

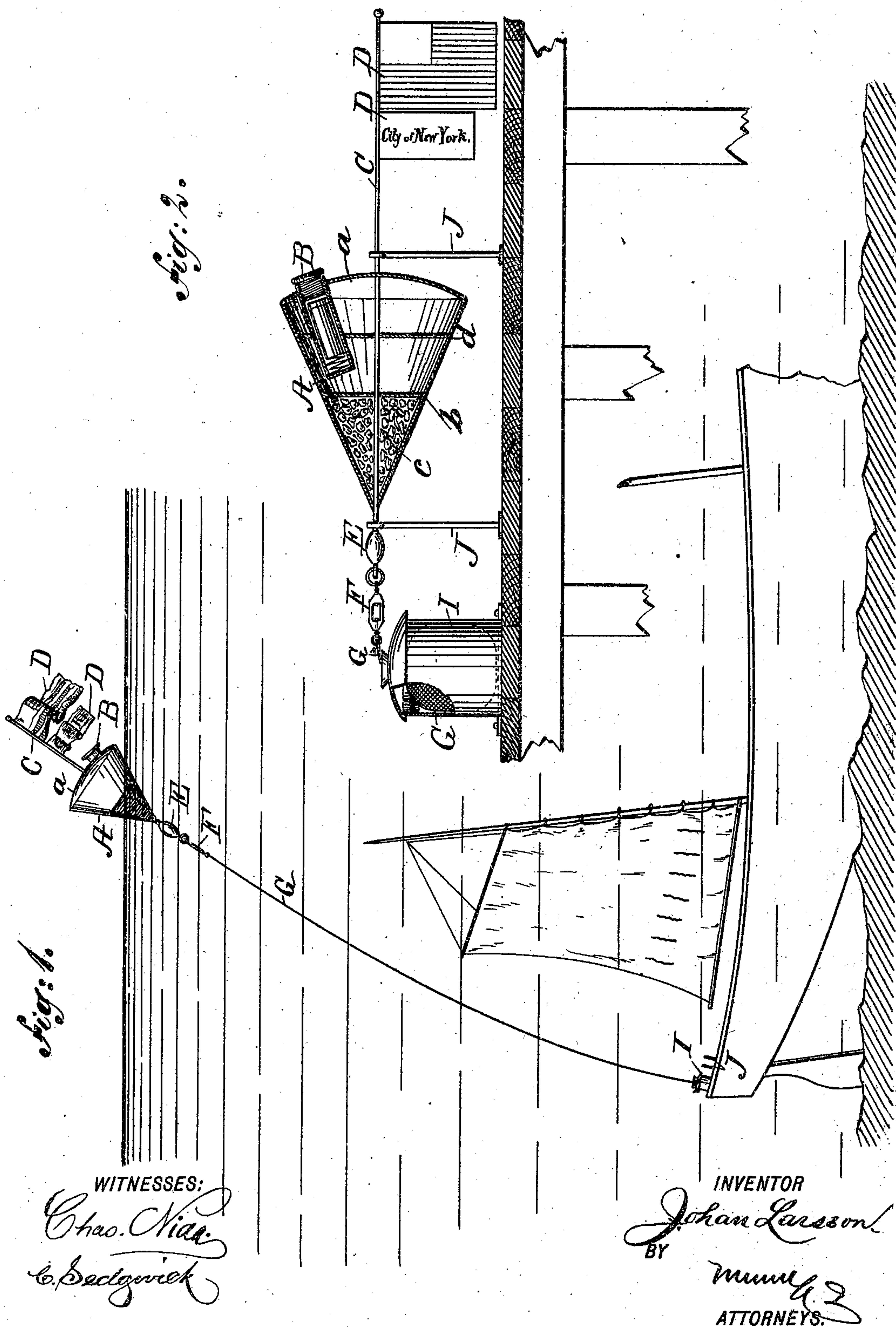
(No Model.)

J. LARSSON.

FLOATING SIGNAL FOR LOCATING SUNKEN VESSELS.

No. 504,225.

Patented Aug. 29, 1893.





# UNITED STATES PATENT OFFICE.

JOHAN LARSSON, OF LUDINGTON, MICHIGAN, ASSIGNOR TO HIMSELF AND  
FRANK PETERSON, OF SAME PLACE.

## FLOATING SIGNAL FOR LOCATING SUNKEN VESSELS.

SPECIFICATION forming part of Letters Patent No. 504,225, dated August 29, 1893.

Application filed December 29, 1892. Serial No. 456,723. (No model.)

*To all whom it may concern:*

Be it known that I, JOHAN LARSSON, of Ludington, in the county of Mason and State of Michigan, have invented a new and useful  
5 Improvement in Floating Signals for Locating Sunken Vessels, of which the following is a full, clear, and exact description.

This invention relates to an improvement in floating devices adapted to indicate the position of a sunken vessel, and has for its object to provide a buoy which will conspicuously show the location of a sunken craft, which will indicate the name of the submerged vessel, which contains a hermetically sealed  
15 case wherein memoranda relating to the foundered craft may be placed, together with a length of line reaching from the buoy to the vessel; and furthermore, to provide means to support the buoy on the vessel, ready for  
20 use if accident happens to the latter and furnish a line for the buoy, which line is adapted to pay out when the vessel sinks and the buoy floats above it, so as to maintain a connection between the signaling device and the object  
25 to which it is attached at the bottom of the water bed.

