

UNITED STATES PATENT OFFICE.

SAMUEL MILLS, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF, AND FREDERICK FRANCK, OF SAN FRANCISCO, CALIFORNIA.

LIFE-BOAT.

Specification of Letters Patent No. 29,508, dated August 7, 1860.

To all whom it may concern:

Be it known that I, Samuel Mills, of the city and county of New York, in the State of New York, have invented new and useful Improvements in Life-Boats and Provision-Magazines; and the following is a clear and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1, shows a top view of the boat, with the several compartments for air, water, and the provision magazine. Fig. 2, is an end view of the boat, cut in the center in section, with the center piece which is the magazine for stores, depressed.

My invention relates to the construction and arrangement for life-boats, that cannot be swamped, capsized and rendered useless, or lost, and also carrying stores of fresh 20 water, and provisions.

To enable others skilled in the art, to make, and use my improvements in lifeboats, I will proceed to describe it in detail, referring to the drawings, and the letters marked thereon.

The portion that forms the outside section, or bulwark, as represented in Figs. 1 and 2, by the letters (A, A,) may be made of any material that is best calculated to secure strength and buoyancy. It may be of cork, or with air-tight sections. The form of an ellipse which is a common shape for boats, is the best, and especially so for my present plan and purpose, as the interior, and other arrangements are such, that their form, allowing the sides to yield, and be compressed there will be much less liability of their being damaged or stove in, by getting under paddle wheels, or striking against firm hard substances, or by the action of breakers.

Inside of the bulwarks (A, A,) and conforming to the shape of the boat, is fitted another air, and water-tight section (B, B,) which is about one half of the depth of the outside section or bulwark (A, A.) The section (B, B,) forms a part of the platform or support for persons in the boat, and may be divided into several compartments, each having an aperture on both sides (b, b, b, b,) which are stopped by screw plugs or corks, so as to be perfectly tight. This entire section is designed for a tank to be always kept supplied with fresh water, on going to sea, so that in any sudden emergency when the boat is launched, there is a supply of fresh

water aboard that cannot be lost. In each aperture, will be secured a tube, or some instrument, by which the water can be extracted, or sucked up, when uncorked for quenching thirst. And again, on the inside 60 of that portion of the platform (B, B,) which forms the water tank, of the same depth, and shape, is fitted another section (C, C,) to be used for a buoy, it being an air chamber, so constructed as to admit of 65 two or three atmospheres being compressed into it. This also forms a part of the supporting platform, or bottom of the boat. Passing through this section, are rods, (c, c, c)c, c,) having on them a screw the whole 70 length, and on each end a circular plate (a, a, a, a,) which are to be used for seats to sit upon to row the boat, &c. By turning the seat, (like the top of a piano stool) the position of it will be changed, so that it matters 75

not which side up the boat rides. Inside of the section (C, C,) which forms the air chamber is fitted the magazine (D,) which may be made of any desired size and depth, for storing provisions, and other nec- 80 essaries, and should always be well supplied before going to sea. The magazine (D,) has an opening, or hatchway (d,) on both sides to close water tight. When the boat is launched, or floating on the water, the 85 magazine serves the purpose of ballast, to right up, and steady the boat while hanging on or climbing into it. The weight will always keep the top, or up side, on a plane with the air chamber, and water tank, which 90 form the bottom of the boat, so that the bottom part of the magazine falling below the other parts, makes a good center or lee board to prevent the boat from drifting to the leeward. The magazine (D,) the air chamber 95 (C₁) the water tank (B₂) and the buoyant section (A,) that forms the bulwarks or outside of the boat, are all made and finished separately, and are put together and secured by metal plates (e, e, e, e, e) or other suitable 100 fixtures so that the boat assumes the same form, and will perform the same functions, whether it be one side up, or the other. There are around both edges of the boat staples (f, f, f, f) in which ropes are fas- 105 tened to hold on. There may also be rings or sockets on both edges of the boat, for thole pins for rowing.

so that in any sudden emergency when the It is too well known that the boats now boat is launched, there is a supply of fresh in common use on sea going vessels, are 110

scarcely an apology for the name of "life boat," for among all of the catastrophes that have occurred, by the burning of ships at sea, or being run into, and sunk, not more than one boat out of ten, has proved of any avail, they have generally been stove in, or swamped at the out-set, and when in a few instances, one has been launched with care, as to escape immediate destruction, and a few persons have been saved from immediate death by drowning they have finally perished, the boat having left the ship without the possibility of taking in any fresh water or provisions

By my invention the boat is so constructed that the outside may yield or spring inwardly to prevent it being easily broken, the spaces, or openings between the other sections will discharge all of the water that she ships aboard, the tank and magazine will afford a supply of fresh water, and provision for as many persons as she will carry,

for at least thirty days, which, under almost all circumstances, would be picked up within that time. Thus it will be seen that my 25 invention is, in every sense a life boat.

Having thus fully described my improvements in self adjusting life boats, and provision magazines, what I claim as new and desire to secure by Letters Patent, is—

1. The arrangement of the several compartments, to reversible life boats, the same being protected by the outside section in the manner as described; and for the purposes herein set forth.

2. The application to reversible life-boats of screw seats:—the same being constructed, and arranged, substantially as, and for the purposes specified.

SAMUEL MILLS.

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Witnesses:

Edw. F. Brown, J. B. Woodruff.