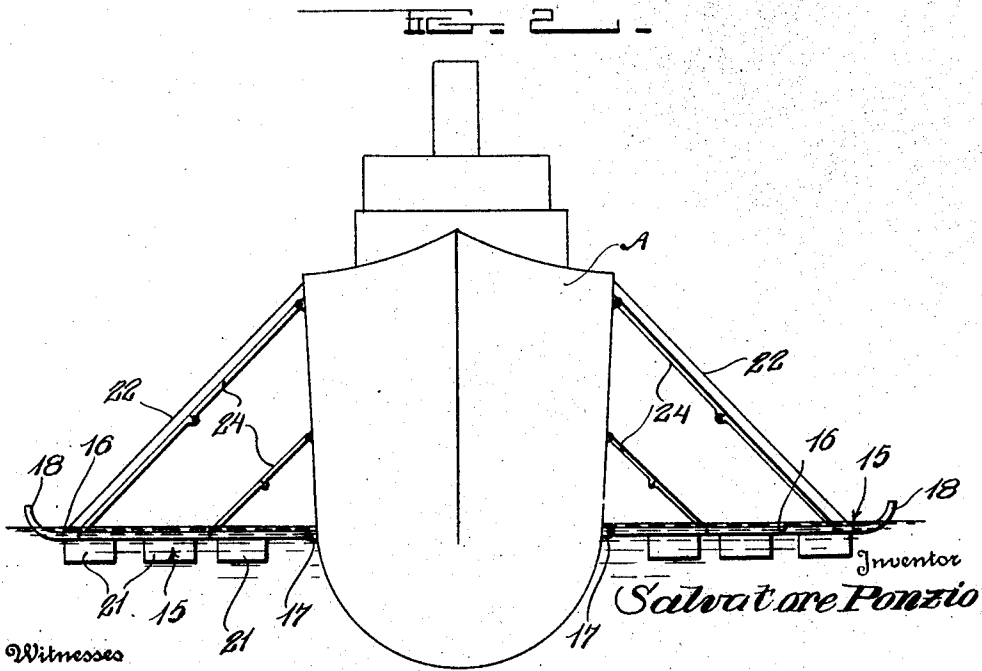
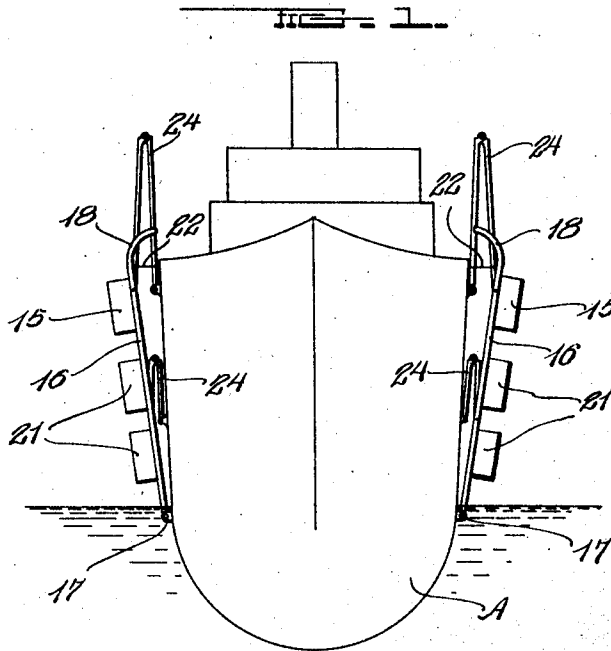


S. PONZIO.
 UNSINKABLE BOAT.
 APPLICATION FILED MAR. 1, 1920.

1,392,217.

Patented Sept. 27, 1921.

5 SHEETS—SHEET 1.



Witnesses

[Signature]

