

(No Model.)

G. A. LEAVITT, Jr.

BOAT PLUG.

No. 258,775.

Patented May 30, 1882.

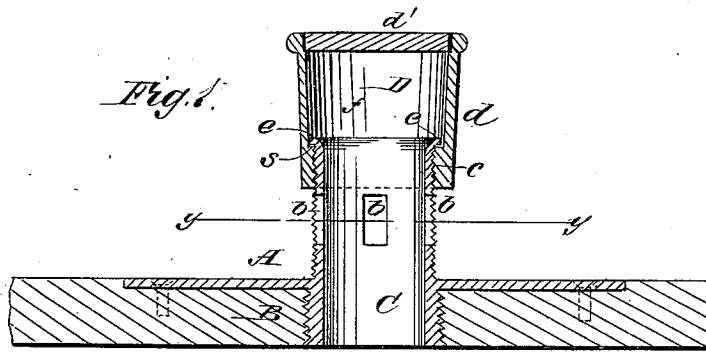
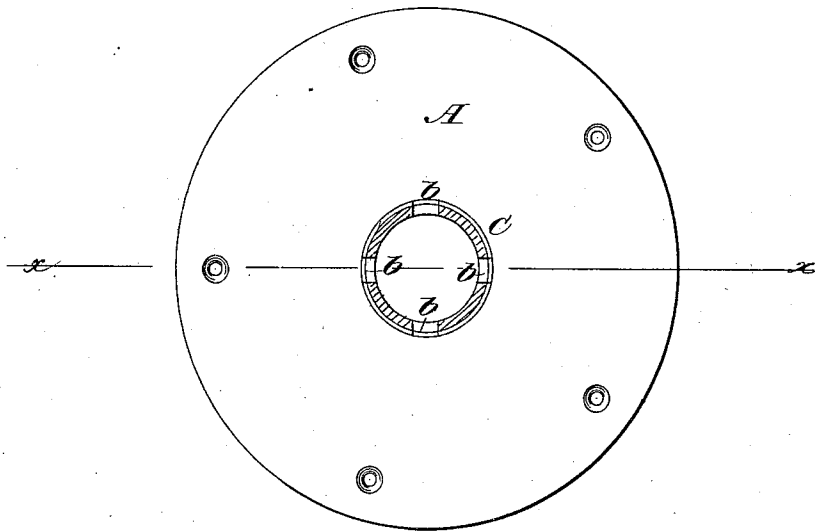


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE A. LEAVITT, JR., OF NEWBURG, NEW YORK.

BOAT-PLUG.

SPECIFICATION forming part of Letters Patent No. 258,775, dated May 30, 1882.

Application filed January 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. LEAVITT, Jr., of Newburg, in the county of Orange and State of New York, have invented a new and useful Improvement in Plugs or Stoppers for Boats and other Purposes, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a vertical section on the line *xx* in Fig. 2 of my improved plug or stopper as applied to the bottom of a boat. Fig. 2 is a horizontal section of the same on the line *yy* in Fig. 1.

This invention, while it is applicable as a plug, stopper, or valve for various purposes or uses in which the ingress or egress of different liquids or gases require to be controlled, is more especially designed to be used as a boat-plug, and will here be described more particularly with reference to such use.

It is a matter of no small importance, especially in the case of an emergency, that the boats carried by vessels should not only be provided with close-fitting plugs in their bottoms, but that these plugs should be always accessible, not liable to be lost or misplaced, and be convenient of operation. The ordinary boat-plug is defective in one or more of these respects, and improvements have been proposed which have had for their objects the remedying of such defects, or certain of them, including the liability to loss of the plug, which has been met by means of a hinged valve and otherwise.

My invention consists in a very simple and effective valvular device, which, when used as a boat-plug or substitute therefor, meets all the necessary requirements. Said invention comprises a simple tube having an attached plate and provided with one or more lateral openings above or outside of said plate. This tube preferably projects beyond both sides of the plate, and has a screw-thread on its exterior. Fitting the screw-threaded portion of this tube, which has the lateral opening or openings in it, is a screw-cap arranged to control said openings, which cap and tube are peculiarly constructed to prevent the removal or loss of the cap.

In the drawings, A indicates a circular or other suitably-shaped plate, which may be secured to the bottom B of a boat by screws arranged at suitable distances apart around the plate. Cast in one piece with this plate is a central tube, C, arranged to project both above and below the plate, and forming a passage-way through it. Said tube has a screw-thread cut on its exterior, and its lower projecting portion is screwed into the bottom of the boat to more effectually secure the device to the boat. A leather or other washer may be used between the plate and bottom of the boat to make a tight joint at such parts. The upper portion of the tube C has one or more lateral openings, *b*, in it for the escape of water from the boat. The upper end of said tube is also open; but it does not serve to deliver water.

D is a cap closed at its upper end, and having an interior screw-thread, *c*, for a limited distance at its lower end, which screw-thread fits the exterior screw-thread on the upper portion of the tube C. This cap D controls the lateral apertures *b* in the tube, and is of sufficient length either to wholly uncover and expose said apertures or to fully close them. When closing them the lower edge of said cap is screwed down against the plate A, or upon any suitable washer placed thereon, to make a tight joint. The cap D is of a peculiar construction, as is also the upper end of the tube C. Thus the cap D is made in two pieces—that is, a body, *d*, and a top, *d'*. The body *d* is of greater dimensions transversely than the internal screw-thread *c*, forming an enlarged chamber, *f*, and shoulder *s* on top of said screw-thread. Before putting on the top *d'* the body *d* of the cap is screwed down over the upper portion of the tube C; and the outer end of said portion of the tube, which has been purposely reduced, is turned outward or over by a burnisher or otherwise to form a flaring upper end, *e*, of greater cross-dimensions than the interior of the cap at its lower screw-threaded end, whereby the upper flaring end, *e*, of the tube, arrested by the shoulder *s*, acts as a stop to prevent the removal or loss of the cap. After the body *d* of the cap has been thus fitted to the tube the top *d'* is let into a recess in the upper or outer end of said body and soldered or otherwise hermetically sealed thereto.

The mode of using this improved boat plug

or valve is as follows: On launching a boat from the davits of a vessel the cap D is screwed tight down on the plate A or packing thereon, which action closes the lateral apertures *b*.
5 When taking the boat out of water the cap D is unscrewed to open the apertures *b* to provide for escape of water from the boat; but said cap cannot be unscrewed farther than the flaring end *e* of the tube, which acts as a stop,
10 will permit. Thus the boat-plug, which the cap D here represents, is never liable to be lost or misplaced, but will always be found in place and ready for use when "taking to the boats."
15 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The plate A, having an attached externally-screw-threaded tube, C, arranged to project from opposite faces of it, and provided with one or more lateral openings in one of its projecting screw-threaded portions, and with a flaring end, *e*, on such portion, in combination with the cap D, having a closed top and internally-screw-threaded inner end, *c*, and enlarged interior chamber or body portion, *f*, essentially as shown and described. 20 25

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Witnesses:

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