

# G. P. Tewksbury.

## Life Boat.

N<sup>o</sup> 6,640.

Patented Aug. 1, 1849.

Fig: 1.

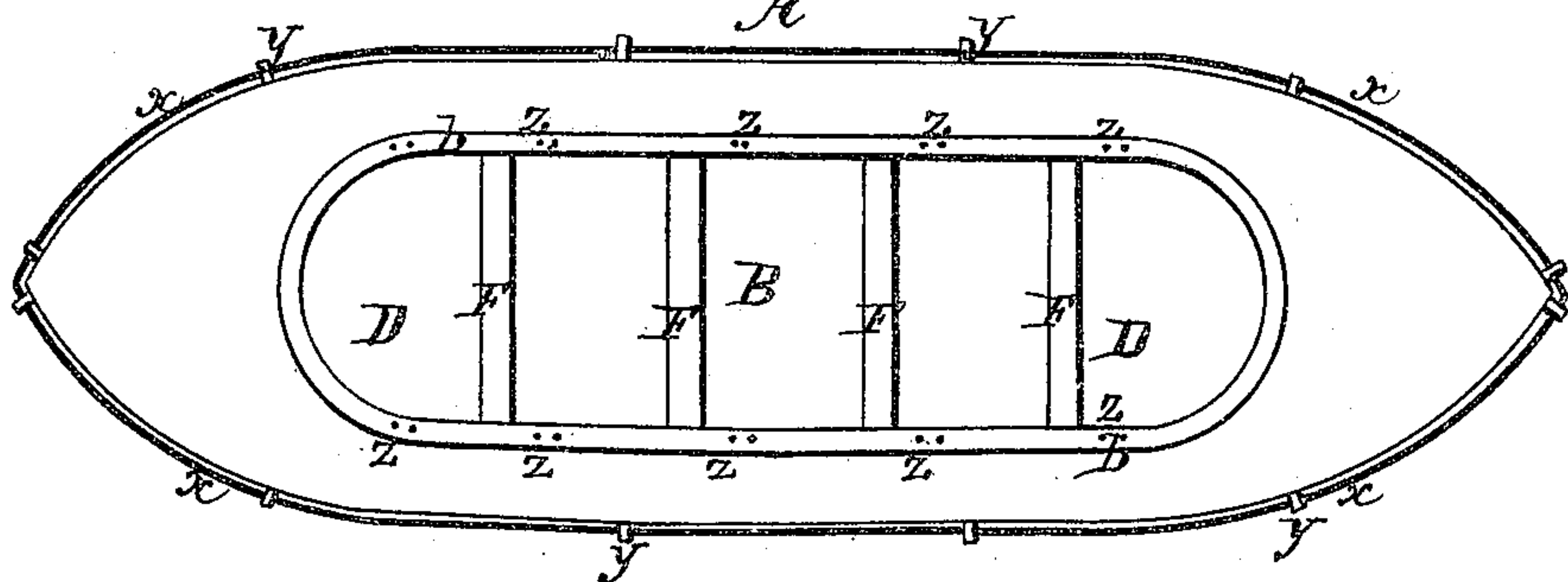


Fig: 2.

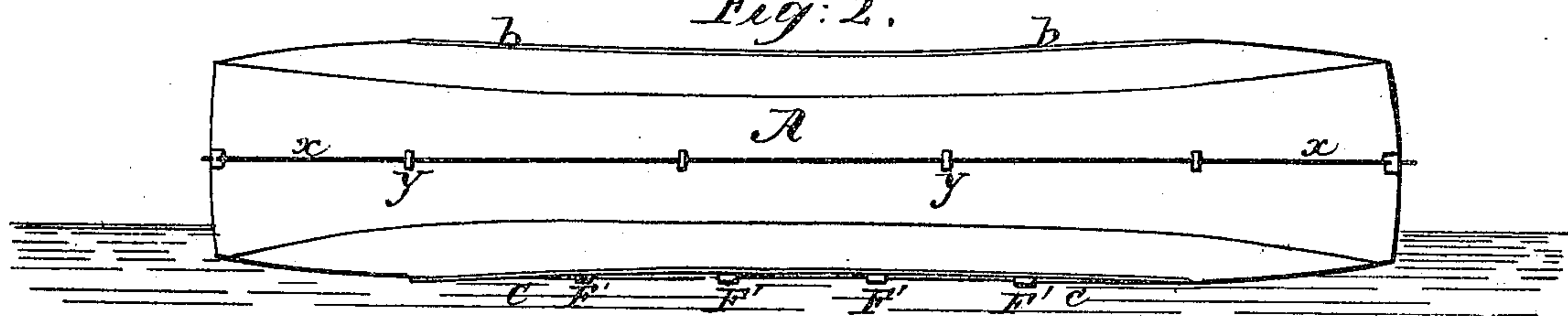


Fig: 3.

