

No. 637,147.

Patented Nov. 14, 1899.

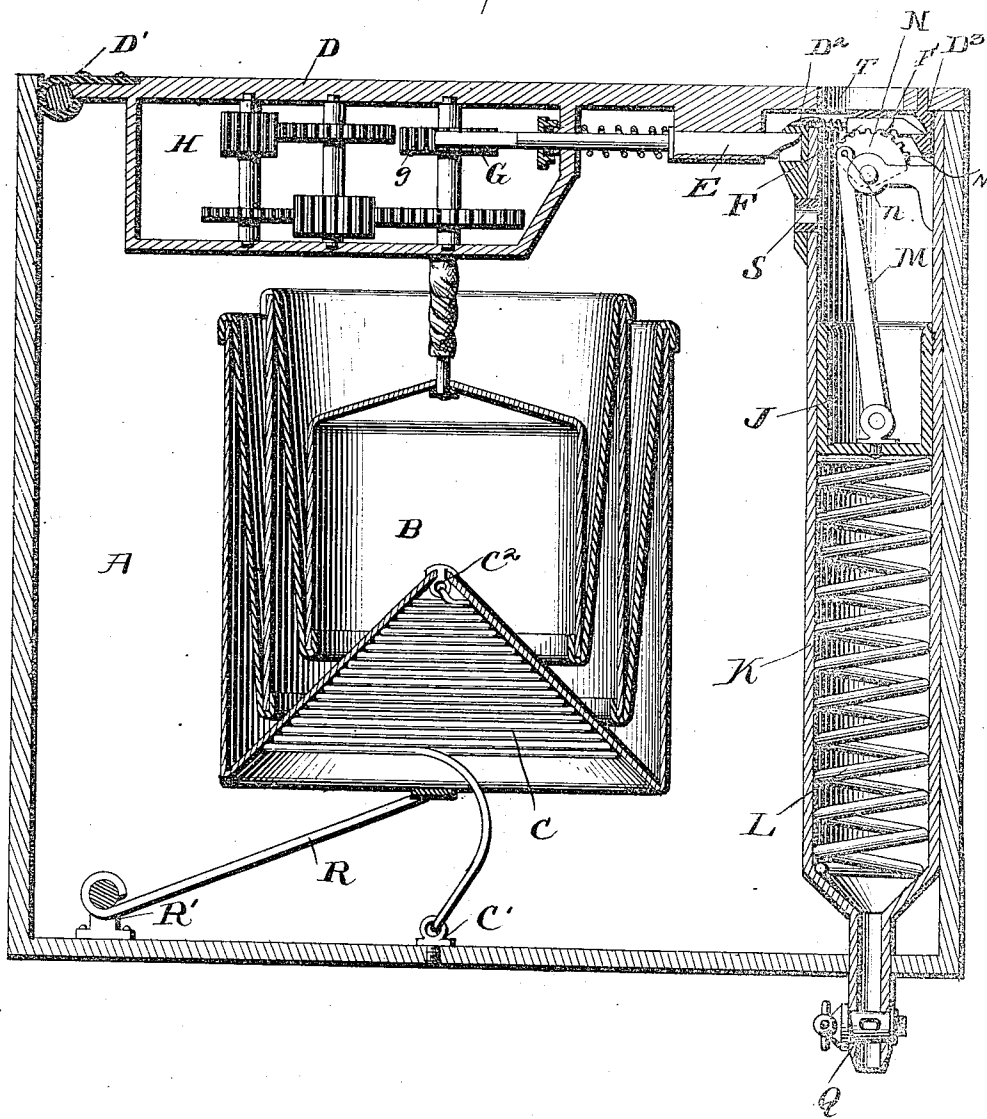
T. J. MORIARTY.
DEVICE FOR LOCATING SUNKEN ARTICLES.

(Application filed May 5, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.



Witnesses
L. C. Hills
C. J. Stockman

Inventor
Thos. J. Moriarty,
by *Franklin H. Douglass*
Attorney

No. 637,147.

Patented Nov. 14, 1899.

