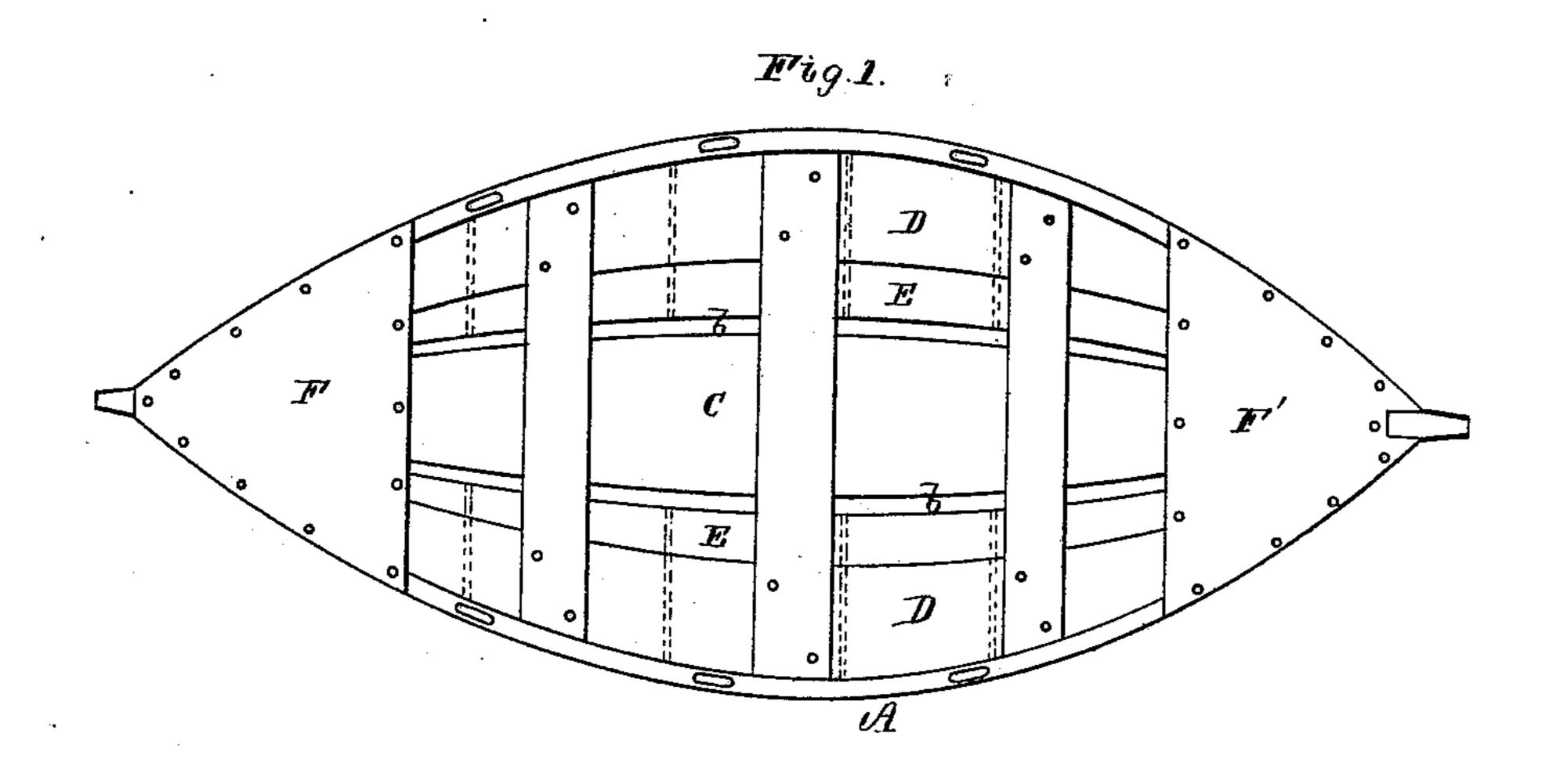
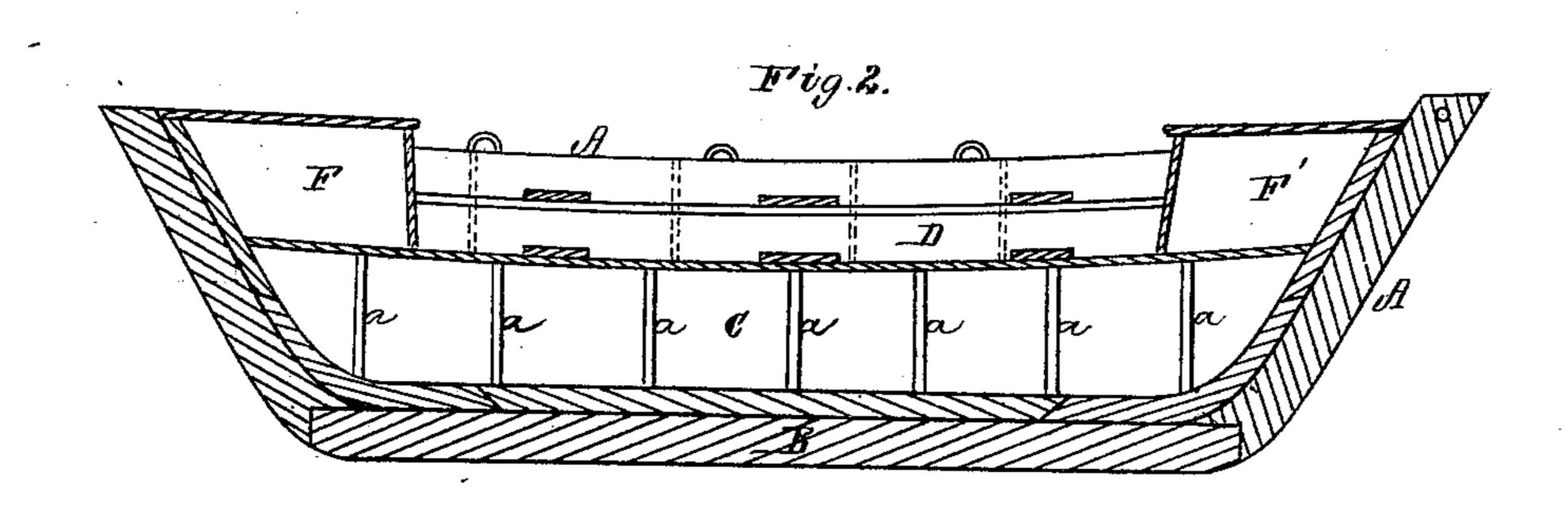
## P. B. CURTIS.