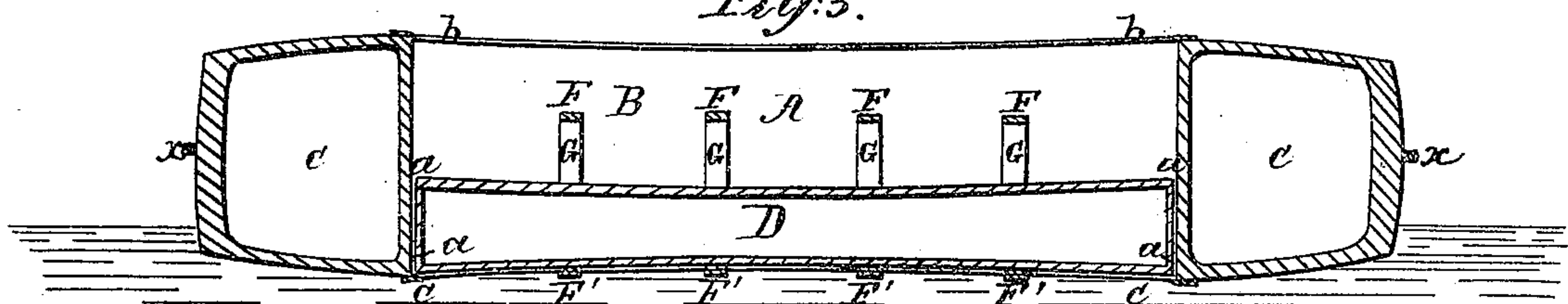


Fig: 5.

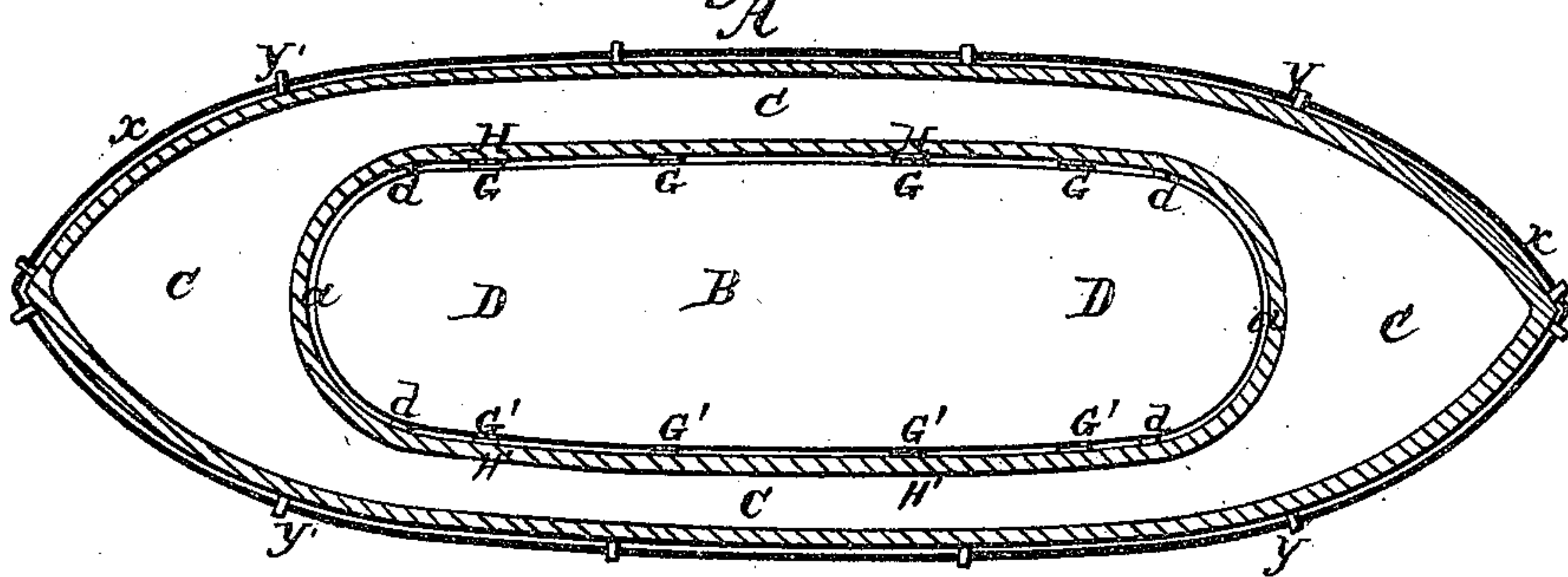
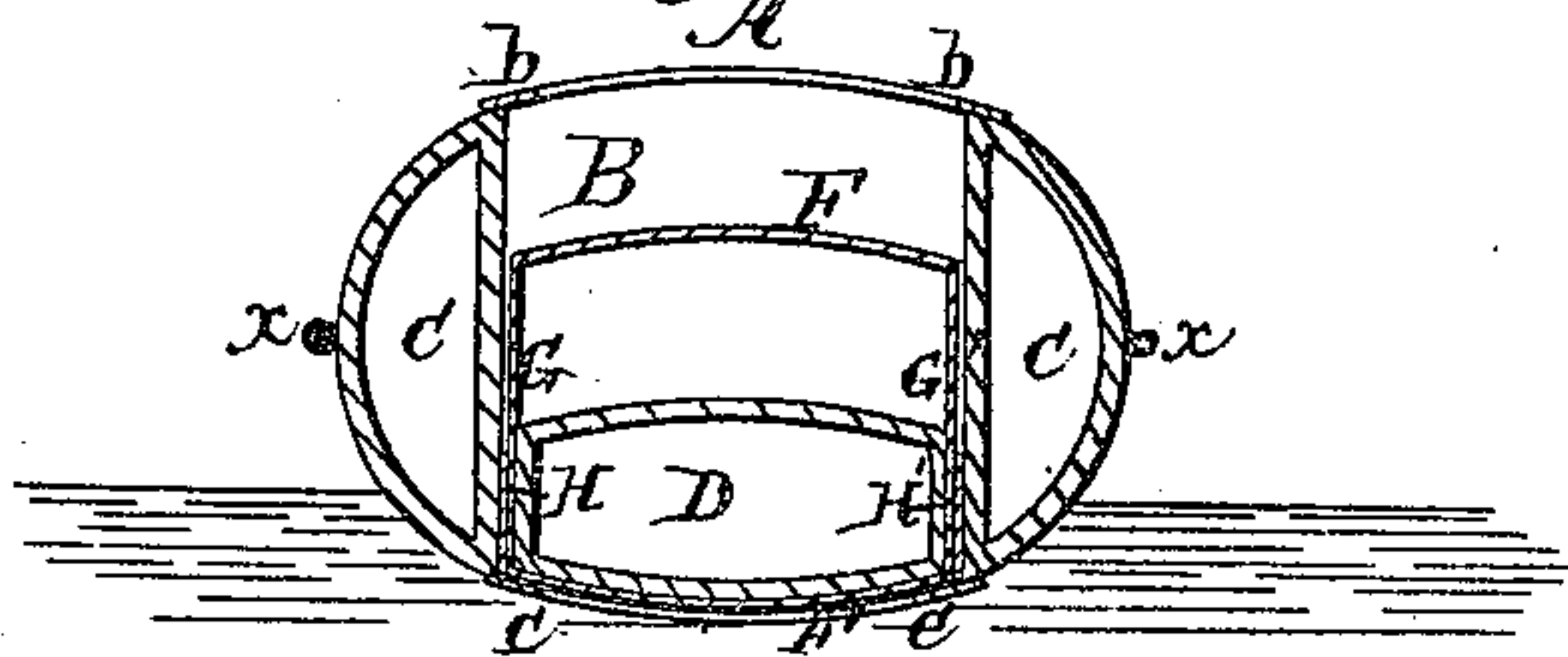


