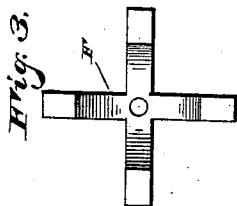
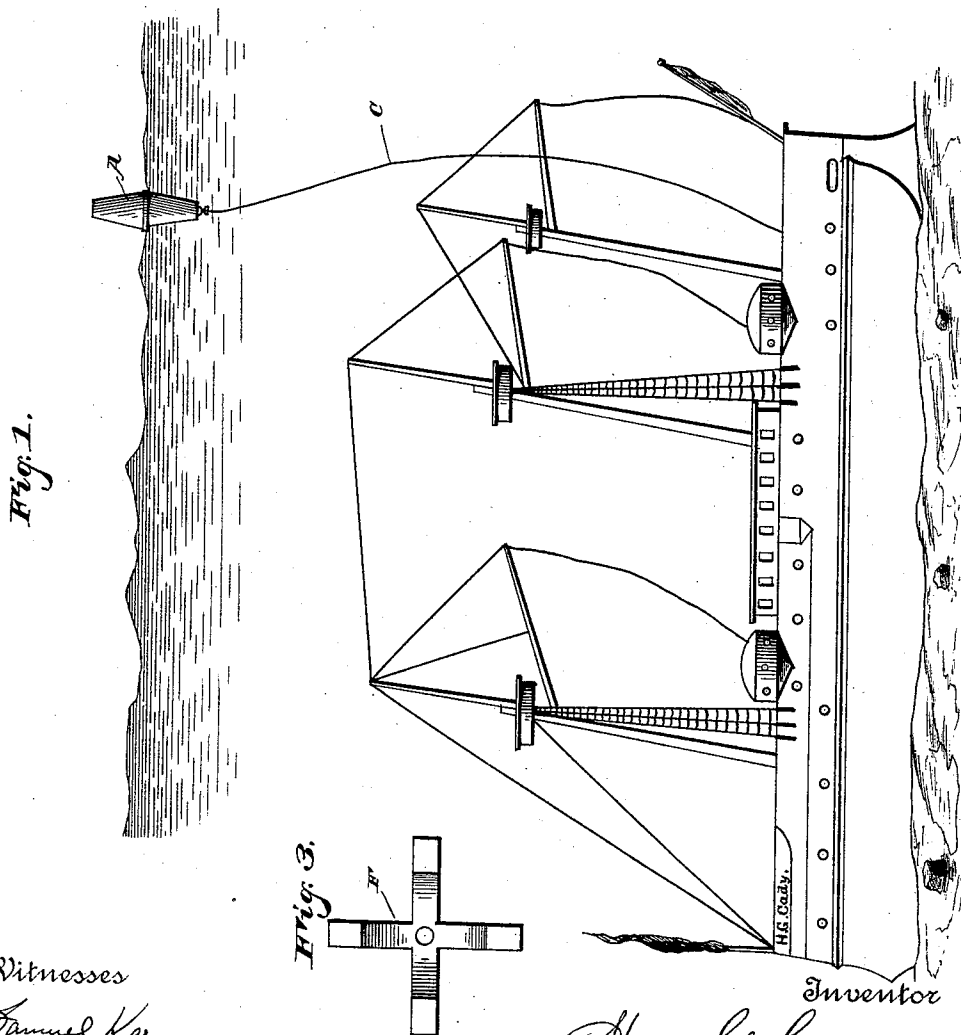
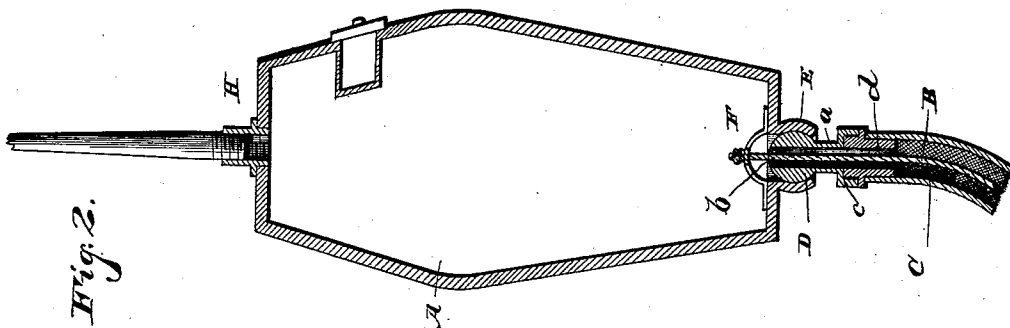


(No Model.)

H. G. CADY.
VESSEL SAVING APPARATUS.

No. 465,342.

Patented Dec. 15, 1891.



