W. F. MERCER.

DEVICE FOR LOCATING SUBMERGED OBJECTS.

APPLICATION FILED FEB. 10, 1920.

1,367,415. Patented Feb. 1. 1921.

Fig. 1.

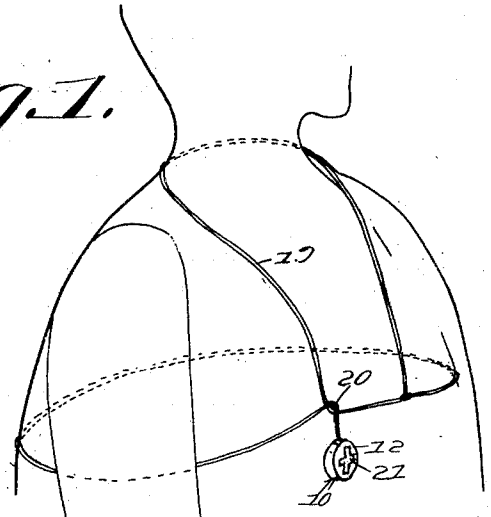


Fig. 2.

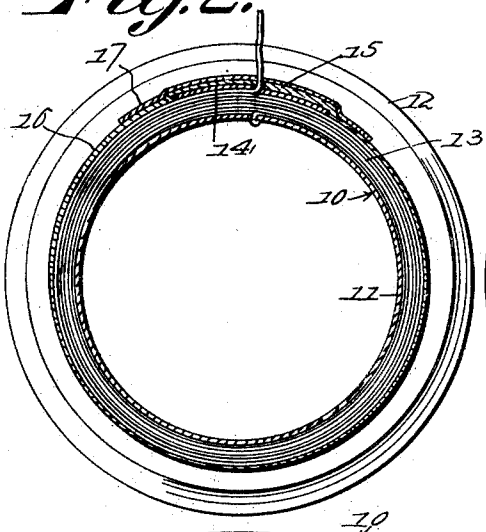
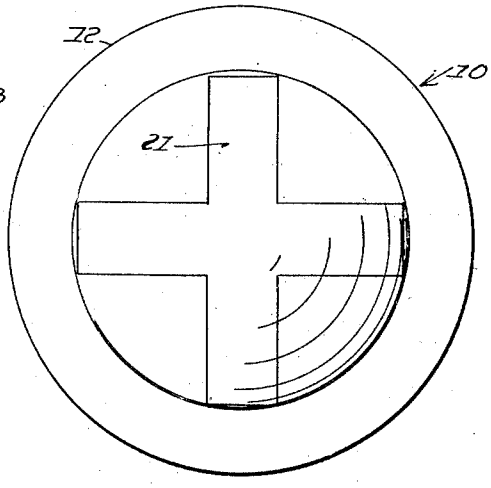


Fig. 3.



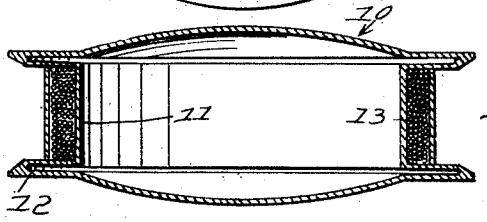


Fig. 4.

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DEVICE FOR LOCATING SUBMERGED OBJECTS.

1,367,415. Specification of Letters Patent. Patented Feb. 1, 1921.

Application filed February 10, 1920. Serial No. 357,645.

To all whom it may concern:

Be it known that I, WALTER F. MERCER, a citizen of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Devices for Locating Submerged Objects, of which the following is a specification.

The object of the invention is to provide a simple, relatively inexpensive and efficient means whereby the location of a submerged object may be indicated, the arrangement of the indicator to perform its function being dependent upon and incident to the submersion of the object, and the construction and proportions of the same being such that it may conveniently be worn or carried inconspicuously by a person in taking a water trip or under conditions in which exposure to a possibility of drowning is involved, and may as well be used in connection with nautical vehicles subject to foundering, or to objects carried on boats or vessels and having a value such as to render salvage thereof a matter of importance, and with these objects in view the invention consists in a construction and combination of parts of which a preferred embodiment is shown in the drawing, wherein:

Figure 1 is a form of the device such as is adapted to be worn by a person about to take a water trip and designed to be attached conveniently to the body under such conditions as to be liberated should the person fall or be thrown into the water.

Fig. 2 is an enlarged sectional view of the reel.

Fig. 3 is a side view enlarged of the same.

Fig. 4 is a section taken in a plane transverse to that of Fig. 2.

The device consists essentially of a hollow buoyant reel 10 which may be made of light sheet metal or other material which is not subject to deterioration by exposure to moisture having the drum portion 11 and flanges 12, upon which is wound a sufficient length of cord 13, such as thread, fish line or the like, to reach from a considerable depth to the surface of the water, said cord being fastened in place upon the reel by means of a sticker 14 provided with an adhesive material as for example, gum arabic, which is soluble in water, said sticker being provided with an eye or opening 15 through which a free end of the cord extends. The wrapping of cord is then preferably protected by a band or belt 16 serving to prevent displacement or entanglement thereof and also to protect it from accumulations of dirt and the like, the extremities of said band or belt being secured by suitable means such as a supplemental sticker 17 adhesively engaged with the band as by a material which is also soluble in water, a further eye or opening 18 being formed in the supplemental sticker to permit of the extension of the free end of the cord therethrough, and when the device is to be worn by a person desiring the benefit of the security afforded thereby, said cord may be formed with a terminal loop 19 adapted to be placed about the neck as shown in Fig. 1 with the loose adjacent portion of the cord carried around the body below the arms and engaged with the loop as shown at 20. Thus arranged the device may be worn under such conditions that in the event that the wearer should be thrown into the water the reel will be exposed to contact with the same whereupon the loosening of the stickers by the dissolving of the adhesive material will permit the cord to unreel and allow the buoyant reel to ascend to the surface. The side surfaces of the reel are preferably provided with designating means such as a cross 21 shown in Fig. 3 which may be colored red or otherwise to attract attention and guide the searcher to the point at which the body or object is submerged.

When the device is attached or annexed to a nautical vehicle for the purpose indicated, it is unnecessary to fasten the cord on the reel with a sticker.

What is claimed is:

1. A device for the purpose indicated consisting of a buoyant reel having a cord wound thereon provided with a soluble fastening agency securing the same, the free end of the cord being extended for attachment to an object to be indicated.

2. A device for the purpose described having a buoyant reel, a cord reeled thereon and provided at its free end with an attaching loop, and a sticker for securing the cord in wound relation with the reel and having an

eye or opening through which the free end of the cord extends, said sticker having a soluble adhesive by which it is held in place.

3. A device for the purpose described having a buoyant reel, a cord wound upon the reel, a cord holding means having a soluble adhesive securing the same, a band or belt arranged in protective relation with the cord and having a soluble adhesive securing the same, the free end of the cord being extended beyond the fastening means for attachment to an object to be indicated.

In testimony whereof I affix my signature.

WALTER F. MERCER.