

(No Model.)

P. DUVAL.
LIFE BOAT.

No. 281,622.

Patented July 17, 1883.

Fig. 1.

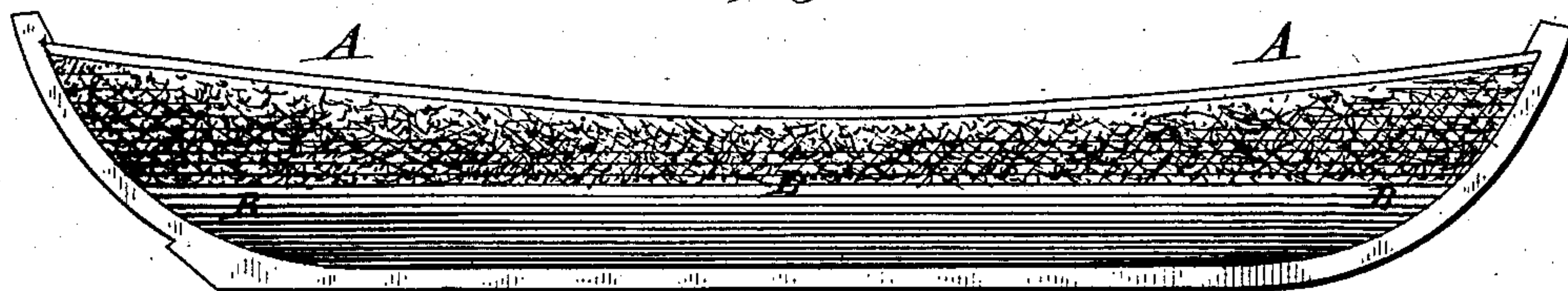


Fig. 2.

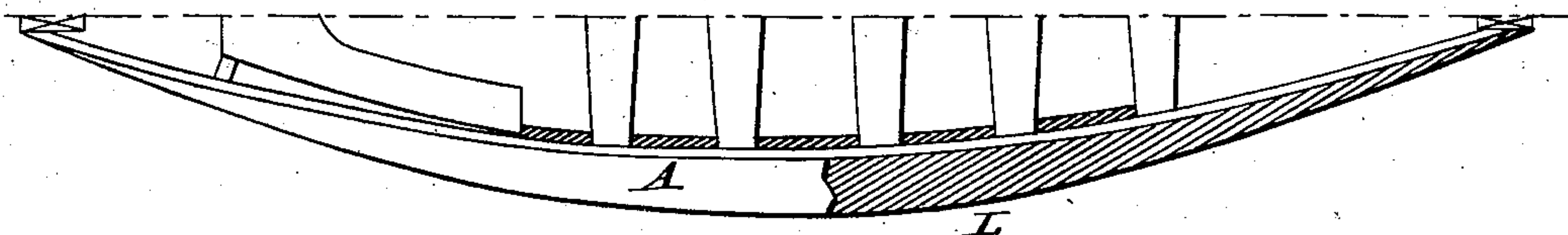
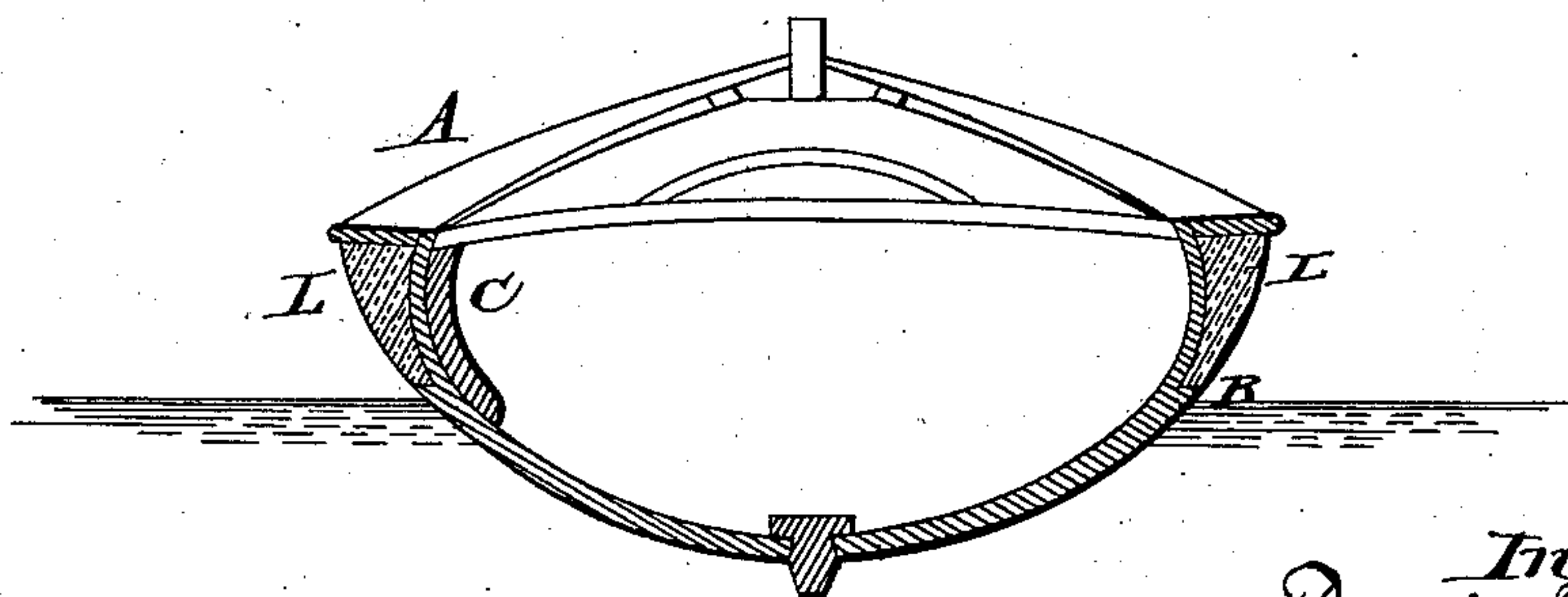


