Nº 1,935. Patented Jan. 20,1841.



## UNITED STATES PATENT OFFICE.

SOLOMON C. BATCHELOR, OF CINCINNATI, OHIO.

## PORTABLE SAFETY-BARGE AND ARMY-BOAT.

Specification of Letters Patent No. 1,935, dated January 20, 1841.

To all whom it may concern:

Be it known that I, Solomon C. Batche-LOR, of the city of Cincinnati, in the State of Ohio, have invented an Improved Boat, which I denominate the "Portable Safety-Barge and Army-Boat;" and I do hereby declare that the following is a full and exact description thereof.

My boat, or barge, is so constructed as to 10 be capable of being doubled up so as to occupy a very small space when it is not in use as a boat. Its exterior, instead of planking, consists of india rubber cloth, or of any other flexible material which is light, read-15 ily folded, and impervious to water. When opened out for the purpose of being used, the sides are sustained by suitable ribs of timber, constructed, and jointed together, in a way to be presently described. The por-20 tion of timber forming the keel is divided into lengths which are connected together by rule joints; and another portion of timber which extends fore and aft, or from stem to stern, directly above the keel, and

25 near the upper part of the boat, is, in like manner divided, and connected by rule joints, so that they may be doubled together, and when opened out the respective pieces will stand in a straight line, or nearly a 30 straight line; the rule joints connecting the several parts of this timber are so constructed as to open a little beyond a straight line, and this forms a kind of lock, as this part

acts as a longitudinal stretcher; the two 35 end pieces of the keel curve up, so as to constitute a stem and stern post.

The accompanying drawing represents my boat, or barge, in perspective. The pieces of timber which constitute the ribs of my 40 boat, or barge, and which are marked a, a, a, consist of hickory, ash, white oak, or other tough, hard wood adapted to the purpose; these pieces are to be bent into the form of a bow, so as to constitute when properly 45 placed, the cross bottom timbers and ribs of the boat; they must, of course, be of such length as will adapt them to the particular purpose to which they are to be applied. These rib-pieces are placed in pairs, crossing 50 each other at their middles, as shown at b, b, b, where they work upon joint pins, formed by the lower ends of the vertical standards c, c, c. Each of these rib-pieces is connected together near its upper end, by 55 a straight stretcher of wood d, and when in place the respective pieces d, d, cross each other, and work on joint pins at the upper ends of the standards c, c, c. The upper fore and aft timber is marked e, e, e, its parts being connected by rule joints at 60 f, f, f; and it is also jointed to the crosspieces d, d, by the joint pin upon which they work. The keel pieces g, g, g, are connected in like manner to the rib pieces b, b, and work upon joint pins passing through 65 and work upon joint pins passing through 65 them, and through b, b, on the lower ends of the standards c, c; one of the curved end pieces of the keel is seen at g', and the upper ends of both of them at  $g^2$ ,  $g^2$ . The two cross pieces d, d, which are nearest to the 70 ends of the boat, are united by hinge joints to straight pieces of stem and stern, or bow, timber h, h, which are hinged at their other ends to the stem and stern posts. Where two ribs meet at the sides of the boat, as at 75 i, i, i, they are united by hinge joints; and it will be readily seen that all the timbers may, from the arrangement of joints as above described, be folded together in such manner as that the length occupied by the 80 boat when so folded, will be equal only to that of one of the bow pieces constituting the ribs, and the width only equal to that of three of the cross timbers d, d, and the thickness of the stern posts; that is, suppos- 85 ing there are three crosses to the boat, as in the drawing; but this number may be increased or diminished at pleasure. I have spoken of stem and stern posts; but these terms must be understood as convertible, the 90 two ends of the boat being similar.

A boat upon the foregoing plan which I have constructed weighs, altogether, thirty five pounds, and it is capable of carrying, very readily, a load of two thousand pounds. 95

Having thus, fully described the manner in which I construct my portable safety barge and army boat, what I claim therein as constituting my invention, and desire to secure by Letters Patent, is-

The manner in which I have arranged and combined the pieces of timber forming the ribs, the cross-pieces by which their ends are sustained, and the longitudinal pieces constituting the keel and the upper timber 105 e, e; the respective parts being united by joint pins, hinge joints, and rule joints, substantially as herein set forth, so that the whole, when not in use, may be folded together, and be instantly prepared for use by the mere act of unfolding, or opening.

## SOLOMON C. BATCHELOR.

Witnesses:

EBENEZER HARRISON, LORENZO D. ROBINSON.