

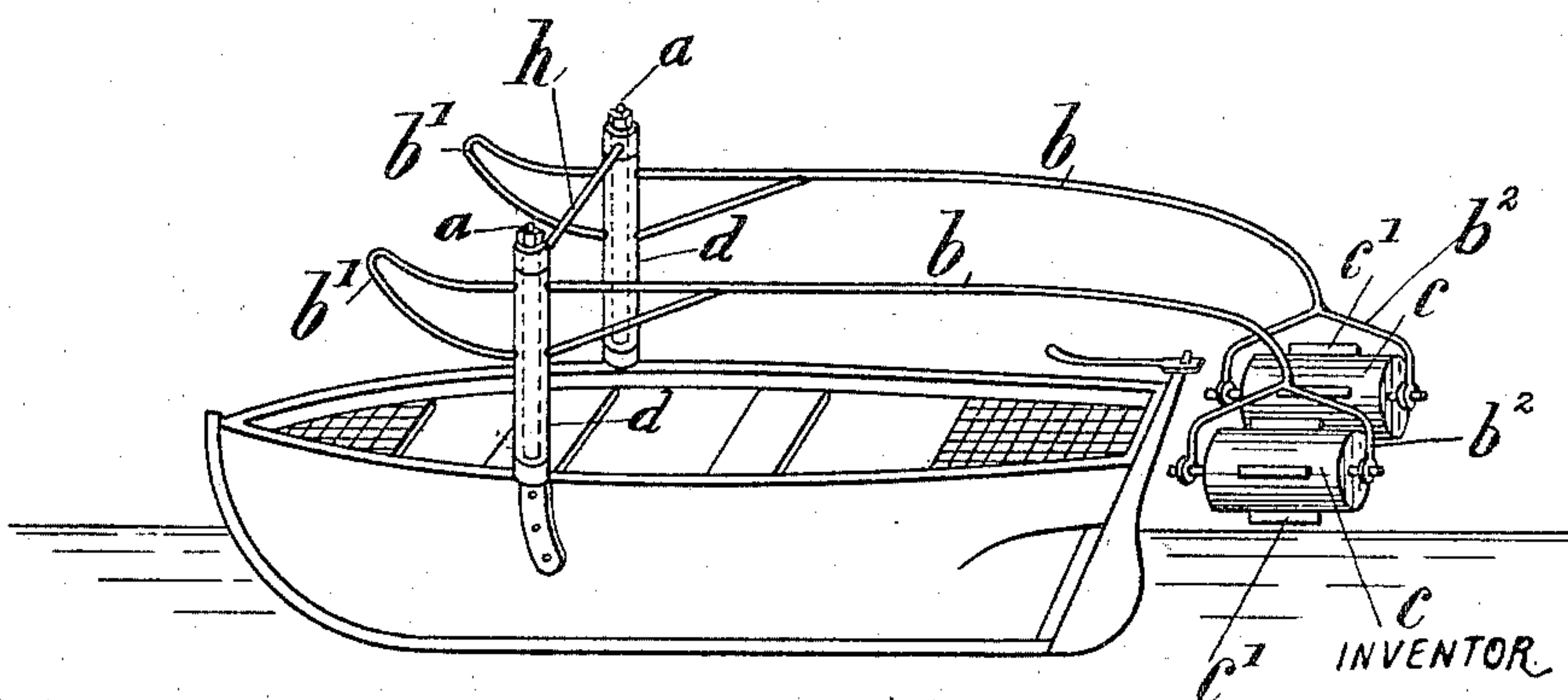
No. 725,264.

PATENTED APR. 14, 1903.

W. M. VON MALEIN.
FLOAT ARRANGEMENT FOR BOATS.

APPLICATION FILED JUNE 16, 1902.

NO MODEL.



WITNESSES:

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WILHELM MICHAEL VON MALEIN, OF HAMBURG, GERMANY.

FLOAT ARRANGEMENT FOR BOATS.

SPECIFICATION forming part of Letters Patent No. 725,264, dated April 14, 1903.

Application filed June 16, 1902. Serial No. 111,910. (No model.)

To all whom it may concern:

Be it known that I, WILHELM MICHAEL VON MALEIN, a subject of the Emperor of Russia, residing at Hamburg, in the German Empire, have invented certain new and useful Improvements in Float Arrangements for Boats and Similar Vessels, of which the following is a specification.

My invention relates to improvements in float devices for boats, particularly life-boats. The object of the improvements is to provide simple and effective means adapted to prevent in a reliable manner the capsizing of such boats when running in a heavy sea or passing a surf and which do not narrow or reduce the available space inside the boat whether the said improved float device is in or out of its operative position.

With this end in view my invention consists in certain novel features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims with reference to the accompanying drawing, whereon I have shown a perspective view of a boat provided with my improved float device.

Similar letters of reference refer to like parts.

At each side of the boat there is provided an upright or standard *a*, serving each as a pivot for a socket or hub *d*, mounted thereon. The upper ends of the pivots *a* may be connected by a cross-bar *h*. Attached to each hub *d* is a horizontal or nearly horizontal arm or outrigger *b*, from the free end of which is suspended in any suitable manner a float-body *c*. In the example shown the float-bodies *c* are constructed in the form and shape of a hollow drum or a roller, each rotatably mounted in a suitable bifurcation *b*² of the corresponding outrigger *b* and provided on its circumference with a plurality of ribs or blades *c'*, the purpose of which will be explained later on.

The outriggers or arms *b* are arranged at a sufficient height above the boat in order not to interfere with the crew or persons inside the boat and are of such a length that when the outriggers *b* have been swung in—that is

to say, brought into a position parallel or nearly parallel to the longitudinal or center line of the boat—the float-bodies *c* are outside the boat, behind its stern, as this is evident from the drawing, showing the outriggers and float-bodies in such inoperative or in position.

In order to bring the float body or bodies into their operative or out position, it is only necessary to swing out the outriggers *b* until they are athwartships, or about so. In this out position the outriggers may be secured by lashing or otherwise fastening suitable projections or arms *b'* of the sockets *d* to the cross-bar *h*. The buoyancy of the float-bodies acting on the free ends of the outriggers affords in either direction a very efficient force or resistance against the capsizing of the boat. Owing to the comparatively great length of the outriggers the float-bodies act upon long lever-arms and need therefore not be unproportionately large. When the boat is moving through the water, the blades *c'* cause the float-bodies to rotate and roll along upon the water, whereby the resistance against headway of the boat is considerably reduced.

The independently - arranged outriggers and floating devices afford the great advantage that when the boat is used as a ship's life-boat it may be prevented from capsizing in lowering down or hoisting by having that outrigger and float-body in out position which are clear of the ship's side.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of a boat with a vertical pivot *a* at each side of the boat, an outrigger *b* rotatably mounted on each pivot, and float-bodies *c* rotatably mounted in the free ends of the said outriggers, substantially as and for the purpose set forth.

2. The combination of a boat with a vertical pivot at each side, a cross connection between the said pivots, a socket or hub on each pivot, an outrigger attached to each hub, a float device suspended from the free end of each outrigger, and an arm extending from

each hub in opposite direction to that of the corresponding outrigger, substantially as and for the purpose set forth.

3. The combination of a boat with two independent float devices each consisting of a pivot *a*, a hub *d*, an outrigger *b*, a float-body *c* having blades *c'*, a cross-bar *h* and an arm

b', substantially as and for the purpose set forth.

WILHELM MICHAEL VON MALEIN.

Witnesses:

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