

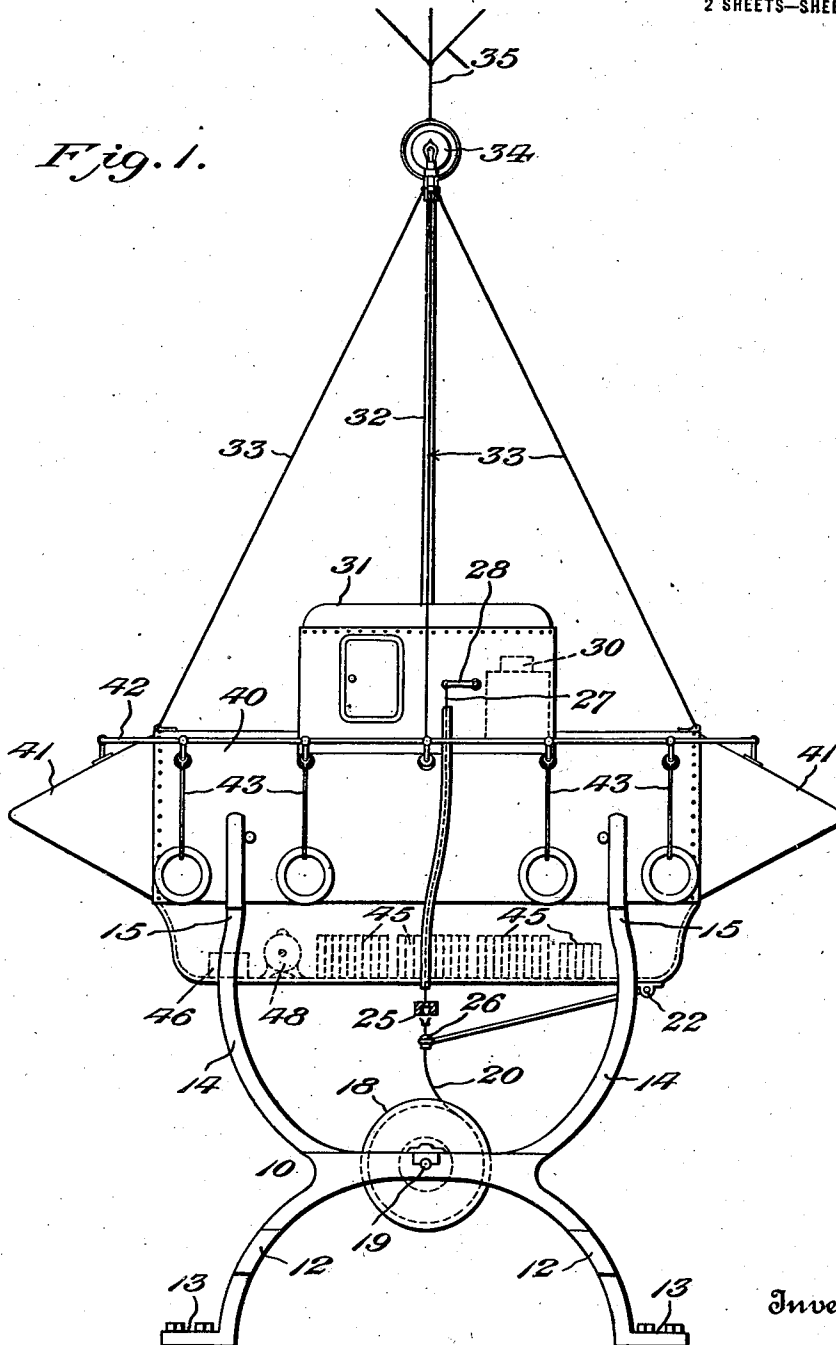
G. W. GWYNN.
WRECK INDICATING BUOY.

APPLICATION FILED APR. 14, 1919. RENEWED OCT. 21, 1921.

1,414,273.

Patented Apr. 25, 1922.