T. J. MORIARTY.
DEVICE FOR LOCATING SUNKEN ARTICLES.

(Application filed May 5, 1899.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 2.

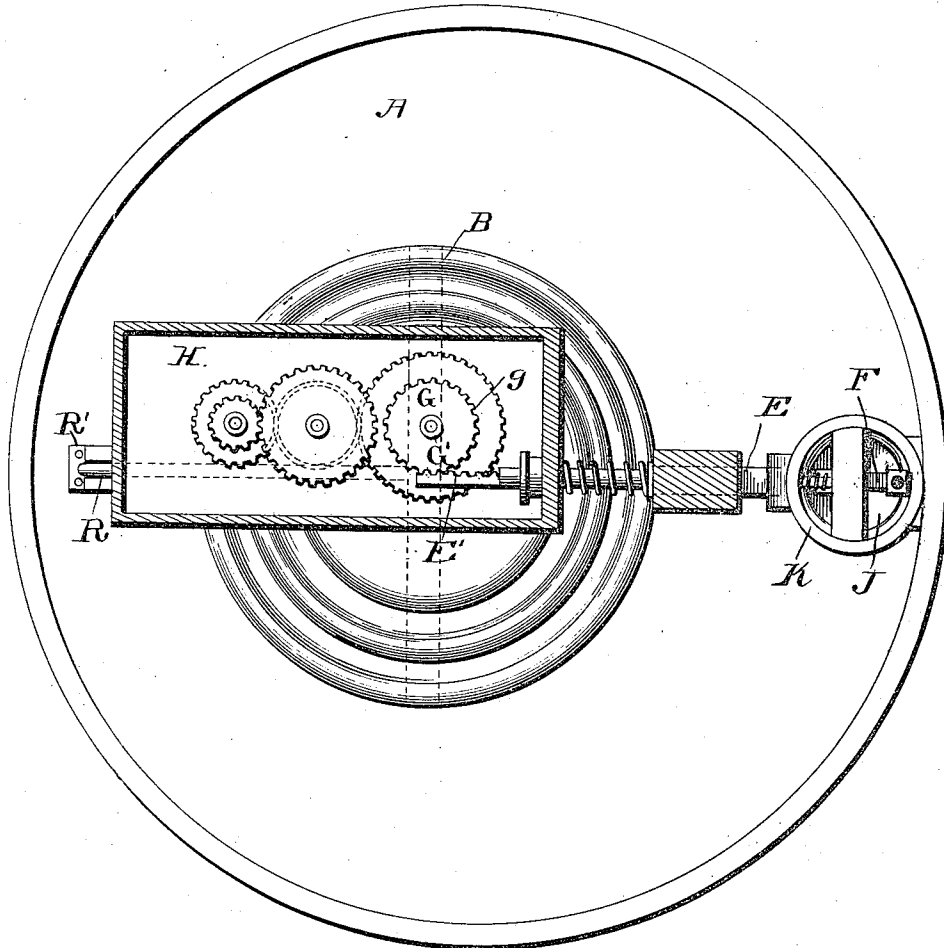
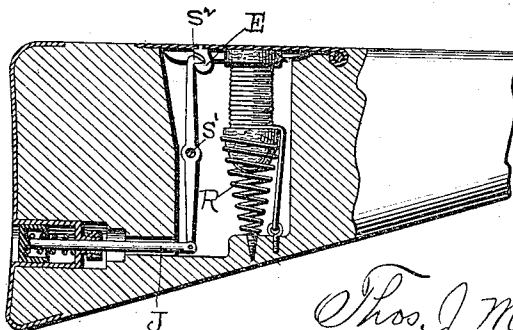


Fig. 3.



Witnesses
L. C. Mills.
C. Stockman

Inventor
Thos. J. Moriarty,
By *Franklin N. Douglass*
Attorney

UNITED STATES PATENT OFFICE.

THOMAS JOSEPH MORIARTY, OF NEWPORT, RHODE ISLAND, ASSIGNOR OF
ONE-HALF TO JOHN T. REAGAN, OF SAME PLACE.