Fig: 4





# UNITED STATES PATENT OFFICE.

GEORGE P. TEWKSBURY, OF BOSTON, MASSACHUSETTS.

## REVERSIBLE LIFE-BOAT.

Specification of Letters Patent No. 6,640, dated August 7, 1849.

*To all whom it may concern:*

Be it known that I, GEORGE P. TEWKSBURY, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new or Improved Life-Boat; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of the said drawings Figure 1, denotes a top view of my said improved life boat. Fig. 2, is a side elevation of it. Fig. 3, a central, vertical and longitudinal section of it. Fig. 4, a vertical and transverse section taken through one of the thwarts. Fig. 5, is a horizontal section of the boat taken through its middle.

In the construction of the boat, the lower half of it, or that part situated below a horizontal plane supposed to pass centrally through the boat, is to be constructed as a practically exact counterpart of the upper half or part situated above such plane.

The boat A, so made, consists of a water tight vessel or one having one or more suitable water tight compartments or chambers, independently of an elongated open space B, which extends vertically and entirely through it, and is open both at top and bottom. The air compartment or compartments are made to surround the said open space B, as seen at C, C, in Figs. 3, and 4. Such air apartments may be constructed only at the bow and stern of the boat, and not on the sides or they may be arranged on the sides and not at the bow and stern; or they may be placed at the bow, stern and sides as seen in the drawings. I do not limit my invention to any peculiar position or arrangement of such air tanks or compartments, nor do I consider air apartments as essential thereto, as the boat may be constructed in various other ways, so as to be buoyant, as for instance it may be made of any proper material which being lighter than water will float thereon, and not sink under a load, such as it should be capable of sustaining. This part therefore of my invention consists in a floating or buoyant boat or stage having an open space B, extending entirely through it from top to bottom.