2 SHEETS—SHEET 1.



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Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

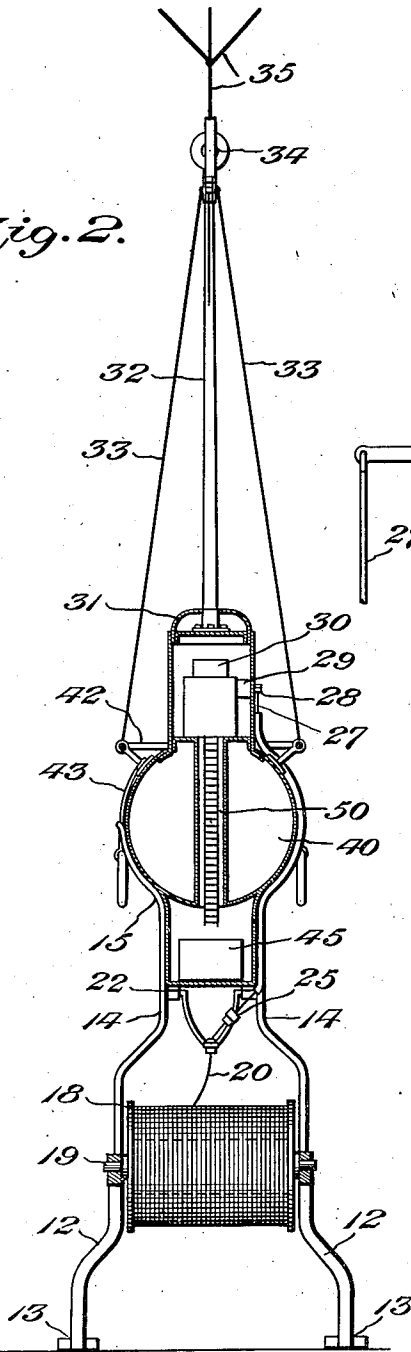


Fig. 3.

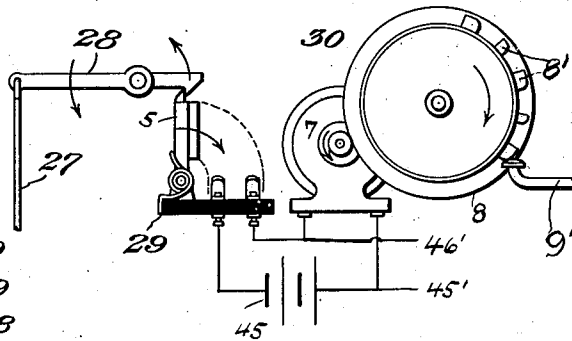
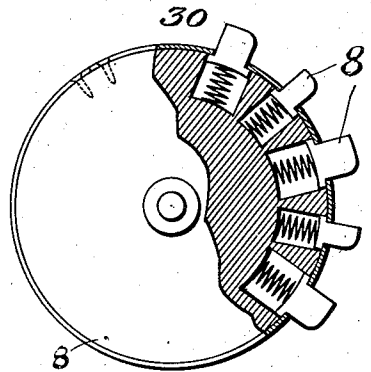


Fig. 4.



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UNITED STATES PATENT OFFICE.

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WRECK-INDICATING BUOY.

1,414,273.

Specification of Letters Patent. Patented Apr. 25, 1922.

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To all whom it may concern:

Be it known that I, GEORGE WILLIAM GWYNN, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented new and useful Improvements in Wreck-Indicating Buoys, of which the following is a specification.

This invention relates to a wreck indicating buoy, and the object is to provide means for locating a vessel or boat which is submerged through accident, said means including a freely mounted buoy which has connection with the vessel by means of a cable, the buoy carrying signaling apparatus placed in operation when the buoy leaves the mounting means carried by the vessel proper and places tension on the cable connecting the buoy with the vessel.

A further object is to provide a signaling apparatus carried by the buoy including a wireless instrument automatically placed in operation when a given switch is closed by means of a spring or the like, such closing being effected by placing tension on the cable connecting the vessel and buoy; the signaling apparatus also including an electric lamp and means for flashing signals therefrom.

With the foregoing and other objects in view, the invention consists in the novel construction, combination and arrangement of elements hereinafter described and claimed.

