

(No Model.)

A. AMIRO.

FLOATING SUNKEN VESSELS.

No. 317,274.

Patented May 5, 1885.

Fig. 7.

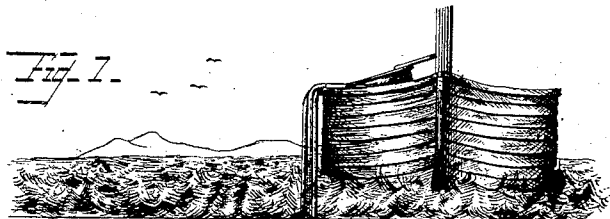


Fig. 8.

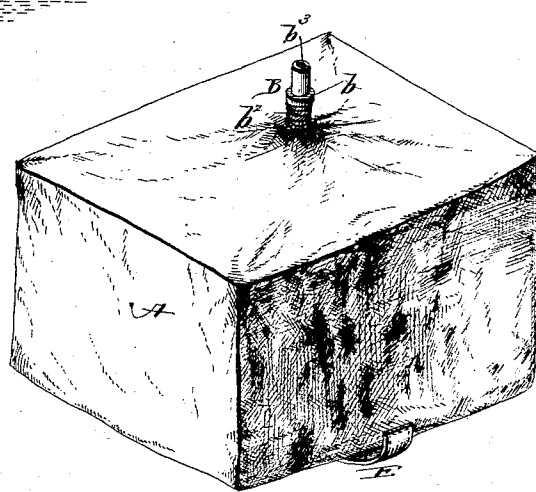
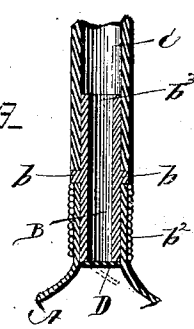


Fig. 9.



WITNESSES

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UNITED STATES PATENT OFFICE.

AMBROSE AMIRO, OF LOWER EAST, (PUBNICO,) NOVA SCOTIA, CANADA,
ASSIGNOR TO HIMSELF AND HENRY T. D'ENTERMONT, OF SAME PLACE.

FLOATING SUNKEN VESSELS.

SPECIFICATION forming part of Letters Patent No. 317,274, dated May 5, 1885.

Application filed November 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, AMBROSE AMIRO, a subject of the Queen of Great Britain, residing at Lower East, (Pubnico,) in the Province of Nova Scotia and Dominion of Canada, have invented certain new and useful Improvements in Floating Sunken Vessels, &c.; 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.

This invention relates to means and devices for floating sunken vessels; and the object of my improvements is to provide simple, inexpensive, convenient, and efficient means whereby sunken vessels may be readily raised and floated, or by which rocks or other sunken substances may be brought to the surface.

In the drawings, Figure 1 is a transverse sectional view of a vessel, showing the application of my invention. Fig. 2 is a detail perspective view of the device proper. Fig. 3 is a detail sectional view thereof.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates a bag, which may be of any suitable shape best adapted for the purpose or position in which it is designed to be used. Under some circumstances the bag is preferably round or ball-shaped; but where it is designed to be applied in the hold of vessels a flat rectangular shape—such as herein shown—may be preferred. The bag is constructed of rubber, canvas, or other suitable air-tight material, and is provided with a mouth formed by a suitable mouth-piece or tube, B. The mouth-piece B is preferably formed with a centrally-disposed circumferential shoulder, *b*, against which the edge of the material of which the bag is constructed is set, the latter being secured around the mouth-piece by means of twine *b*², or in any other suitable manner.

When the bag is set in position for operation, the end *b*³ of the mouth-piece, projecting from the shoulder *b*, is adapted to receive a suitable tube, C, through which air is forced into the bag. The tube is connected at its other end with an ordinary bellows or with

a steam-bellows, by which the required air-pressure is secured.

A valve, D, may be provided in the mouth-piece B to prevent the escape of air after it is forced into the bag.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains.

To raise and float a sunken vessel, a suitable number of bags such as above described are set by divers in the hold of the vessel, and when thus arranged in the hold it is unnecessary to fasten the bags, as they will readily retain their position. The bags are of course empty when thus set for operation, and the conducting-tubes leading from a bellows or other air-forcing apparatus are of sufficient length to extend to the deck of a vessel or to the shore. It is manifest that as the bags are filled with air the vessel will be readily raised and floated.

It is designed to have these improved bags of such a shape and construction that they may be compactly folded and stowed away on board vessels, after the manner of life-preservers, so that in case of accident they can readily be adjusted in position and operated to float the vessel.

When it is desired to raise rocks or other sunken substances, a suitable number of devices, as herein described, are fastened to the rock. To provide for this, a strap or loop, E, is secured upon the surface of the bag, and is adapted to be engaged by a grommet, by which the bag is firmly fastened to the rock; but, in lieu of this arrangement, suitable hooks or other fastening devices may be employed. When thus fastened to the rock and filled with air by means of the conducting-tubes, the rock will be brought to the surface.

I claim as my invention and desire to secure by Letters Patent—

As an improvement in means for raising and floating sunken vessels, the combination of the herein-described collapsible bag, formed entirely of rubber or other suitable material, the cylindrical tubular mouth-piece having the central circumferential shoulder and provided with the valve at its inner end, the

mouth of the bag being placed around the
end of the tube with its edge set against the
shoulder and secured, as described, and the
air-tube extending from the bag, and having
5 its end fitted over the outer end of the mouth-
piece and set against the shoulder, all ar-
ranged and operated substantially as and for
the purpose set forth.

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

AMBROSE AMIRO.

Witnesses:

MARK E. LEBLANC,
WILLIAM H. AMIRO.