DEVICE FOR LOCATING SUNKEN ARTICLES.

SPECIFICATION forming part of Letters Patent No. 637,147, dated November 14, 1899.

Application filed May 5, 1899. Serial No. 715,739. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JOSEPH MORIARTY, a citizen of the United States, residing at Newport, in the county of Newport and State of Rhode Island, have invented certain new and useful Improvements in Devices for Locating Sunken Articles; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements for locating sunken articles; and it consists in the provision of a buoy which is housed in a suitable receptacle and anchored to the article which is sunken by means of a cord which has one end secured to the casing, the other end to the buoy, and wound about the latter, means being provided whereby said buoy may be released from its casing, which is carried by the sunken article, means being provided for automatically releasing the cover of the casing by hydrostatic pressure while under water in conjunction with clock mechanism, which may be set so as to allow retaining-bolts to be withdrawn at a predetermined time.

More specifically the present invention consists in the provision of a device for indicating the location of sunken articles, such as torpedoes, firearms of various kinds, lobster-pots, fish-cars, &c., and consists in confining within a casing a buoy, about which is reeled a cord, which cord is anchored to the casing, the latter being of such size as to be readily fitted into the article the location of which is to be indicated, said casing containing a clockwork which is designed to withdraw a retaining-bolt, and a spring-actuated piston which has connection with a second releasing-bolt, whereby the pressure of water upon the piston-head will cause the second bolt to withdraw from its engaging relation with the cover of the casing, whereby the buoy will be allowed to leave the casing and float to the surface of the water, thus forming an indication of the sunken article.

To these ends and to such others as the in-

vention may pertain the same consists, further, in the novel construction, arrangement, and adaptation of parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a sectional view through the casing and the buoys and piston contained therein. Fig. 2 is an end view of the casing, showing the cover removed. Fig. 3 is a sectional view through a portion of the stock of a gun, showing the device as applied to the stock.

Reference now being had to the details of the drawings by letter, A designates the casing containing my improved mechanism, which may be made of any suitable shape for the purpose for which it may be designed, and in the present instance I have shown the casing as cylindrical and adapted to be fitted within an automobile torpedo or any other article the location of which is desired to be determined when sunken. This casing contains the buoy B, about which is reeled a rope C, one end of which is connected to the casing, as at C', and its other end to the buoy, as at C². Said casing has a cover D, which is hinged at D' to the casing and is provided with two catches D² and D³, which are engaged by the spring-actuated bolts E and F. The bolt E has a series of rack-teeth E' at one end, which teeth are designed to mesh with the teeth g of the pinion-wheel G, which is mounted on the shaft G' of the clockwork mechanism, which is contained within the compartment II of the casing. This clockwork mechanism is of the ordinary construction common in alarm mechanisms and so arranged that it may be set to go off at any stated time and cause the bolt E to be disengaged from the notch D². As no novelty is claimed for this clock mechanism, no detailed illustration or further description of this mechanism is deemed necessary.

On one side of the casing is a cylinder K, in which works a piston J, which is acted upon by a spring L in the lower part of said

cylinder, the tension of which spring serves to keep the piston J normally at its highest limit, but allowing the same to be depressed under tension of the spring when the device is sunken and acted upon by the pressure of the water bearing upon the upper face of said piston. Mounted in said cylinder and connected to the piston is the rod M, the upper end of which is connected at n to the segment N, which has a series of teeth N', which are adapted to mesh with the teeth F' on the spring-actuated bolt F' as the piston is depressed, thus causing said bolt to disengage with the notch D³, with which it normally engages when the apparatus is in shape for use. At the lower end of said cylinder is a drip-cock Q, whereby the water which may enter the space in the cylinder below the piston may be drawn off. In order to release the buoy from its casing when the cover is opened, a spring R is provided, the free end of which bears yieldingly against the lower end of the buoy, while its other end is secured at R' to the casing.

