

(No Model.)

F. BYRNES.
CONSTRUCTION OF BOATS.

No. 293,714.

Patented Feb. 19, 1884.

Fig. 2.

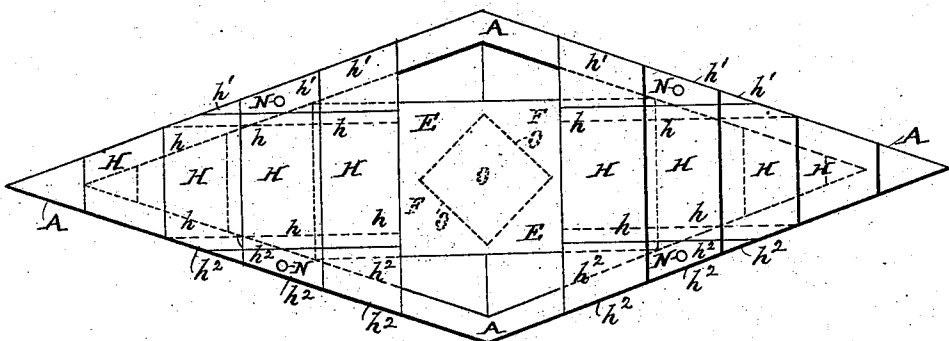
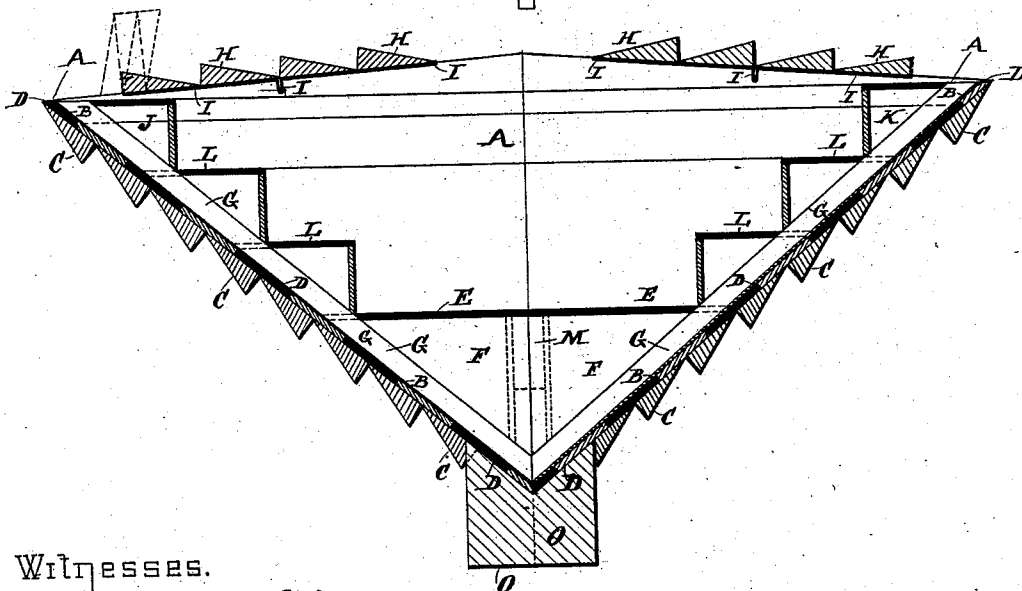


Fig.1.



Witnesses.

Harry Shipley
Newton Myckoff.

Inventor.
Francis Byrnes.
By his attorney
Philip T. Dodge

UNITED STATES PATENT OFFICE.

FRANCIS BYRNES, OF LIVERPOOL, COUNTY OF LANCASTER, ENGLAND.

CONSTRUCTION OF BOATS.

SPECIFICATION forming part of Letters Patent No. 293,714, dated February 19, 1884.

Application filed October 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS BYRNES, a subject of the Queen of Great Britain, residing at Liverpool, in the county of Lancaster, in the Kingdom of England, have invented certain new and useful Improvements in Boats, of which the following is a specification.

This invention has for its object a boat or life-saving apparatus which will be buoyant and stable in water.

In the accompanying drawings, Figure 1 is a sectional elevation, and Fig. 2 is a plan.

It consists of an inverted pyramidal-shaped boat, A, with one axis longer than the other, preferably made of wood, and lined at B with gutta-percha, india-rubber, or the like. The sides are formed with a series of inverted steps, C, (formed by sawing the planks diagonally,) and secured by ordinary means to a backing, D, and lined at B with gutta-percha or the like. These inverted steps C are designed to have a hold on the water, and prevent the sides sinking in the water when struck by a sea on the other side.

A deck or flooring is shown at E, with a pump-well, F, below. Longitudinal and transverse stays G are used to strengthen the boat.

The boat may be provided with an upper deck or cover, H, the two sides of which are movable independently of each other. This deck may consist of a sheet of rubber or its equivalent, I, having planks *h* formed and secured thereon in the same manner as upon the hull, to present a series of shoulders. The attachment of these decking or covering planks to the pliable sheet I admits of their being folded backward toward the side of the boat, out of action, in the manner represented in dotted lines on the left hand of Fig. 1. In this manner either side of the boat may be covered and the other left open or uncovered—an arrangement which will be found exceedingly convenient when sailing in rough water.

The decking, instead of being constructed as illustrated in Fig. 1, and above described, may be constructed, as represented in Fig. 2, of a series of sections, *h*, arranged to slide lengthwise of the hull between the stationary portions or guides *h'* and *h''* at the sides. The sections *h* will slide backward one over another toward the bow and stern, leaving the central portion of the body uncovered; or they

may be moved inward to the positions represented in Fig. 2, so as to constitute jointly a continuous decking.

Fore and aft I provide cupboards, J and K, forming bulk-heads, and others can also be formed in the sides when desired. Steps L are placed along the sloping sides for standing upon. A mast can be placed in the center of the boat at M, and rowlocks in the gunwale at N. O is a lead or metal block attached to the bottom of the boat, for ballasting purposes.

The boat being pyramidal, with a keel nearly coming to a point, it can be simply dropped from the davits or thrown overboard, instead of carefully lowered, as with the ships' boats at present in use. While this invention is in the first instance intended for use with smaller boats, such as those referred to, I do not wish to confine myself thereto, as I consider it is also applicable to boats or ships of larger dimensions.

I claim as my invention—

1. An inverted pyramidal-shaped boat, with one axis longer than the other, and having on its sides a series of inverted steps, and provided with a folding covering, H, substantially as herein set forth.

2. The boat-sides formed of a series of inverted steps, with an inner backing of wood, and lined with india-rubber, gutta-percha, or like material, substantially as herein described.

3. In combination with a boat, a covering formed of wooden blocks or steps, with their vertical faces facing from the center line of the boat toward the sea, attached to a gutta-percha, india-rubber, or canvas backing capable of being easily folded up, substantially as herein set forth.

4. A boat having the form of an inverted pyramid, with a series of inverted steps extending longitudinally on the outer surface.

5. In an inverted pyramidal-shaped boat, the steps L, placed along its sloping sides, for standing upon, substantially as herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCIS BYRNES.

Witnesses:

JOHN H. BYRNES,
JOHN HAYES.