

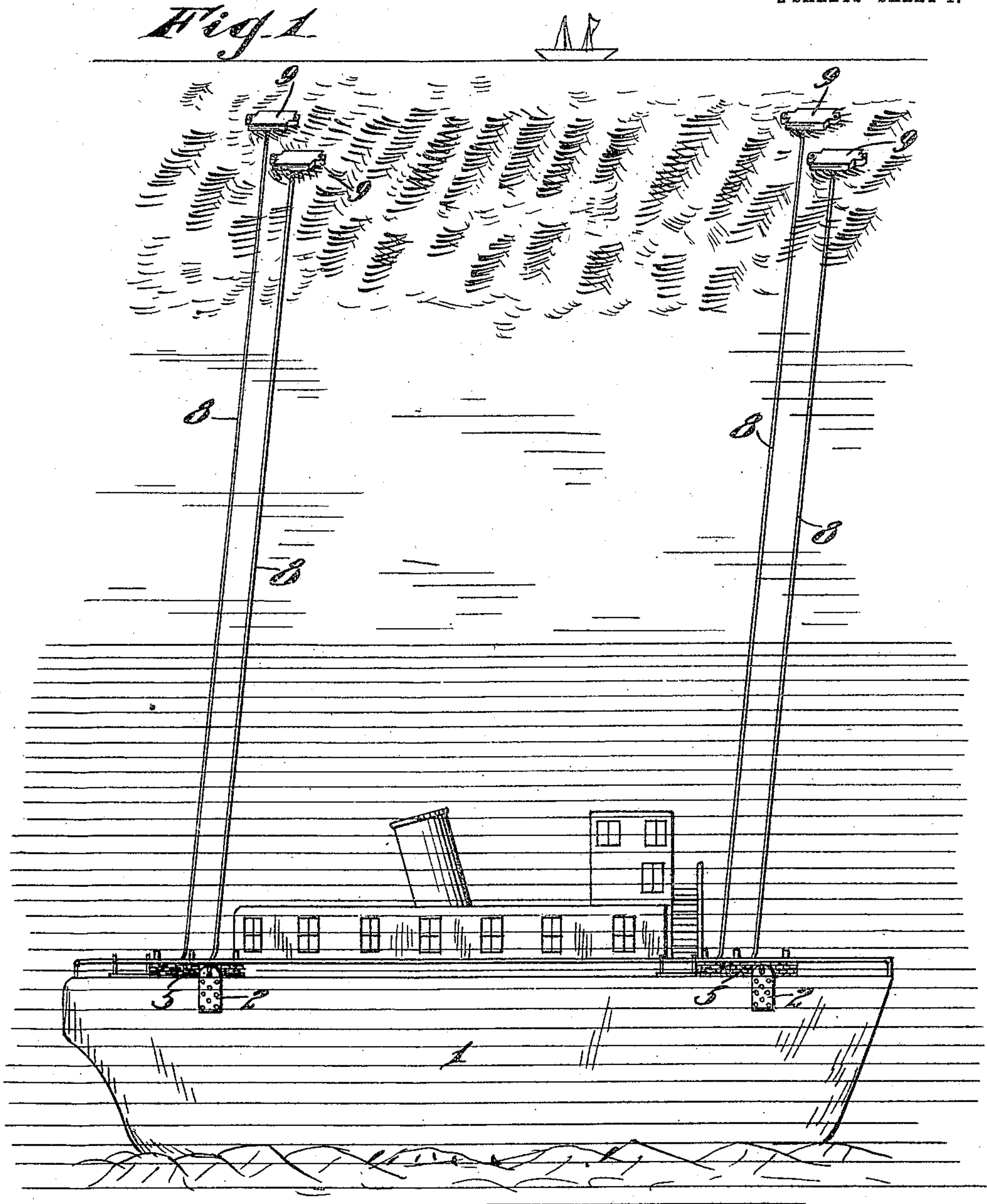
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ATTACHMENT FOR VESSELS FOR FACILITATING THE LOCATION AND RAISING OF VESSELS  
WHEN SUNK.

APPLICATION FILED AUG. 5, 1909.

944,277.

Patented Dec. 28, 1909.