In operation when the device is used in connection with automobile torpedoes and it is desired to have the apparatus operate a few moments after the time which is set for the run of the torpedo the clockwork is set accordingly to cause the bolt E to be released at a predetermined time, and in case the torpedo should come to the surface at the time the clockwork is set for releasing the lever E the latter will be released, but the second sliding bolt will not be actuated. Hence the cover will not be released, allowing the buoy to escape from its inclosure; but should it happen that the torpedo should sink the bolt E being released the pressure of the water against the piston J will cause the latter to be depressed against the tension of the spring L, thereby releasing the bolt F, and the cover will open. As the cover opens the spring R will throw the buoy out, which buoy being made of buoyant material will rise to the surface, and as it rises the rope contained about its body portion will unreel and the sunken object will be indicated by the presence of the buoy on the surface of the water above.

While I have not described any particular form of buoy to be used in connection with my apparatus, still I preferably utilize a buoy which when in its confined position in the casing may be telescoped and when released will open out, as shown in the drawings, thus offering a conspicuous object when it reaches the surface of the water.

It is my purpose to utilize my improved device in connection with various articles and by simple modifications make it applicable to small firearms in which the casing may be placed within the stock of the gun or in connection with any object which is heavier than the water and will sink. In the drawings it will be noted that an aperture S leads through from the compartment containing the buoy into the cylinder, also an aperture T, leading

through the cover into the upper end of the cylinder, whereby water may readily pass into the cylinder for the purpose of causing the piston J to be depressed in the act of releasing the bolt F from engagement with the latch carried at the free end of the hinged cover.

When my device is used in connection with the stock of a gun, as shown in Fig. 3 of the drawings, but the one latch E is employed, which is engaged by the tilting lever S, fulcrumed on the pin S' and having a hook S², engaging with said catch, while the other end of said lever is pivoted directly to the piston-rod J, so that when the plunger in the piston-cylinder is acted upon by the pressure of the water the lever S is tilted and the cover to the casing released, and the spring R will throw the buoy out, and as it rises to the surface of the water the rope will unreel, as will be understood.

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

1. A device for locating sunken articles, comprising a buoy, which is confined within a suitable casing and having releasing-bolts whereby said buoy may be allowed to leave its inclosure and float to the surface of the water, said releasing-bolts being actuated at a predetermined moment and by mechanism acted upon by pressure of the water, as shown and described.

2. A device for indicating the location of sunken articles, comprising a casing, a buoy with rope reeled thereon and anchored to said casing, a hinged cover and retaining-bolt engaging therewith and a piston which is acted upon by the pressure of the water, and means between said piston and a retaining-bolt for releasing the latter as the piston is depressed.

3. A device for indicating the location of sunken articles comprising a casing, a hinged cover therefor, the buoy and rope anchoring the same to said casing, the retaining-bolt and means connected thereto for releasing same at a predetermined moment, combined with a piston, a second bolt engaging with a catch on the cover, a toothed segment engaging with said bolt, and a lever connecting the rack-bar with the piston, whereby as the piston is depressed said catch-engaging bolt may be released and the buoy allowed to escape from its inclosure and rise to the surface, as set forth.

4. A device for locating articles which are sunken in the water, consisting of a casing, a buoy anchored therein, and having a rope connection between same and the casing, means for automatically opening the cover to the casing, and a spring bearing yieldingly against the buoy to throw the same out after the cover is opened.

5. A device for locating sunken articles, consisting of the casing, the buoy and rope anchoring the same to the casing, the cylinder within the casing, the piston working in

said cylinder against the tension of a spring, the hinged cover to the casing, the retaining-bolts engaging with said cover and casing, connections between said piston and one of the bolts for releasing the same, and clockwork mechanism for releasing the second bolt at a predetermined moment, whereby the cover may swing open and the buoy released, as set forth.

6. In combination with the casing, a hinged cover, a spring-actuated bolt engaging with

a catch on said casing rack-teeth on a portion of said bolt, and pinion-wheel engaging with said rack-teeth, and clockwork mechanism for actuating said pinion, as set forth.

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

THOMAS JOSEPH MORIARTY.

Witnesses:

CARRIE A. HALL,
CLARENCE A. HAMMETT.