Witnesses
Samuel Ker.
Johf A. Hagmann

Inventor
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By *[Signature]*
Attorneys.

UNITED STATES PATENT OFFICE.

HENRY G. CADY, OF PINE BLUFF, ARKANSAS.

VESSEL-SAVING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 465,342, dated December 15, 1891.

Application filed December 3, 1890. Serial No. 373,501. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. CADY, a citizen of the United States of America, residing at Pine Bluff, in the county of Jefferson and State of Arkansas, have invented certain new and useful Improvements in Vessel-Saving Apparatus, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention pertains to vessel-saving apparatus, and is designed to provide means for locating sunken vessels, in order that, thus located, they may subsequently be recovered, substantially as hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a side elevation; Fig. 2, a vertical section of the same. Fig. 3 is a plan view thereof.

In carrying out my invention I employ buoy or float A, having painted thereon the name of the vessel to be thus identified. Buoy or float A has one end of rope B permanently connected thereto, and also a hose or rubber tube C, in which this rope is inclosed, the greater diameter of the hose also admitting free passage of air therethrough. The connection of the rope to the buoy or float is effected by means of a ball-and-socket or universal joint D in order to render the connection more flexible, and thus prevent wear and breakage at that point, chiefly, of the hose-pipe from the vibrating motion of the water. The ball-and-socket joint is pendent from the lower end of the buoy, the ball being seated in the socket E and having a suitable passage through it for the wire rope and air, the rope in continuation being passed through corresponding central orifices in the curved cross-bars F and then tied or otherwise secured, the object of the curved crossing bars being to permit passage of air from the tube or hose through the buoy to the collar or sleeve G. The opening of the buoy at its upper end, wherein is secured the threaded collar or sleeve H, is designed to permit the attachment thereto of a section of hose, in connection with an air-force pump, when the sunken vessel is to be raised, the collar-screws being normally closed with a screw-cap to permit the ingress of air.

Ball-and-socket joint D is provided with a

hollow stem or pipe *a*, in alignment with passage *b*, the stem or pipe being formed with a screw-cap *c*, engaging a screw-threaded sleeve or collar *d*, secured to the upper end of the hose-pipe.

Thus constructed, the wire rope is secured to the vessel, and, with the hose, is connected in any ordinary manner to suitable and connecting air-tight compartments, and in the event of the sinking of the vessel or ship equipped with the apparatus, the hose and wire rope, uncoiling, the buoy would float on the surface of the water and locate the ship.

When preferable, a storage-chamber may be provided in the buoy or float in which to preserve the ship's log, money, treasure, or valuable papers placed therein through a door near the top and fitted water-tight.

Having thus fully described my invention, I claim—

1. The buoy or float connected by a line to a floating ship or vessel, in combination with the hose enveloping said line and having a universal-joint connection with said float and of a diameter in cross-sectional area adapted to provide for the passage therethrough of air under pressure to the float, substantially as set forth.

2. The buoy or float having a ball-and-socket connection provided with a tube or hollow stem terminating in a screw-cap, in combination with the air tube or hose having fitted in one end a tubular sleeve or collar engaged by said cap, said hose being connected to a floating ship or vessel, substantially as set forth.

3. The buoy or float having integral therewith a socket, and the orificed crossing bars arranged in alignment with said socket, in combination with the tube or hollow stem having an orificed ball engaging said socket, the hose adapted for the passage of air therethrough and having fitted in one end a tubular sleeve or collar engaged with said tube or stem, and the line passing through said hose and secured in the orifice of said crossing bars, substantially as specified.

4. The buoy or float having at top a threaded collar or sleeve for attachment thereto of an air-pump and at bottom orificed crossing bars and a ball-and-socket connection provided with a tube or hollow stem terminating in a screw-cap, and the hose for connection with

an air-chamber in the floating ship or vessel and fitted at one end with a screw-threaded sleeve or collar engaged by said cap, substantially as set forth.

- 5 5. The buoy or float having at top a threaded collar or sleeve for attachment thereto of an air-pump and at bottom orificed crossing bars and a ball-and-socket connection provided with a tube or hollow stem terminating in a
10 screw-cap, the hose for connection with an air-chamber in the floating ship or vessel and fitted at one end with a sleeve or collar engaged by said cap, and the line having connection with said orificed crossing bars and
15 inclosed within said hose and connected to said ship or vessel, substantially as specified.

6. The apparatus for indicating the locality of a sunken vessel, comprising the buoy or float having connected thereto the hose at one end, the opposite end of said hose being 20 connected to an air-tight compartment of said vessel, and the line also connected to said vessel, passed through said hose, and connected to said float or buoy, substantially as specified. 25

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

HENRY G. CADY.

Witnesses:

J. G. TAYLOR,
N. J. C. JOHNSON.