2 SHEETS—SHEET 1.



Inventor

Witnesses

*Thos. Esenard.*  
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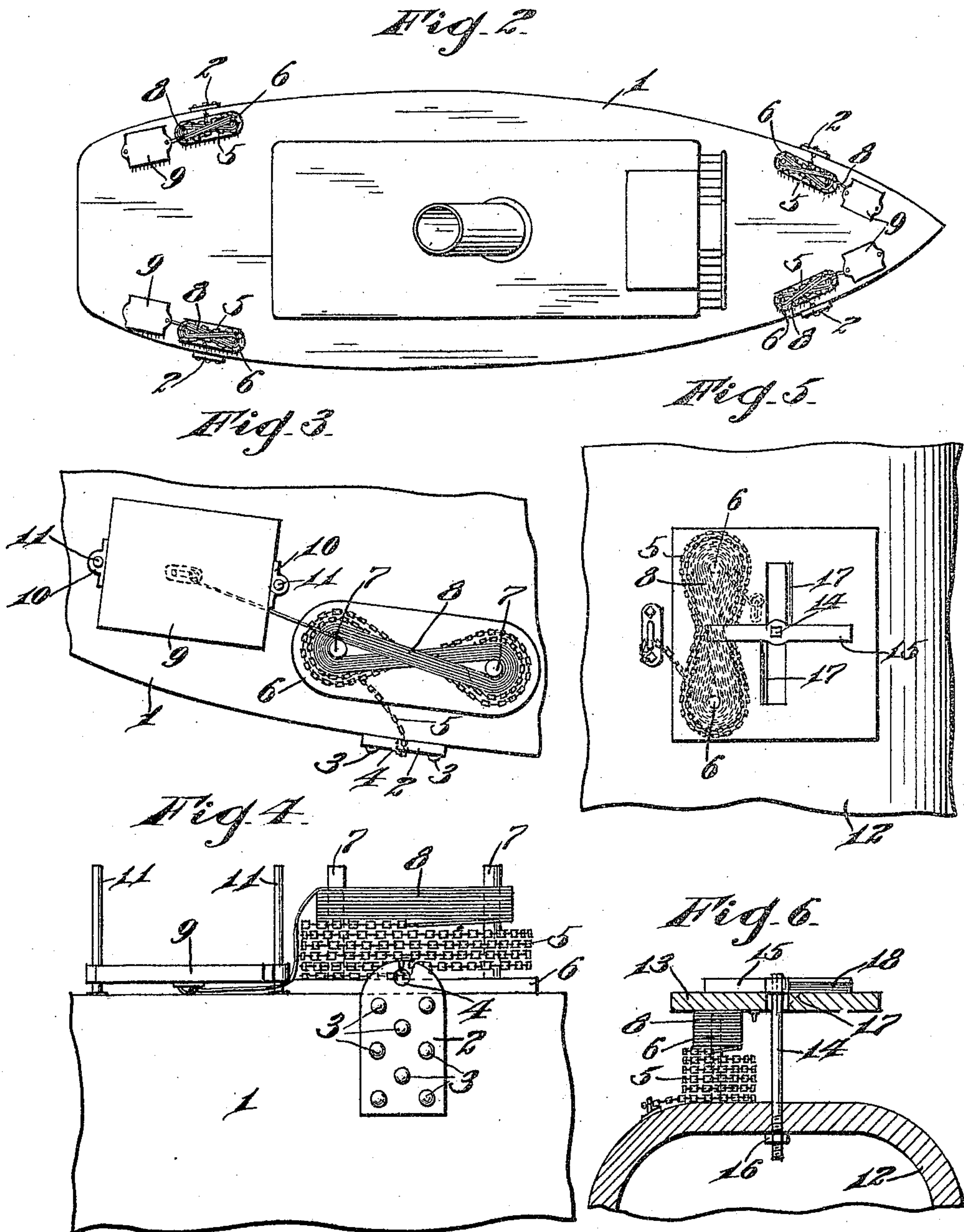
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# UNITED STATES PATENT OFFICE.

ROBERT W. RAMSDEN, OF PHILADELPHIA, PENNSYLVANIA.

ATTACHMENT FOR VESSELS FOR FACILITATING THE LOCATION AND RAISING OF  
VESSELS WHEN SUNK.

944,277.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed August 5, 1909. Serial No. 511,277.

*To all whom it may concern:*

Be it known that I, ROBERT W. RAMSDEN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Attachments for Vessels for Facilitating the Location and Raising of Vessels When Sunk, of which the following is a specification.

