

A. L. Shears. Life Boat.

No 49,197.

Patented Aug. 1, 1865.

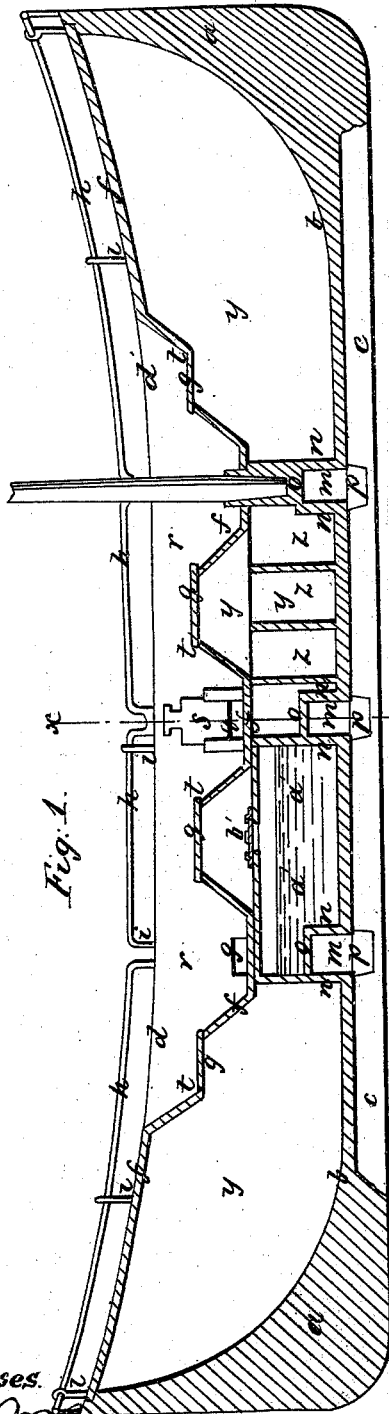


Fig. 1.

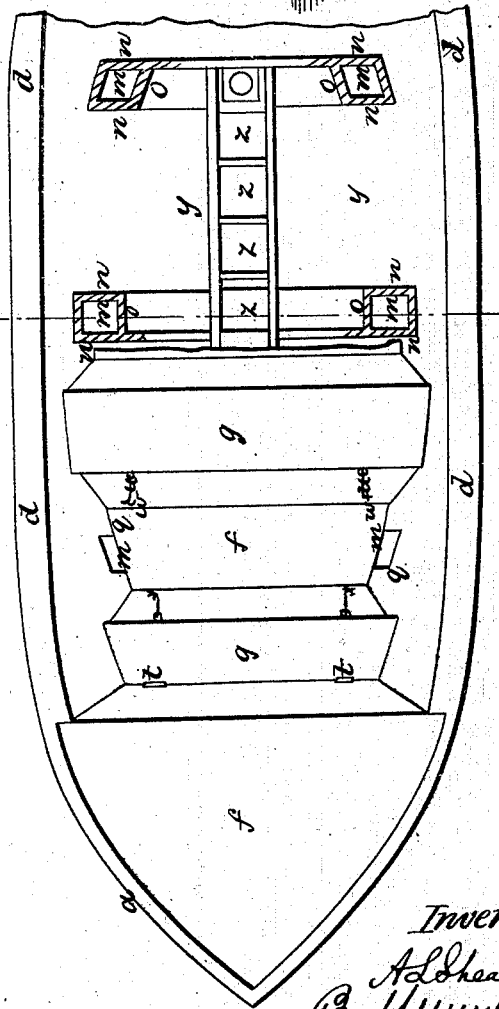


Fig. 2.

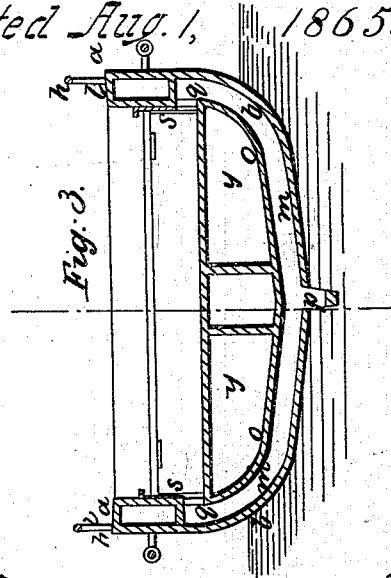


Fig. 3.

Witnesses.

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A. L. SHEARS, OF FLINT, MICHIGAN, ASSIGNOR TO HIMSELF AND H. T. WOODMAN, OF DUBUQUE, IOWA.

IMPROVED LIFE-BOAT.