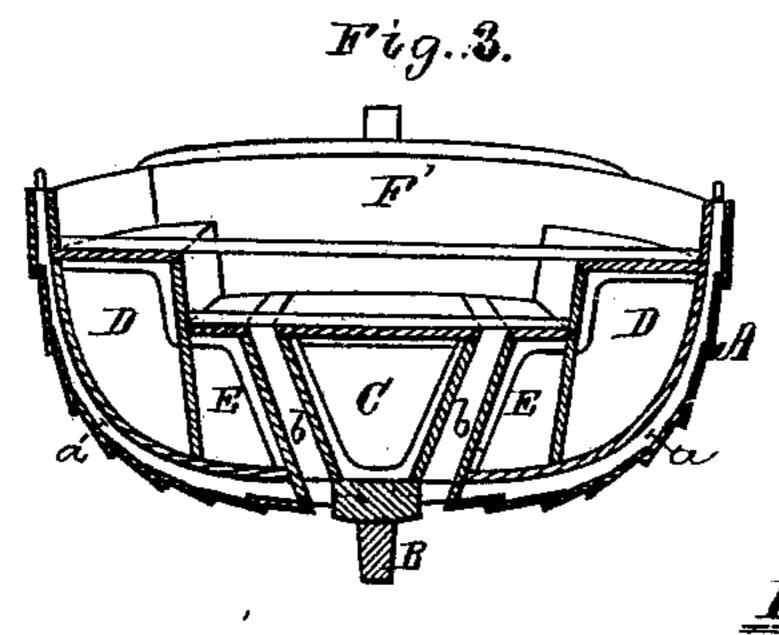
LIFE-BOAT.

No. 188,862.

Patented March 27, 1877.







Witnesses. Geo Gray Holdale

Philip.B. Curtis.

- by his attorney

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## United States Patent Office.

PHILIP B. CURTIS, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND JOHN C. TILTON, OF SAME PLACE.

## IMPROVEMENT IN LIFE-BOATS.

Specification forming part of Letters Patent No. 188,862, dated March 27, 1877; application filed June 23, 1876.

To all whom it may concern:

Be it known that I, Philip B. Curtis, of Haverhill, in the county of Essex and State of Massachusetts, 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 which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

In such drawing, Figure 1 denotes a top view, Fig. 2 a central and longitudinal section, and Fig. 3 a transverse section, of a life-boat, constructed in accordance with my invention.

The object of my invention is the production of an efficient life-boat, one not only strong, substantial, and capable of readily freeing itself of water accidentally shipped by it, but having other valuable qualities.

The invention consists in a peculiar arrangement and combination of air or buoyant compartments and water-escape passages, all being substantially as hereinafter explained.

In the said drawing, A denotes the hull of the boat, the same being provided with a keel, B, ribs a a, and sheathed in the ordinary way. Instead of making the bottom tight and closed in the usual manner, the same is left open on each side of the keel, these openings being of any desirable width, and communicating with the deck or upper portion of the boat. Within the boat, and centrally over the keel, I prefer to arrange a long boat-like chamber, C, this chamber having a buoying capacity greater than that required to float the boat, so that in case the sides of the boat should be stove such chamber would still preserve the boat floatable. The said hull is made with two air-chambers, D D, extending along its

sides, respectively, from stem to stern, these being subdivided into a series of smaller chambers, so that in case one or more of them may become injured, the others will still be intact and operative. E E are two air-chambers extending along the inner vertical faces of the chambers D D, and having their top surfaces on a plane with the top of the chamber C—the top of the chamber C and the chambers E E forming the deck or floor. Thus it will be seen that water-spaces b b are formed between the vertical faces of the chamber C and E E, such serving to render the boat stiffer and more easily managed. Both the stem and the stern are formed as airchambers F F'.

I am aware that boats have been constructed with pipes leading from the deck or floor of the boat into the water below the water-line of the boat, and provided with outward-opening valves at their lower ends, through which to discharge the water shipped into the boat. This I do not claim, as such differs entirely from my invention.

What I claim as my invention is as follows:

1. A life-boat provided with central and lateral fore and aft buoyant chambers and waterescape passages, arranged substantially as set forth.

2. A life-boat provided with central and lateral fore and aft buoyant chambers, and water-escape passages, and end buoyant chambers, arranged substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

PHILIP B. CURTIS.

Witnesses:

F. P. HALE, F. C. HALE.