My invention relates to an attachment for vessels for facilitating the location and raising of the vessels when sunk, the object of the invention being to provide improvements of this character, which can be conveniently placed upon a ship, and which in the event of the sinking of the ship, the floats will rise from the sunken vessel to the surface, and be connected by ropes or cables, with heavy chains of sufficient strength to raise the vessel, and which chains may be raised by means of the cable when the salvage crew arrives.

A further object is to provide improved mounting on the vessel for chain, cable and float, which will effectually hold them in normal position in heavy seas, and will always maintain them in proper position for instant use in the event of the vessel sinking.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claim.

In the accompanying drawings, Figure 1, is a view in elevation illustrating the application of my improvements upon a sunken vessel. Fig. 2, is a plan view of the vessel with the attachment in position for use. Fig. 3, is an enlarged plan view of one of the attachments shown in Fig. 2. Fig. 4, is a view in side elevation of the structure shown in Fig. 3, and Figs. 5 and 6, are plan and sectional views respectively, illustrating the application of my improvements to a submarine boat.

1 represents the vessel, and 2 metal plates secured to the hull of the vessel by means of rivets 3, and providing an eye 4 in which a heavy chain 5 is secured, and is of sufficient strength to lift the vessel when sunk. While I have shown four of these plates 2 and attachments, it is obvious that as many of them may be employed as may be necessary to lift that particular vessel, and I do

not of course limit myself to any particular number, as the number will vary according to the size of the vessel. The chain 5 is coiled upon a rack 6, comprising a base having uprights 7 thereon, and is of a length sufficient to reach from any ordinary depth to the surface. To the free end of this chain 5, a rope or cable 8 is secured, and is also coiled upon the rack, and is of a length at least equal to the length of the chain. The free end of this rope or cable is secured to a raft or float 9, which latter may be made of any suitable material, and is provided with eyes 10 at its ends positioned over vertical rods or posts 11, secured to the ship. The purpose of these rods is to hold the float against displacement when the ship is in heavy seas, and are of sufficient length, so that even though waves should wash over the deck of the vessel, they would not wash the float or raft from its mooring. However, the rods permit the floats or rafts to float freely off in the event of the sinking of the ship.

The operation is therefore as follows: When a vessel sinks, all of the rafts or floats 9 will float off the rods 11 to the surface of the water, and will be connected by the cables or ropes 8 to the chains 5 on racks 6. When the salvage crew arrives, it is simply necessary to get hold of the cables 8 and draw up the chains 5, and attach them to the windlasses, so that when the windlasses are turned, the sunken ship will be raised.

In the modification shown in Figs. 5 and 6, showing the application of my improvements to a submarine, the chain 5 and cable 8 are wound upon the rack 6 on top of the submarine 12, and the wood float or raft 13 is secured on top of the cable or chain by means of a rod 14, having a T-head 15 on its upper end. This rod 14 projects through the top of the submarine, and is made water tight, and is provided with a hand hold or turning device 16 on its lower end inside of the submarine. The float 13 is provided with a slot larger than the T-head 15, and provided with beveled walls 17, while the T-head 15 is provided with beveled walls 18 to contact with the beveled walls 17 of the float, and when the float is in position, and the T-head turned by means of the hand hold 16 inside of the submarine, the T-head will exert a downward pressure on the float to securely bind it on the cables and chains,



and not only lock the float in position, but also hold the cable and chains clamped to the top of the submarine. If the submarine should sink, and due to accident be unable to rise again, the hand hold 16 can be turned from the inside of the ship to register the T-head 15 with the slot in the float, and the latter will float off the submarine and carry with it the cable to the surface of the water.

10 Various other slight changes might be made in the general form and arrangements of parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but

15 consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the claim.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

20 In combination with a ship, plates riveted

to the ship, and having eyes therein, racks on the ship, heavy chains secured at one end in the eyes of the plates, and wound on said racks, cables secured at one end to the end of the chains, and wound on said racks above the chains, vertical rods rigidly secured to the ship and disposed parallel to each other, a float having eyes at its ends mounted in said rods, said cables secured to said floats whereby when said floats move upward off the vertical rods, the end of the cable will be conveyed to the surface of the water, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT W. RAMSDEN.

Witnesses:

J. A. L. MULHALL,  
ROSE H. KRENKEL.