384

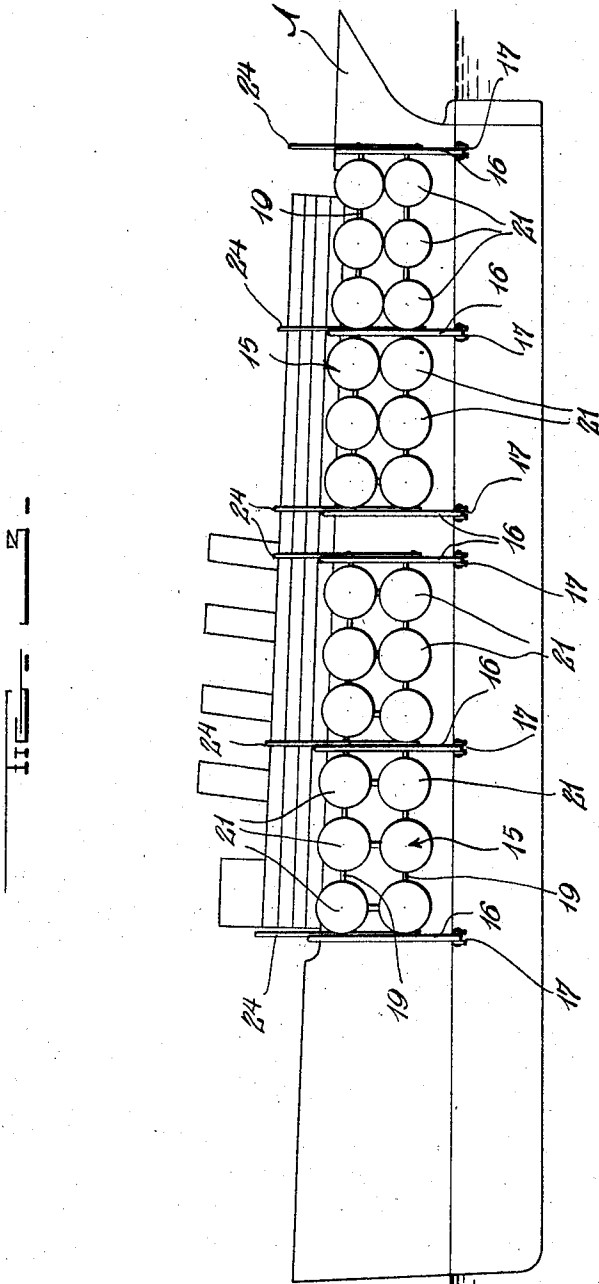
Victor J. Evans

Attorney

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5 SHEETS—SHEET 2.



Witnesses
[Signature]

Inventor
Salvatore Ponzio

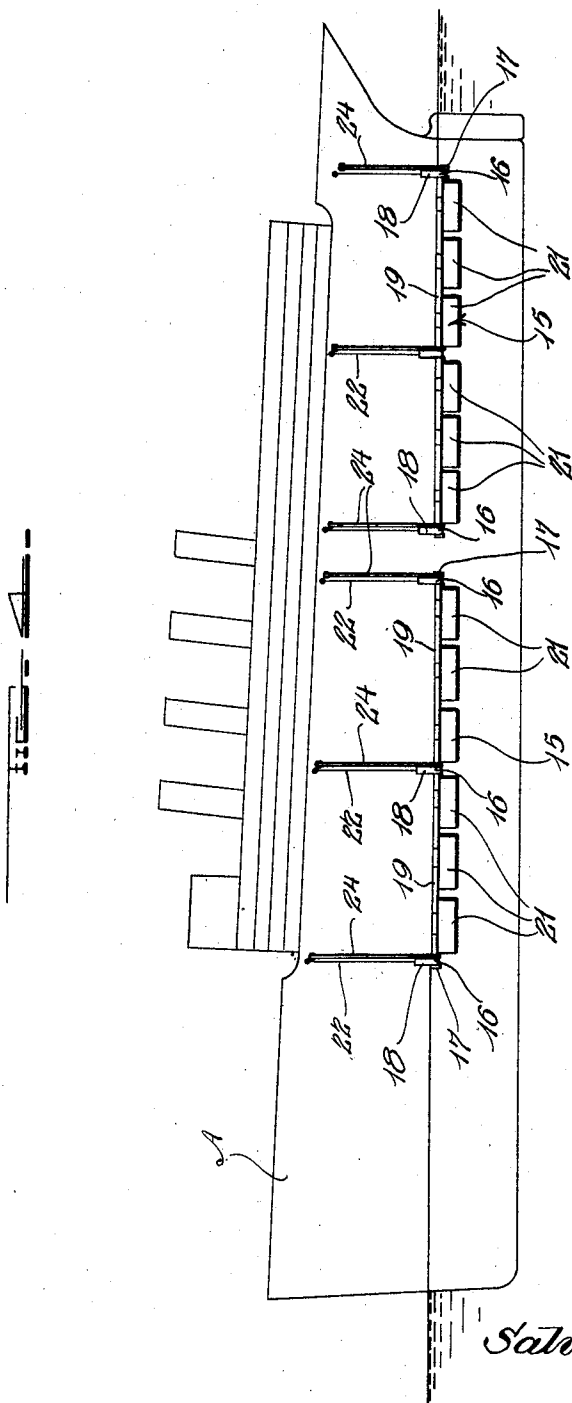
By *Victor J. Evans*
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5 SHEETS—SHEET 3.



