## W & T. Schnebly. Life Boat.

Nº0,053.

Patented Jan. 23,1849.

Fig:1.



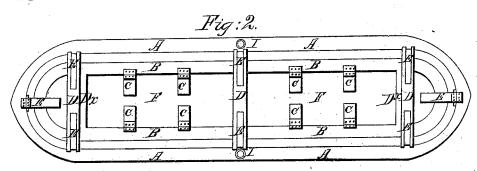
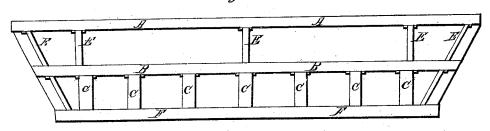
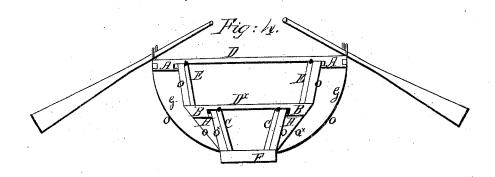


Fig: 3.





## UNITED STATES PATENT OFFICE.

WM. SCHNEBLY AND THOS. SCHNEBLY, OF HAGERSTOWN, MARYLAND.

## IMPROVED SELF INFLATING AND FOLDING LIFE-BOAT.

Specification forming part of Letters Patent No. 6,053, dated January 23, 1849.

to all whom it may concern:

Be it known that we, WILLIAM SCHNEBLY and THOMAS SCHNEBLY, of Hagerstown, in the county of Washington and State of Maryland, have invented a new and Improved Mode of Constructing Life-Boats; and we do hereby declare that the following is a full and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side view of the boat when closed and stowed away. Fig. 2 is a plan view, showing the thwarts and extensors or supporting-braces. Fig. 3 is a longitudinal section through the middle, exposing half of the boat when inflated and ready for service, the thwarts and extensors being all in place. Fig. 4 shows a transverse section of the boat through the gunwales A A B B, the extensors C C E E, the thwarts D and D, and the air-chambers G G H H, similar letters being used in each figure to designate the same parts.

The accompanying drawings and model represent the boat as having an upper and lower gunwale, and likewise double air-cases, one surrounding the other, so that in case of accident happening to one reliance may be had upon the other. It is manifest that the extra air-chamber and upper gunwale may be dispensed with without altering the principle.

A A represent the upper gunwale, made of suitable material and of proper width and thickness, having openings at I I, Fig. 2, to admit air into the chamber G G, between the sides O O, Fig. 4, as the boat is shifted from its packed form, as at Fig. 1, to its extended form, as at Fig. 3, by raising the gunwales so as to bring the extensors and thwarts into play. This being done, the air-holes I I are securely closed by proper plugs or valves. Both the upper and lower gunwales are in this respect alike, so that the elevation of the upper gunwale lifts the lower, and causes the air-chambers beneath each and between their respective sides to become filled more or less with atmospheric air.

The sides of our life-boat, instead of being of wood or metal, are made of india-rubber or other air and water tight fabric, the novel feature of which consists in the sides being formed of two or more instead of a single thickness, thus admitting an air space between the thick-

nesses for buoyant purposes. These air-spaces may be divided into any required number of distinct compartments for greater security. The two or more thicknesses of the flexible material forming the sides of the boat meet, and are in contact where they are attached to the bottom of the boat around its outer edge, and fastened by any secure method; but the said two or more thicknesses of flexible material are separated where they are joined to the gunwale, the outer thickness being attached to the outer edge of the gunwale, and the inner thickness being attached to the inner edge of the gunwale, by any secure and convenient method known. The spaces thus formed between the two or more thicknesses so described serve as air-chambers, which become inflated more or less, as above mentioned. The extensors C C C are attached to the inner edge of the gunwale by hinges or other suitable fixtures, so that when the gunwales are raised they will drop down and rest upon the bottom of the boat, where they are then secured by proper fastenings, while those attached to the upper gunwale will fall in their proper places.

D D represent the thwarts, which extend across the boat and brace the gunwales.

E E, Fig. 4, represent the extensors, attached to the upper gunwale, the lower ends of which rest upon the top of the lower gunwale; and C C, Fig. 4, represent the extremes attached to the upper gunwale, the lower ends of which rest upon the bottom of the boat. FF represent the bottom, which is made in the ordinary way and of any suitable material. O O O represent the flexible material forming the sides, G G being the air-chamber between the sides, attached to the upper gunwale, AA, Fig. 4, and H H being the air-chamber between the sides, attached to the lower gunwale, BB, Fig. 4. These air-chambers may have a communication between them; but we think it is better not so. They may also be more completely distended to increase the volume of air and the buoyancy of the boat by having air forced into them by an air-pump attached to the gunwale, which is not shown in the model or drawings.

From this description it will be perceived that the gunwales and bottom of our boat are much after the ordinary models, except that the intermediate gunwale is considerably wider, the novelty of our boat consisting in its two or more sides of flexible material, impervious both to air and water, so arranged, in combination with the gunwales and bottom, as to form air-chambers, which may be inflated with air more or less by simply placing the parts in their proper relative position to form a life-boat, which is accomplished by standing within, upon the bottom, or on the outside of the boat and grasping the upper gunwale and raising it up, the whole being kept in position by the extensors and thwarts described herein, the object of this arrangement being to admit of its being folded up and stowed away in a small space.

What we claim, and desire to secure by Let-

ters Patent, is—

Forming the sides of life boats of two or

more thicknesses of flexible material impervious to both air and water, so arranged and in combination with gunwales or intermediate gunwales and the bottom as to form air-chambers on both sides of the boat, from stem to stern, which may be inflated with air more or less by raising up the gunwales or intermediate gunwales from the bottom of the boat, on which they rest when the boat is folded up, substantially as described.

WM. SCHNEBLY. THOMAS SCHNEBLY.

Witnesses:

THADDEUS HYATT, D. BIRDSALL, JOHN HEALHOPE.