

L. Ball.
Life Boat.

Patented Apr. 20, 1858.

Nº 12,977.

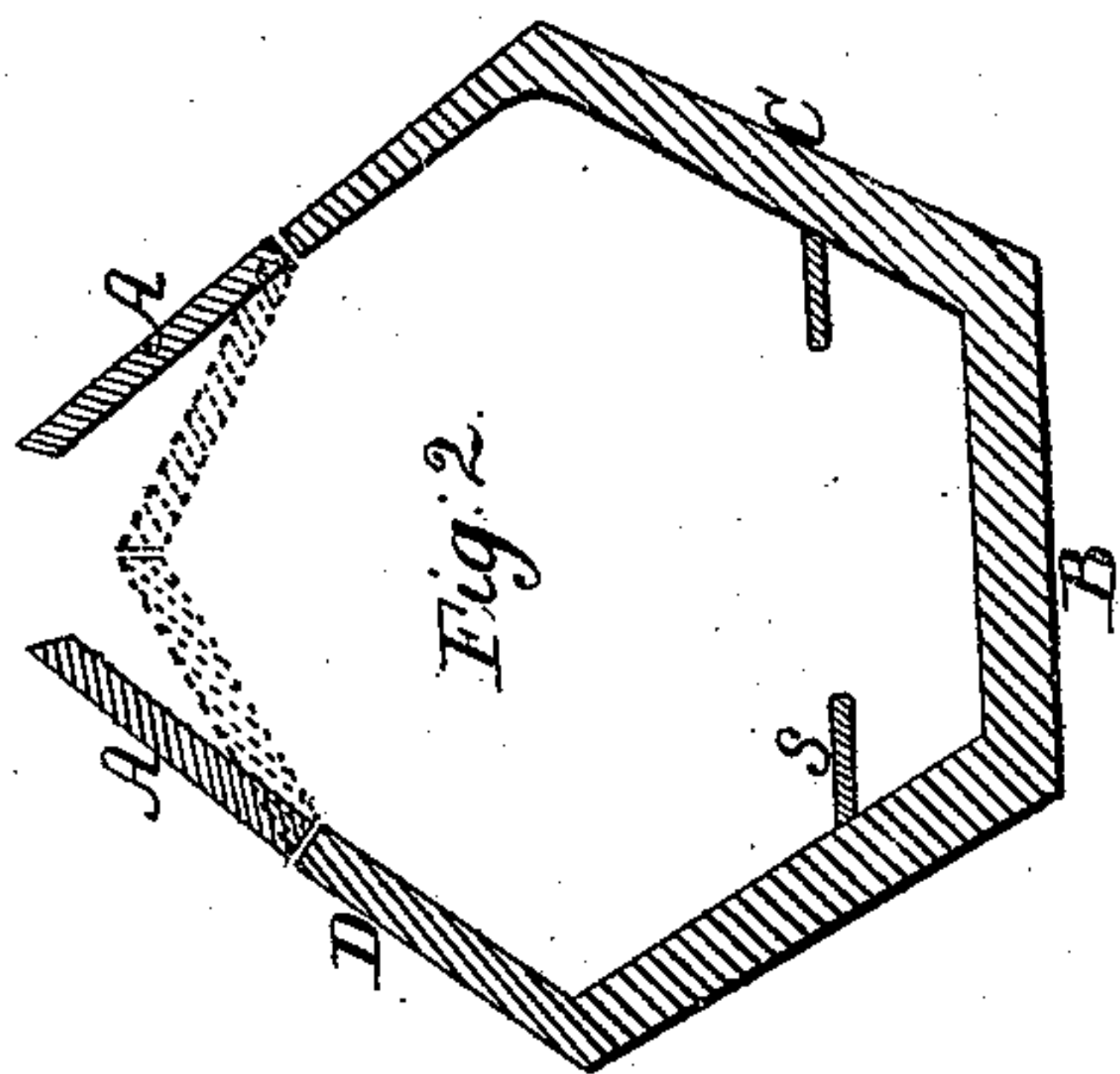
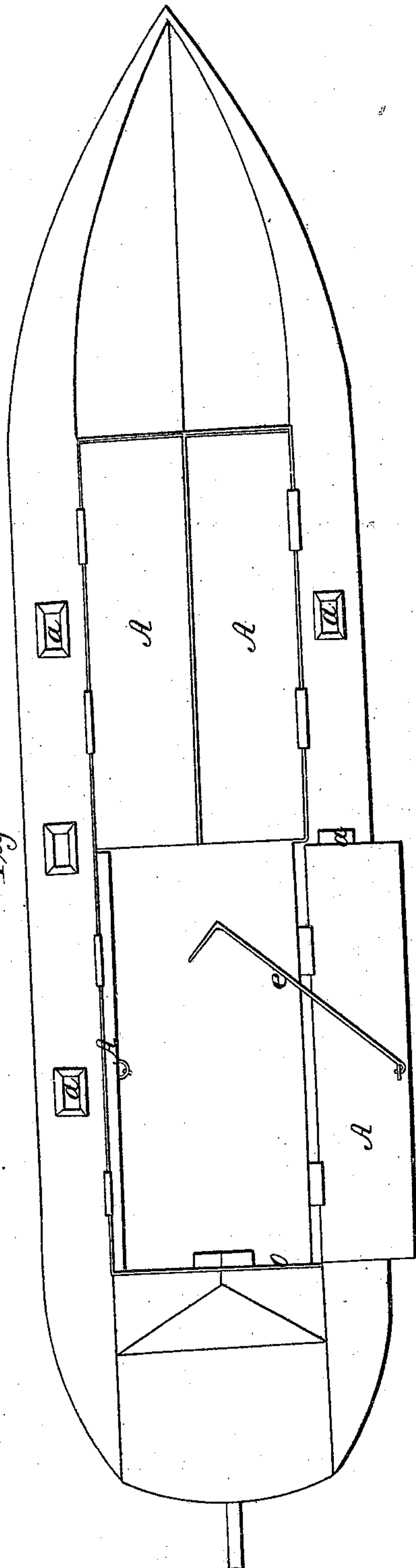