In the drawings,

Figure 1 is a view of the buoy in side elevation, the buoy being mounted on a frame by means of which it may be supported on the deck of a vessel,

Figure 2 is a view in vertical transverse section,

Figures 3 and 4 are details of the signaling apparatus.

In carrying out my invention I mount on the upper portion or deck of a boat to be protected a structure including a plurality of frames which may be of the form shown in the drawings and there designated 10. These frames include downwardly extending supporting devices 12 which are secured at 13 to the upper deck of the vessel to be protected, the frames also including upwardly extending members 14 provided with inwardly extending portions 15 adapted to directly engage and support the buoy. A reel 18 is mounted on an axle 19 in the frames 10 and serves to permit a cable 20 to

unwind to any required extent to permit the buoy to rise to the surface when the vessel has been submerged, due to accident of some character. The cable 20 is connected with the buoy at the point 22. This is a permanent connection, so that the buoy may be retained in position over the submerged vessel. The detachable coupling 25 permits of separation between cables 20 and 27 after sufficient tension has been exerted on the latter to throw arm 28.

A detachable coupling 25 is connected with cable 20 at the point 26. One member of this coupling is connected with the cable 27 having connection with an arm 28 serving to operate a switch 29, completing a circuit for setting in operation apparatus shown conventionally at 30 and designed to automatically transmit wireless signals. A cabin for housing the wireless apparatus and accommodating the operator is designated 31. A mast 32 is braced by means of guy wires 33 and at the upper end of this mast is a signal lamp 34. The antennae for the wireless apparatus are shown in 35.

An oxygen tank is designated 40 and includes end portions 41. A rail 42 may be provided with cords or ropes 43 to which life saving apparatus may be attached.

The storage batteries are shown at 45, any suitable number of cells being provided, and a time controlled switch 46 is so connected with the circuit for lamp 34 that in the event of the buoy being released during the night, the time controlled switch will complete the circuit through lamp 34. This circuit will not be completed during the day time. Means for interrupting the circuit and producing the flashing of the light is shown conventionally at 48.

Referring to Figures 3 and 4 it will be observed that the automatic sending apparatus is set in motion when the arm or catch 28 releases the spring controlled switch 5, completing a circuit through source of current 45 and a motor 7. The motor drives the drum 8 mounting spring held pins 8' contacting with key 9, and opening the key for longer or shorter intervals, depending upon the period of mechanical contact and the size of the pin.

Tension of moderate degree on the cable 20 will release the catch 28 from the switch, permitting the latter to close, and more pronounced tension will produce separation at coupling 25. It is needless to add that the

catch 28 would not be capable of standing any considerable portion of the strain transmitted through the main cable, when the buoy is subjected to wave action—hence the necessity for the coupling 25 permitting detachment of the elements at this point.

The closing of switch 5 also completes a circuit including lamp 34 and the time controlled switch 46, unless the lamp is cut out, owing to the opening of the time switch during daylight hours. The conductors for the last named circuit are designated 45' and 46'.

An opening 50 is provided centrally of the tank 40 and permits of access to the compartment or cabin 31 from the deck of the boat.

The apparatus herein described is especially adapted for indicating the location of vessels sunk by torpedoes and for transmitting signals by wireless so that members of the crew who may be in small boats, may be picked up if there are vessels within the reach of the wireless sending apparatus.

What is claimed is:

1. In a device of the class described, a buoy and means for supporting the latter on the deck of a boat, a reel having connection

with the supporting means, said buoy being freely mounted with reference to the supporting means, a cable connecting the buoy with the reel, a switch forming a portion of an electrically operated signal apparatus, a detachable coupling connected with the cable and means connecting the coupling with the switch, the switch being operable and the coupling being detachable when tension is placed on the cable.

2. In a device of the class described, a buoy and means for freely supporting the latter on the deck of a vessel, cable holding means associated with the supporting means, a cable connecting the buoy with the means last named, a coupling detachable when tension is placed on the cable, an automatic switch forming an element of an electrically operated signal apparatus, and means connecting the switch with the coupling, said switch being thrown to operative position and the elements of the coupling being separated upon the movement of the buoy away from the supporting means therefor.

In testimony whereof I affix my signature.

GEO. WM. GWYNN.