The next part or element of my invention consists of an air tight, buoyant or floating tank or platform D, placed within the opening B, and made generally speaking, a lit-

tle less in size in its horizontal section than the said opening is in its horizontal section, there being a clear space *a, a*, between said platform and the sides of the opening B, sufficient not only to admit of the free play or vertical movement of the platform within said opening but at the same time to allow the escape of any superfluous water which may be shipped by the boat, or in any other manner be introduced therein.

The said tank, platform or floor as it may be termed is to have suitable contrivances (either affixed to it or the boat or to both as may be most convenient) for the purpose of regulating the extent of its vertical motions, and of preventing it from separating from the boat. For this purpose a projecting ledge *b*, or *c*, is carried partially or entirely around the top and bottom of the opening B, and made to extend inward from the sides of the boat as seen in Figs. 1, 3 and 4. I however do not limit my invention to the employment of such a contrivance as such other or others as would naturally be suggested to a workman skilled in the art of boat building or such art as may be most nearly connected therewith, may be substituted.

The thwarts are seen at F, F, F, F, F', F', F', F'. Two of each viz. F' F', are arranged and connected together by vertical bars G, G', as seen in Fig. 4, the one thwart of each set being arranged above the platform D, while the other is placed below it. In Fig. 5, the upright bars G, G', are shown as passing through steadying clasps H, H', affixed to the platform D. Such clasps however instead of being connected directly with the platform may be affixed to the side of the opening B. The two thwarts of each set are to be placed apart from one another a vertical distance greater than the vertical thickness of the platform D, the same being to enable one of the thwarts to always be at a suitable sitting distance above the platform when the boat is floating in the water and the other thwart is resting on the lowest of the projecting ledges *b*, or *c*. The superior and inferior thwarts of each set, together with their connecting bars G, G', may be termed a thwart frame, such a number of such thwart frames being employed in any boat as circumstances may require.

To the platform D, slides, ways, projections *d, d, d, d*, or other suitable contri-



vances may be affixed to guide it in its vertical motions and prevent it from binding against the sides of the opening B, the object being to have it play freely up and  
 5 down within said opening, and in such manner, that in whatever way the boat may be launched into the water, whether the top or bottom may be upward the stage or platform may sink down in the opening and to  
 10 or nearly to the bottom of the same and constitute a floor for the space or part of said opening, which in consequence thereof may be produced above it. During the descent of the platform D, the several thwart  
 15 frames will be depressed with and by it so that the superior thwarts will be brought into correct position for the rowers to sit upon.

Should the boat, so constructed, be over-  
 20 set by a sea or other cause, it will readily be seen that as soon as it comes fairly over so that what was below before comes upward the platform will immediately drop so as to leave a space for the rowers or persons to  
 25 get into. The air tight compartments of the boat, whether of the platform or other part or parts may be provided with proper openings and covers or contrivances for so closing the same as (when closed) to prevent  
 30 the admission of water into the air spaces, these openings being intended to enable a person to make use of the compartments as places for the storage of provisions or such other matters as occasion may require.

35 A guard rail, rod, or fender *x*, may be placed entirely around the boat, and secured to it by clamps or connections *y*, *y*, such as will enable the rail to be convenient for a person when overboard to lay hold of,  
 40 and secure himself to. It will also serve to prevent accident to the boat when thrown against a vessel or other body. Holes *z*, *z*,

&c., may be made in proper places through the ledges *b*, *c*, for the reception of thole pins.

The boat may be made of wood, metal or  
 45 other suitable material or materials and to render it safer as a life boat, it (except in the opening B) may be constructed with water tight partitions extending across it so  
 50 as to divide it into such a number of air or water tight spaces or compartments as may be desirable, and so that in case the boat should get stove in any part of it or any  
 one of said apartments, the other apartments would preserve to her a sufficient buoyancy  
 55 in the water.

I do not intend to confine my invention to the precise shape or form of parts as exhibited in the drawings, but mean to vary  
 60 or change the same in any manner and to any extent so long as I maintain or preserve in it the principle or novel feature claimed by me and which renders my boat of great  
 advantage for the purpose of saving life in cases of shipwreck or other disaster to which  
 65 navigable vessels are subject.

What I claim as my invention is—

The buoyant boat constructed with the opening B, and the removable platform or floor D, placed within the same and made  
 70 to operate therein substantially in the manner and for the purpose as specified. And as auxiliary thereto I claim the combination of one or more thwart frames as constructed  
 applied to the same and made to operate in  
 75 connection with the platform essentially as described.

In testimony whereof I have hereto set my signature this eleventh day of July, A. D. 1849.

GEORGE P. TEWKSBURY.

Witnesses:

R. H. EDDY,  
 FRANCIS GOULD.