To these ends my invention consists in the construction of parts and their combination, as is hereinafter described and claimed.

30 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 is a side view in part, of a sunken vessel and the improved indicating buoy connected therewith and floating on the surface of the water above the craft; and Fig. 2 represents the improved signaling device partly  
35 in section, and supported on a portion of a vessel's deck.

The improvement consists of a hollow sheet metal float or buoy A, of suitable dimensions for efficient service and conical in form, having its top wall *a*, convexed, and the entire  
45 structure made water and air-tight. A transverse partition wall *b*, is formed in the hollow float A, near its longitudinal center, and the space below said partition is filled with cork *c*.

Between the partition *b*, and top wall *a*,  
50 there is located a transverse diaphragm *d*, which is secured to the inner surface of the

conical side wall of the float A, so as to produce two air-tight compartments within it, above the lower chamber wherein the cork filling *c*, is packed; thus furnishing two air-tight chambers, so that if one is injured and  
55 fills with water, the other will float the upper part of the shell of the buoy.

An aperture of proper size is formed in the convex wall *a*, for the introduction of a cylindrical case B, which is secured therein air-tight, and is designed to contain the ship's letters and papers, or other memoranda that would be of service to indicate to those interested the name, rating, destination, home, and  
65 cargo, of a sunken vessel, to which the buoy belongs. The case is sealed hermetically by any proper device, a screw cap on its outer end being shown as a preferred means for closing the case water-tight, after the papers  
70 have been introduced.

A flag-staff C, is introduced through the center of the top wall *a*, and also through the partitions therein, and the converged lower terminal of the float wall, its joints with said  
75 parts being made water and air-tight. The staff C, extends a short distance below the pointed lower end of the float shell A, and projects a proper distance above the top wall *a*, to afford a support for the signal flags D,  
80 which may represent any national color or emblem and have the name of the vessel they belong to imprinted upon them or any other design or legend that may be preferred. From the lower end of the staff C, a ballast  
85 weight E, is projected, which is of a sufficient heft to counter-balance the weight of the staff above the top wall of the float A, and cause the float to ride upon the water and hold the flag elevated.

90 On the ballast weight E, a swivel piece F, is affixed by a ring or like means, the swivel piece extending from the lower part of the ballast weight. A wrapped ball of cordage G having a sufficient length for effective service,  
95 is placed in an inclosed receptacle I, and has one of its end portions projected through the perforated top of said receptacle or box, which latter is by preference secured to the deck of the vessel that is to carry the signal,  
100 near its bow or stern. The rope G, is adapted to unwrap freely when its end portion outside



of the containing box is drawn upon, and said portion of the rope is attached to the lower end of the swivel piece F, the other end being prevented from passing out of the box I, by any suitable means.

On the deck of the vessel whereon the improvement is to be placed, two standards J, are vertically erected, near the box I, as indicated in Fig. 2, a proper distance intervening the standards to permit the location of the flag staff C, upon them; there being crotched formations on the upper terminals of the standards that facilitate the support of the staff which is loosely laid in said crotches, with the float or buoy A between the standards, the height of the latter maintaining the buoy body above the deck.

The parts being constructed and arranged as stated, it will be seen, that in case the vessel having the improvement is foundered, the buoy A, will rise to the water's surface, and float above the sunken craft, and in case the seamen are drowned, or have to abandon the submerged vessel, the buoy and its flag will show the exact location of the ship below it. Furthermore, an examination of the contents of the sealed case B, will enable those who subsequently inspect it, to ascertain the probable depth of the water, where the vessel is lying, if the length of the buoy line G, is recorded in the memoranda contained in the case B.

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

1. An indicating buoy for vessels, the same being formed with transverse partitions forming airtight chambers, a filling of cork in one of such chambers, a staff extending longitudinally through the buoy partitions and projecting beyond the top and bottom of the buoy, and a counterbalance weight on the

lower projecting end of the staff, the upper end of the staff being adapted to receive a flag or the like, substantially as described.

2. In an indicating device for vessels, the combination with a conical air-tight hollow float or buoy shell, a flag-staff extending longitudinally and centrally through the shell, of a line box on the vessel's deck, a wrapped line therein having one end connected with the buoy at its lower end and oppositely attached to the box, and spaced standards on the vessel adapted to loosely sustain the buoy shell between them by engaging the flag-staff, substantially as described.

3. An indicating device for sunken vessels, comprising a conical buoy shell divided into a lower chamber and two upper chambers, cork-filling in the lower chamber, a flag-staff secured centrally and longitudinally in the buoy shell and projected through it air-tight, a sealed case in the buoy shell above a partition therein, standards on the deck of the vessel, which normally support the indicating device, and a line connected by one end to the float and the other to the vessel, substantially as described.

4. An indicating device for sunken vessels, comprising an air-tight conical buoy shell divided into three chambers, cork filling in the lower chamber, a flag-staff extending centrally and longitudinally through the buoy shell, a flag thereon above said shell, a depending ballast weight on the lower end of the flag-staff, a swivel piece on the weight, and a line in a box on the vessel's deck, and attached by one end in said box and at the other end to the swivel piece, substantially as described.

JOHAN LARSSON.

Witnesses:

DANIEL W. RUNDON,  
FRANK E. PETERSON.