Specification forming part of Letters Patent No. 49,197, dated August 1, 1865.

To all whom it may concern:

Be it known that I, A. L. SHEARS, of Flint, in the county of Genesee and State of Michigan, have invented a new and useful Improvement in Life-Boats; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention relates, first, in forming upon the inner sides of the hull of a boat, one or more water-scuppers, communicating at their upper ends with the inner portion of the boat, and at their lower ends with the water in which the boat is placed, whereby when the water dashes or flows over the sides of the boat it will immediately pass out of the same through the scuppers without the necessity of bailing, the side pieces forming the said scuppers bracing and strengthening the hull; second, in forming air-chambers under the thwarts of the boat, extending up its sides as high at the gunwales, if so desired, or at least sufficiently high to prevent the boat from sinking so far in the water as not to let the water escape therefrom through its scuppers when it is overflowed, as described, the said chambers also giving room for storage of provisions, clothing, &c., and, in case of necessity, giving shelter to the occupants of the boat from the storm, &c., as well as affording a convenient place for sleeping, entrance being had to the same by raising the seats of the boat, which are so arranged as to admit of the same, and can be closed with sufficient tightness to prevent the entrance of water therein, and fresh air being fed to the same through any suitable arrangement of air-pipes communicating therewith and with the external air; third, in placing at or near the center of the boat a water-tank in which water is inserted to be used for drinking purposes, it serving also as ballast for the boat, to balance it.

In accompanying plate of drawings my improvements are represented, Figure 1 being a longitudinal vertical section through the center of the boat; Fig. 2 a partial plan or top view of a portion of the same; and Fig. 3 a transverse vertical section in plane of line *x x*, Fig. 1.

a a represent the outside of the boat; *b*, its

hull; *c*, keel, and *d* gunwales; *f f*, deck of boat, provided with seats or thwarts *g g g*, at proper distances apart; *h*, rail extending around the gunwales of the boat, supported at intermediate points by stanchions *l l*, &c.

m m, &c., represent a series of water-scuppers upon each side of the boat, extending along and down the inside of the hull, formed by side and top pieces, *n n* and *o*, which serve also as braces for strengthening the boat. The scuppers are open at their lower ends, *p p*, communicating with the water surrounding the boat, and at their upper ends, *q q*, with the space *r* of the boat above its deck, and have slides *s s* for opening or closing the same at pleasure. The seats *g g g* are each hinged on one side, as seen at *t t* in Fig. 1, and have hooks *u u*, &c., and fixed staples *w w*, &c., for fastening the same when desired. By raising the seats communication is had with the interior air-chambers, *y y*, under the deck, and which may extend up the sides of the boat, either to the gunwales *d d*, or sufficiently to keep the boat in such a position when in the water that the upper openings of the water-scuppers shall be above the level of the water. In the air-chambers *y y* provisions, clothing, &c., may be stowed away in its compartments *z z*, &c., and in storms the occupants of the boat can retire therefor shelter, as well also for sleep, fresh air being allowed to enter the same by means of any proper-arranged air-tubes connected with them and communicating with the external air.

a' a' represent a water-tank placed at or near the center of the boat for holding fresh water to be used for drinking purposes, provided with a slide, *b'*, for opening or closing the same at pleasure. This water-tank, when filled, also serves as a ballast for the boat, to balance and to steady it. In case of a heavy sea causing the waves to dash over the sides of the boat, filling it with water, it immediately flows out of the same through the water-scuppers, arranged as above-described, without the necessity of bailing, the advantages of which are evident, the seats being made water-tight at their joints, so as to prevent the entrance of water to the air-chambers below the deck, and having suitable devices upon the inside thereof, that they can be also made water-tight from the inside of the chambers.

By forming the interior of the boat with air-tight compartments, as described, it is evident that it cannot possibly be swamped, as they impart sufficient buoyancy to it to entirely prevent it; and also that its strength or stiffness is not in the least impaired thereby.

Bulls-eyes or other proper glasses can be inserted in any suitable positions in the deck to impart light to the interior air-chambers, and suitable sockets can also be made at the proper points in the boat for the insertion of masts, when desired, they being made in sections and stowed away in the air-chambers of the boat when not in use.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

The general arrangement of the boat herein described, the same consisting of the air-chambers or spaces for storage of provisions, &c., water-scuppers, and thwarts susceptible of being raised or lowered at pleasure, for communication with the air-chambers of the boat, arranged together and operating substantially in the manner and for the purpose specified.

The above specification of my invention signed by me this 15th day of March, 1865.

A. L. SHEARS.

Witnesses:

M. J. PUTNAM,

L. G. BICKFORD.