No. 647,813. Patented Apr. 17, 1900.

L. DOLONE.

INSUBMERGIBLE BOAT.

(Application filed May 19, 1899.)

(No Model.)

Fig. 2.

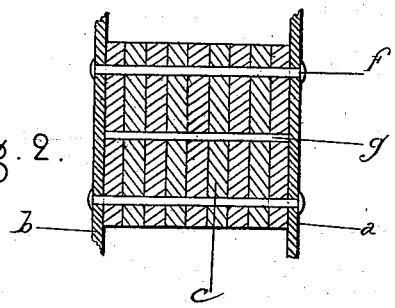


Fig. 3.

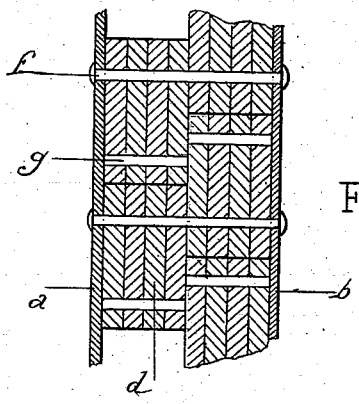
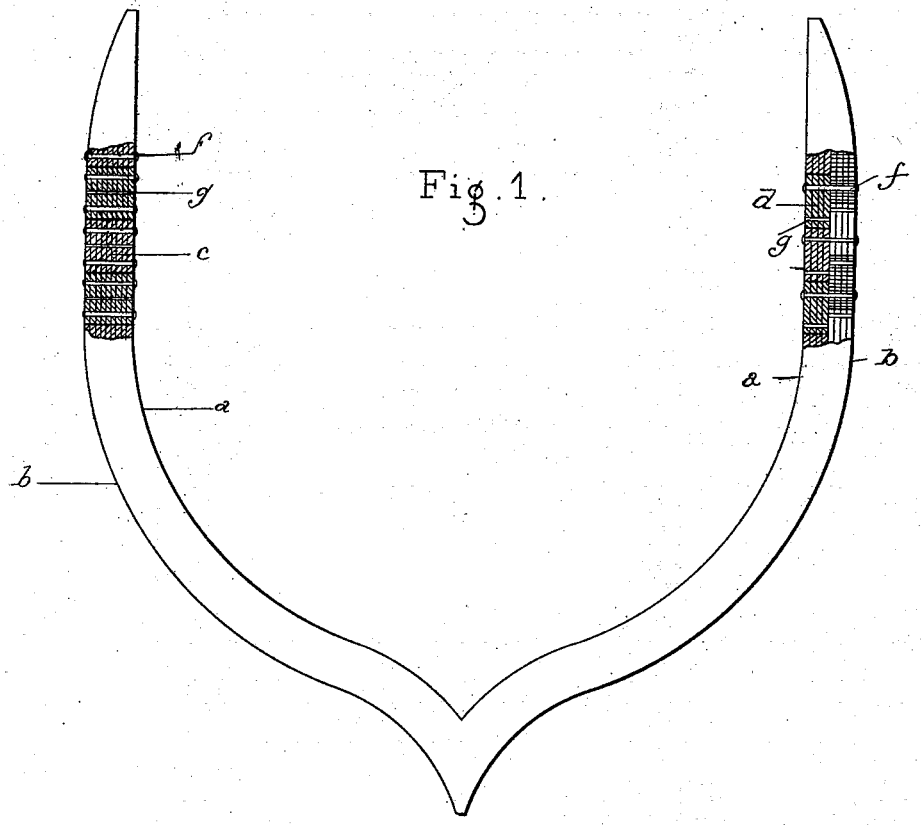


Fig. 1.



Witnesses:-
Jas. A. Richmond
Jas. L. Hopkins.

Inventor
Louis Dolone
by G. Dittmar
Atty.

UNITED STATES PATENT OFFICE.

LOUIS DOLONE, OF MARSEILLES, FRANCE.

INSUBMERGIBLE BOAT.

SPECIFICATION forming part of Letters Patent No. 647,813, dated April 17, 1900.

Application filed May 19, 1899. Serial No. 717,511. (No model.)

To all whom it may concern:

Be it known that I, LOUIS DOLONE, a citizen of the Republic of France, residing at Marseilles, Department of Bouches-du-Rhône, France, have invented certain new and useful Improvements in Ships' Hulls; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to ships' hulls; and its novelty consists in the construction and adaptation of the parts, as more fully hereinafter pointed out.

The purpose of my invention is to provide a hull which will when damaged by collision or otherwise be practically impenetrable to water. To this end I construct the hull with double walls, with an intermediate lining of cork or the like material, which is preferably laid in blocks or slabs, the said blocks being either arranged end to end or in two rows, with the broken joints covered by substantially the middle of the next block.

My improved hull construction is clearly illustrated in the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a diagram of a portion of the hull of a vessel, partly in section, showing two ways of carrying out my invention. Fig. 2 is a transverse section of one of the blocks. Fig. 3 is a similar view through a preferred modification.

Referring to the drawings by letter, *a* designates the inner wall of the hull, and *b* the outer wall thereof, both of which may be made of metal or wood, as usual, and between which the blocks of cork are arranged.

Referring to the construction shown in Fig. 2, it will be seen that the blocks are composed of a plurality of cork plates *c*, mounted sidewise of each other and secured together by a wooden pin *g* and to the hull by rivets *f*. These blocks are square and are intended to be arranged end to end in the hull.

In the modification shown in Fig. 3 the cork lining is preferably arranged in two rows and composed of oblong blocks, the latter being formed of cork plates *d*, fastened at one end by wooden pins *g*. The blocks are here laid in the fashion of bricks, with the broken joints in one row covered by substantially the middle of the next block in the opposite row. As stated, the cork plates *d* are fastened together at one end by wooden pins *g*, and rivets or bolts *f* are provided, which pass through the walls *a b* of the hull and through the substantially loose ends of two adjacent blocks, firmly securing the latter in position.

Of course in practice the plates may be bent or curved to coincide with the shape or configuration of the hull, as they follow the continuity of the same, and manifestly the blocks will be thicker in some parts of the hull than in others.

Having thus described my invention, I claim—

In combination with the hull of a vessel having double walls forming a continuous compartment embracing the same, of a filling consisting of a series of blocks of cork arranged in and adapted to fill the said compartment, and composed of superposed slabs of cork united at one end by wooden pins *g*, said blocks being arranged in two rows whereby the point of juncture of two blocks in one row is covered by substantially the middle portion of a block in the second row, and united by bolts or rivets *f* passing through the double walls of the hull and through the substantially-loose ends of the blocks, in the manner herein described and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS DOLONE.

Witnesses:
R. K. FAST,
C. CHANIER.