Inventor

Salvatore Ponzio

Witnesses

334

Victor J. Evans

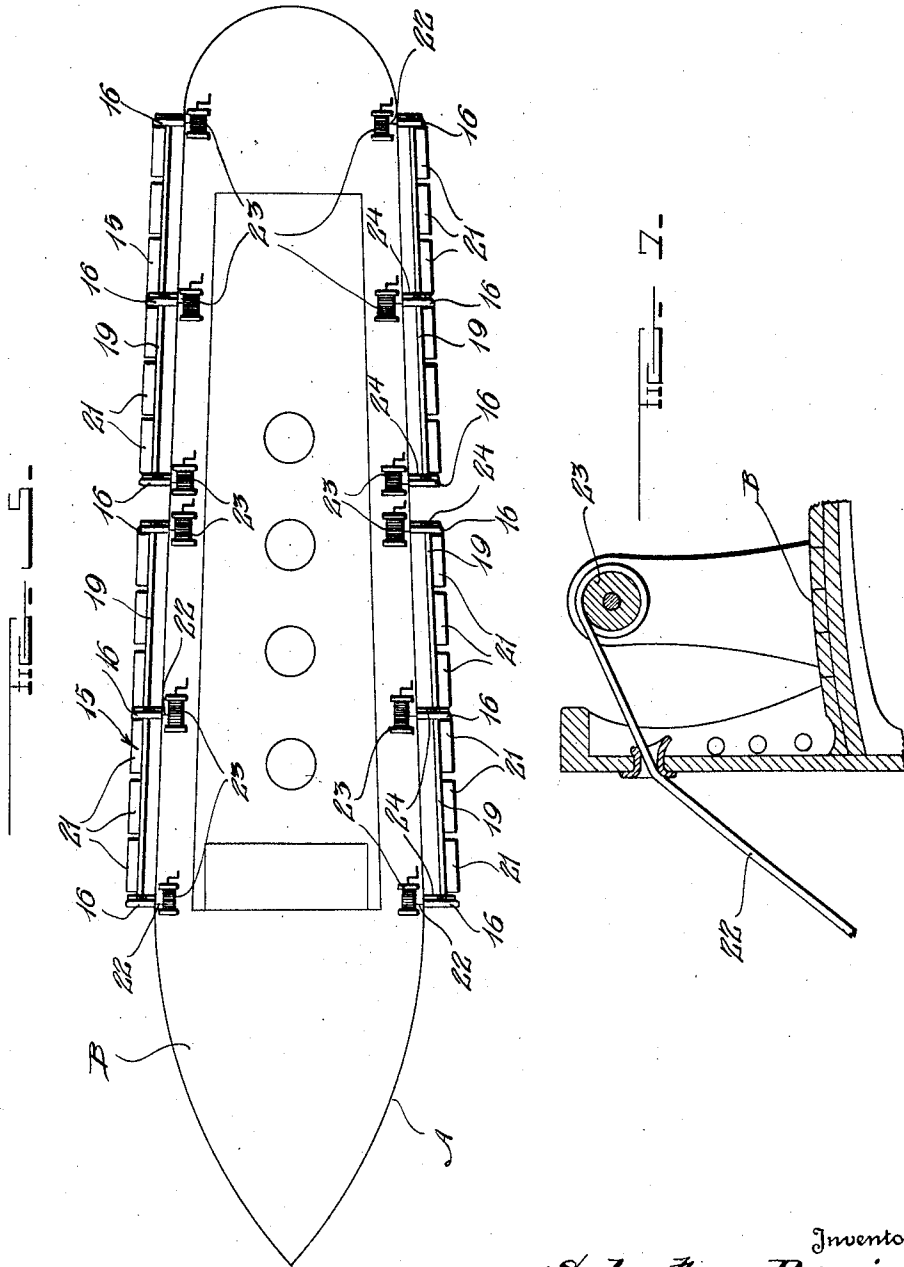
Attorney

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5 SHEETS—SHEET 4.



