(No Model.)

T. BRIDGE.

MEANS FOR SAVING SHIPS FROM FOUNDERING, &c.

No. 326,896. Patented Sept. 22, 1885.

Fig. 1.

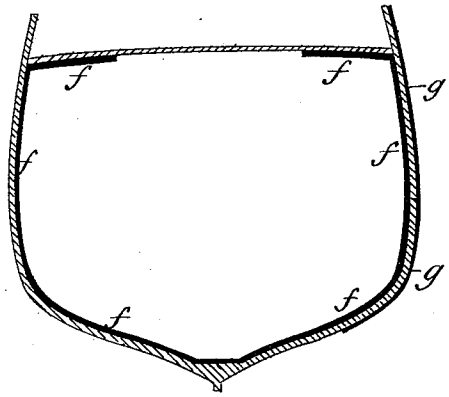
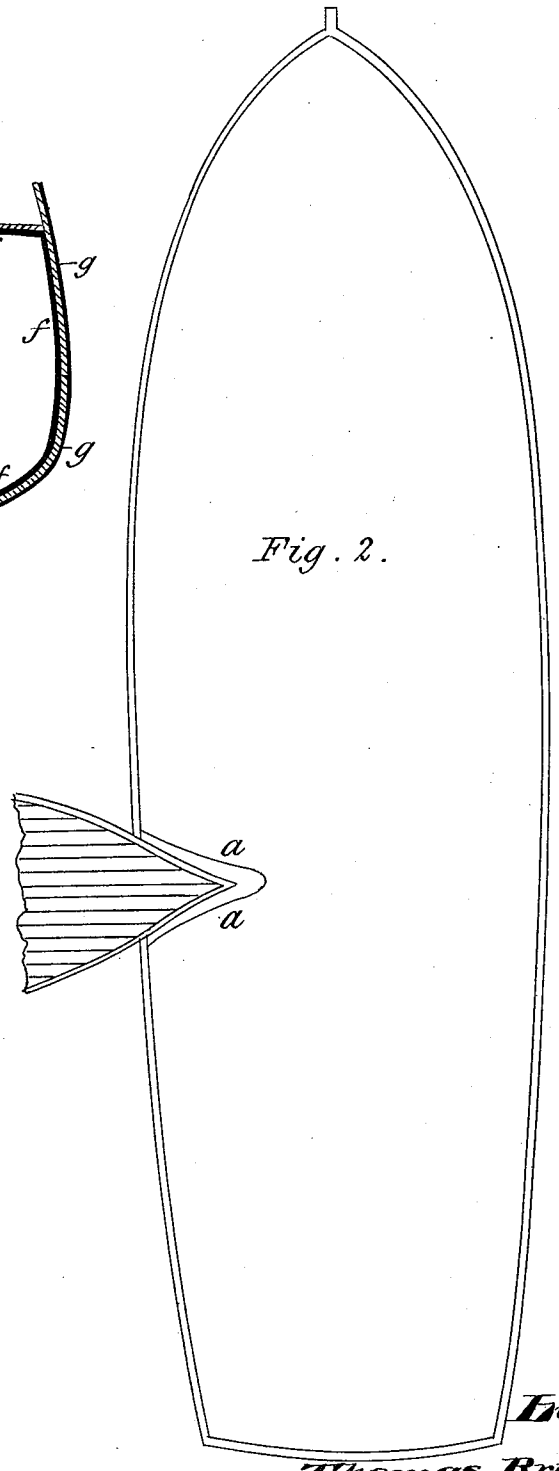


Fig. 2.



Witnesses:
Chas. F. Dyer
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N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

THOMAS BRIDGE, OF EASTBOURNE, COUNTY OF SUSSEX, ENGLAND.

MEANS FOR SAVING SHIPS FROM FOUNDERING, &c.

SPECIFICATION forming part of Letters Patent No. 326,896, dated September 22, 1885.

Application filed March 31, 1884. (No model.) Patented in England January 14, 1884, No. 489.

To all whom it may concern:

Be it known that I, THOMAS BRIDGE, a subject of the Queen of Great Britain, residing at Eastbourne, in the county of Sussex, England, builder, have invented certain new and useful Improvements in Means and Appliances for Saving Ships from Foundering by Collision or Stranding, (for which I have obtained a patent in Great Britain, No. 489, bearing date January 14, 1884,) of which the following is a specification.

The object of my invention is the saving of ships when in collision or on becoming stranded by providing a flexible lining which operates as a collision-bulkhead, and prevents the hold from being filled with water.

My invention consists of rope net-work and prepared canvas sheeting or tarpaulin with wool and india-rubber or other analogous materials, strengthened by and kept in position by means of timber or other battens.

It is placed in position in plaits or folds against the inside of the ship in order to prevent its rupture when the side or bottom of the vessel is penetrated by collision or striking on the ground.

By this method of arrangement and the manner in which it is disposed it forms a system of expansive lining which can be fitted to the ship inside when unloaded.

As a means of increasing its efficiency and affording additional safety, a supply of the same material is carried which can be applied to the outside of the ship to stop a leak, and enable a vessel to keep afloat when damaged. The inner and outer lines of the section of a ship shown in Figure 1 of the drawings which accompany this specification indicate the position of the inside and outside coverings, *f f* representing the inside lining, and *g g* a piece placed on the outside.

When the ship is struck in collision, as at *a* in Fig. 2, my improved lining will recede or expand, as also shown in Fig. 2, and thus prevent water from entering the ship or passing beyond the lining.

In preparing the canvas sheeting I use a mixture of boiled oil, red lead, and lamp-black; but I do not confine myself to the use of these ingredients for the purpose.

On a ship thus protected becoming stranded on rocks or on the seashore, the lining which is the subject of my invention acts in a similar way as when in collision, and unless the ship breaks up, the ship is prevented from becoming waterlogged.

I am aware that it has been proposed to provide ships with linings and sheathings of india-rubber, canvas, or like material, for the purpose of preventing leaks. This, however, I do not claim broadly. Such linings or coverings have not been disposed in plaits or folds, as contemplated by my invention, and therefore are not so readily expansible to prevent the entrance of water to the interior of a vessel in case of breaks in its sides.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

The combination, with a ship, of an expansible lining composed of a rope net-work and prepared tarpaulin or canvas sheeting disposed in plaits or folds against the inside of the ship, in order to prevent the entrance of water in case of collision or stranding, substantially as described.

In testimony whereof I have hereunto set my hand this 13th day of March, 1884.

THOMAS BRIDGE.

Witnesses:

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