Fig. 1.



UNITED STATES PATENT OFFICE.

L. BALL, OF AUBURN, NEW YORK.

LIFE-BOAT.

Specification of Letters Patent No. 19,977, dated April 20, 1858.

To all whom it may concern:

Be it known that I, LEVERETT BALL, of Auburn, in the county of Cayuga and State of New York, have invented a new and Improved Life-Boat; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

In the use of small boats for preserving the lives of shipwrecked passengers, the greatest danger is usually at the moment when the boat, on being lowered from the ship, strikes the water, or when approaching the shore through the breakers. In cold windy weather, persons often perish from too great exposure in an open boat. To meet these emergencies some attempts have been made to provide a covered boat, but hitherto without success. Most of these boats are liable to capsize, and are incapable of righting themselves again. Others cannot be well ventilated, and the passengers sicken from foul air or die of suffocation.

The object of my invention is to provide a simple boat which can be loaded with passengers in the greatest hurry, and then be launched and kept alive in rough water.

In the accompanying drawings, Figure 1 is a top view of my boat, with two doors open, the other two closed. Fig. 2 is a cross section through the middle of the boat.

My invention consists of a life boat, made very light, and provided with doors covering the greater portion of the roof or top of the boat, and capable of being opened and closed at pleasure; so that a large number of passengers may occupy the boat, and by their added weight, prevent the possibility of capsizing, while ingress of water is effectually prevented, during the launching or any other like emergency, by closing the doors.

The bow and stern of my boat have a close deck, as shown in Fig. 1 of the accompanying drawings, and the intermediate portion of the boat is provided with doors A, A, two of which are closed, while of the other two, one is flung entirely open, the other partially so. The form of the hull as well as the position of the doors is best seen in Fig. 2. The bottom B of the boat, as shown also in my model is rather broad and flat. The sides of the hull C extend

obliquely outward and upward to about half the height of the boat. The upper half has oblique sides D, which are solid with the hull, and supplied with windows *a, a*.

Above the sides D, are the doors A, which may be shut, so as completely to exclude the water, as seen in red lines, Fig. 2, or they may be left partially open—being adjustable by hook *e*. When the doors are set a little way open, as seen in black lines, Fig. 2. A; the air can be freely admitted, and yet the water excluded, except under extraordinary emergencies, requiring the doors wholly closed until the danger of filling with water is past. This danger can arise only when the boat is temporarily submerged.

Metallic plates *o*, are arranged at the ends of the doors for the purpose of making a closer joint when partially open. The doors themselves may be provided with plates on their ends, and the joint at the hinge be closed by leather, canvas or caoutchouc.

Seats *s* are provided for the passengers near the bottom of the boat, and they may hold themselves fast by rods or be strapped to the seat, according to circumstances.

Near the stern of the boat is a high deck for several men to occupy in managing the boat.

The helm of the boat may be controlled from the inside of the boat if desirable.

The boat may be provided with sails or propelled by a wheel.

The bow and stern afford room for provisions.

The usual dimensions of my boat may be about 30 feet long, 8 feet wide and 7 feet high. A vessel of this size will carry 100 passengers. The position of the passengers, near the bottom of the boat, together with the height of the roof, prevent the boat from capsizing. If the wind or a wave should strike the boat, throwing it upon its side, the weight of the passengers, together with the buoyancy of the upper part of the boat will bring it again to an upright position.

It will be seen by Fig. 2 that the upper half of the boat slants inward, so that the wind and waves lose their force upon the boat, when it is careened, and yet there is no danger of filling the boat with water. A

heavy wave may ride completely over the boat and yet she will rise in a moment without harm to the passengers.

Although I have represented only one
5 form of boat, having a broad and flat bottom, yet my invention is equally applicable to a boat with a different keel,—of such form as to sail well, and also to a boat constructed of any different material, as of
10 iron or gutta percha.

Having thus fully described my inven-

tion, what I claim and desire to secure by Letters Patent of the United States is:

The combination of the above described doors with the life boat, for the purpose of 15 preserving the lives of shipwrecked passengers, substantially as set forth.

LEVERETT BALL.

Witnesses:

DANIEL BREED,
EDW. F. BROWN.