Fig. 3.



Witnesses:

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per Brashears & Williams

Attys.

UNITED STATES PATENT OFFICE.

PAUL DUVAL, OF PARIS, FRANCE.

LIFE-BOAT.

SPECIFICATION forming part of Letters Patent No. 281,622, dated July 17, 1883.

Application filed April 20, 1882. (No model.) Patented in France July 19, 1880, No. 137,838; in Russia August 21, 1880; in England August 26, 1880, No. 3,459, and in Belgium August 23, 1880, No. 52,433.

To all whom it may concern:

Be it known that I, PAUL DUVAL, of the city of Paris, in the Department of the Seine and Republic of France, have invented an Improved System of Life-Boats and Ships; and I do hereby declare the same to be fully, clearly, and exactly described as follows:

This invention relates to an improvement whereby boats and ships or vessels of any size may be rendered more nearly insubmersive or unsinkable.

My invention is based upon the application of cork in superposed pieces or planks, outside of the planking or sheathing of the boat or vessel, which application being made without alteration of the exterior shape of the boat or vessel, this latter will preserve all its nautical qualities.

On the accompanying sheet of drawings, Figure 1 is an elevation of a boat embodying this invention, Fig. 2 being a half-sectional plan, and Fig. 3 a cross-section, of same.

As shown on the drawings, the cork planking L is applied outside of the ordinary planking of the boat, from immediately under the gunwale A down to the float-line B; and in order that this application may not in any way alter its primitive outer form, I make the frame or carcass of the boat from the careening or float line up to the gunwales with an inward curve, as shown at Fig. 3, to receive the planks, plates, or pieces of cork, which, countersunk into the planking at the float-line, go on increasing in thickness until they

attain the level of the gunwales. Thus there is upon the sides of the boat a sort of armor-plating of cork, which, increasing in thickness more and more as it approaches the gunwale, at the same time increases the resistance to submersion in proportion to the sinking of the boat or ship under the weight of its load or cargo. A boat constructed in this way may therefore be entirely filled with water, and will not only still float, but will at the same time carry its crew, as proved by experiment. In such case it is only necessary to open the bottom valves to enable the boat to empty itself and rise to its normal float-line. For the purpose of increasing this power of righting itself I have arranged planks or sheets of cork C inside of the boat. The cork may be protected on the outside by any suitable kind of covering—such as canvas, wood, or metal—coated with any suitable preparation for preserving it from the effects of sea-water and of accidents.

What I claim is—

A boat having its sides pitched inward from about the water-line to the rail, and having plates of cork countersunk in the sides and secured thereto, and conforming, as described, to the curve of the sides of the boat, as and for the purpose set forth.

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Witnesses:

ROBT. M. HOOPER,
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