Witnesses
[Signature]

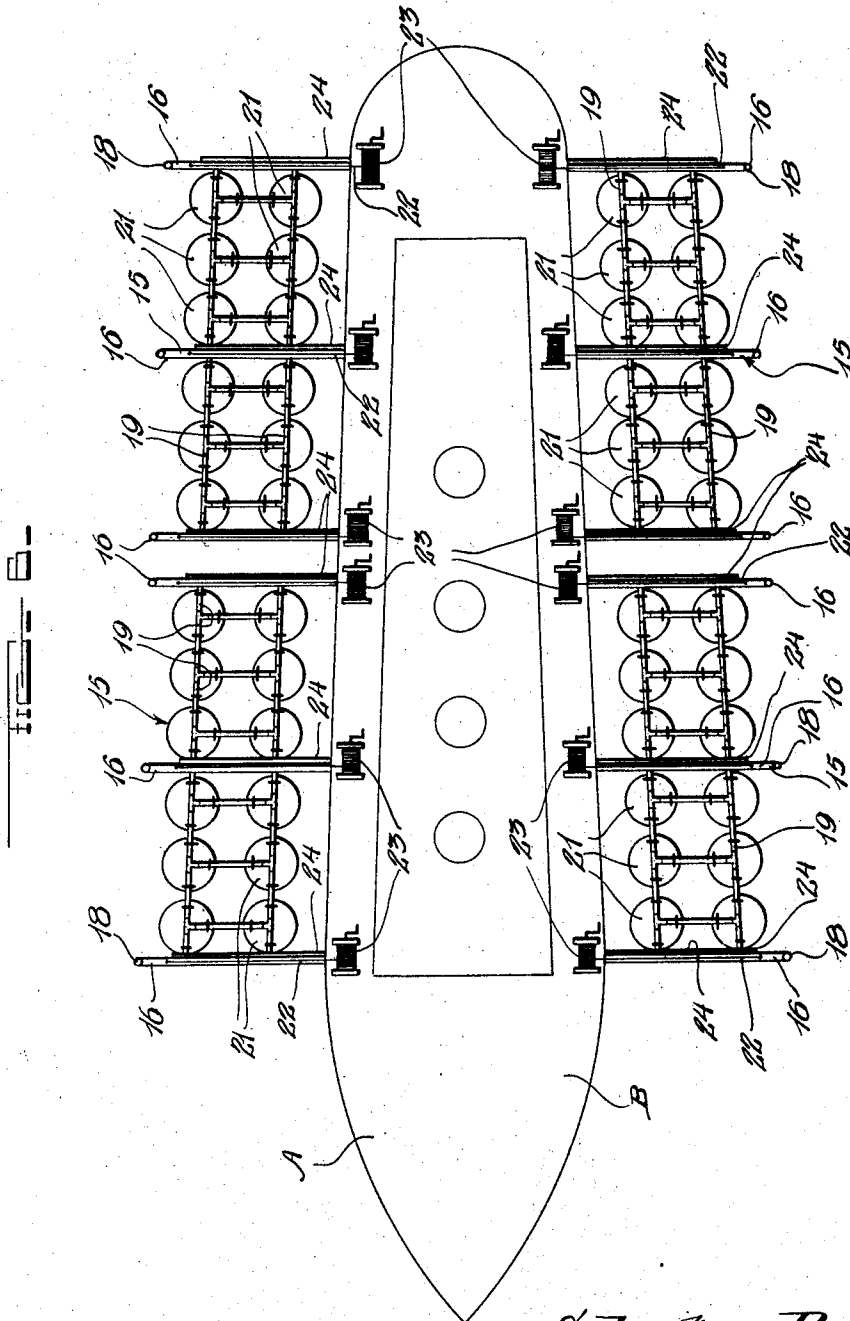
Inventor
Salvatore Ponzio

By *Victor J. Evans*
 Attorney

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 5 SHEETS—SHEET 5.



Witnesses

[Handwritten signature]

Inventor
Salvatore Ponzio

By *Victor J. Evans*
 Attorney

UNITED STATES PATENT OFFICE.

SALVATORE PONZIO, OF SYRACUSE, NEW YORK.

UNSINKABLE BOAT.

1,392,217.

Specification of Letters Patent. Patented Sept. 27, 1921.

Application filed March 1, 1920. Serial No. 362,254.

To all whom it may concern:

Be it known that I, SALVATORE PONZIO, a citizen of Italy, residing at Syracuse, in the county of Onondaga and State of New York, have invented new and useful Improvements in Unsinkable Boats, of which the following is a specification.

This invention relates to ship construction and has for its object the provision of means carried by a ship and carrying a plurality of buoys, this means being movable to lie upon the surface of the water in case of injury to the ship whereby the ship will be not only prevented from sinking but also held upright upon an even keel.

An important object is the provision of a structure of this character which includes a plurality of wing-like members pivotally mounted upon the sides of a ship somewhat below the normal water line thereof and normally held in elevated position by suitable cables trained about proper windlasses, these wing members being swingable downwardly onto the water in the event of a mishap, and carrying a plurality of bars which are adapted to be rigidly secured at their upper ends with respect to the ship whereby to prevent folding up of the wings.

An additional object is the provision of a device of this character which will be comparatively simple and inexpensive in manufacture and installation, which will be highly efficient in preventing loss of a ship, and which will be a general improvement in the art.

With the above and other objects and advantages in view the invention consists in the details of construction to be hereinafter more fully described and claimed and illustrated in the accompanying drawings in which—

Figure 1 is an end elevation of a ship equipped with my device, the wings being shown in elevated position,

Fig. 2 is a similar view showing the wings extended,

Fig. 3 is a side elevation of a ship with the wings in folded position,

Fig. 4 is a similar view showing the wings in extended position,

Fig. 5 is a plan view with the wings in folded position,

Fig. 6 is a plan view with the wings in extended position, and

Fig. 7 is a detail view.

Referring more particularly to the drawings, the letter A designates the hull of a ship and B designates the deck. In carrying out my invention I provide upon each side of the hull a pair of wing members, each of which is designated broadly by the numeral 15. Each wing member comprises a frame formed of transverse bars 16 which are pivotally connected, as shown at 17, with the hull, preferably at a slight distance below or at least adjacent the normal water line. These transverse bars 16 are upwardly and inwardly curved at their outer ends, as shown at 18. Each frame further includes a plurality of longitudinal bars 19 which are secured to the transverse bars 16 and the inner frame is braced by a plurality of diagonally extending bars or the like, 20. Each frame carries a plurality of spaced buoyant members 21 which are preferably hermetically sealed tanks rigidly secured in position upon the frames by any suitable means.

In order that the wings may be held in their normal or upright position, each frame has connected therewith one or more steel cables 22 which are suitably secured to the frame and which are trained about suitable windlass structures 23 mounted upon the deck of the ship and provided with the usual operating handle and pawl and ratchet mechanism. By this means it will be seen that the wing members may be readily maintained in inactive position.

In the event of a collision or any other mishap which results in tearing a hole in the hull of the ship, in order to maintain the ship afloat, it is merely necessary to release the cables 22 by unwinding them from the windlasses 23, whereupon the wing members will descend and engage the surface of the water. As this alone would not be sufficient to maintain the ship afloat, it is necessary to provide means for holding the wing members down on the water. In order to accomplish this I provide a plurality of strong steel bars 24 which may be solid or tubular, as preferred, which are pivotally connected, as shown at 25, with the transverse frame bars 16, and which have their upper ends adapted to be forced into retaining members 26 mounted either upon the deck or upon the sides of the hull adjacent the deck. It will be seen that when these bars 24 are pressed

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downwardly and their upper ends engaged within the retaining members 26, upward movement of the wing members will be positively prevented and the ship will consequently be kept afloat and in an upright position.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided readily operable and easily controlled means which may, in an extremely short time, be moved into such position as to support a ship in the event of damage to the hull thereof which might cause danger of sinking.

While I have shown and described the preferred embodiment of my invention, it is of course to be understood that I reserve the right to make such changes in the form, construction, and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claim.

Having thus described my invention, I claim:

In combination with the hull of a ship, a buoing device comprising a plurality of frames pivoted upon the hull adjacent the water line, a plurality of floats carried by each frame, windlasses mounted upon the deck of the ship, flexible members trained about said windlasses and connected with said frames whereby said frames may be elevated, and a plurality of diagonally disposed brace bars pivotally connected with the hull of the ship near the deck line and pivotally connected with the frame, each of said brace bars being jointed intermediate its ends by means of a rule joint, the function of said brace bars being to hold said frame in substantially horizontal position when in use.

In testimony whereof I affix my signature.
SALVATORE PONZIO.