W. H. CHERRY.

MINE.

APPLICATION FILED FEB. 1, 1918.

1,292,255. Patented Jan. 21, 1919.

FIG. 1.

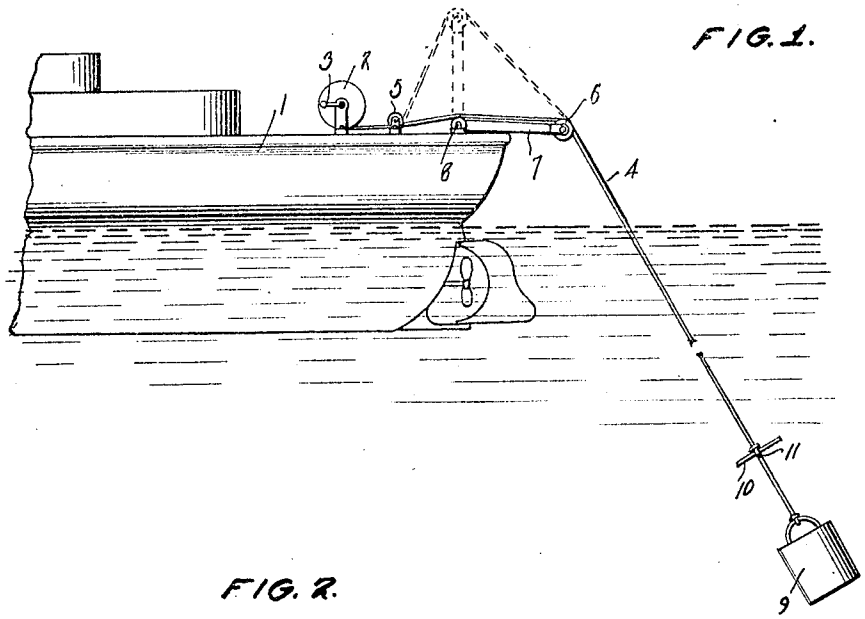
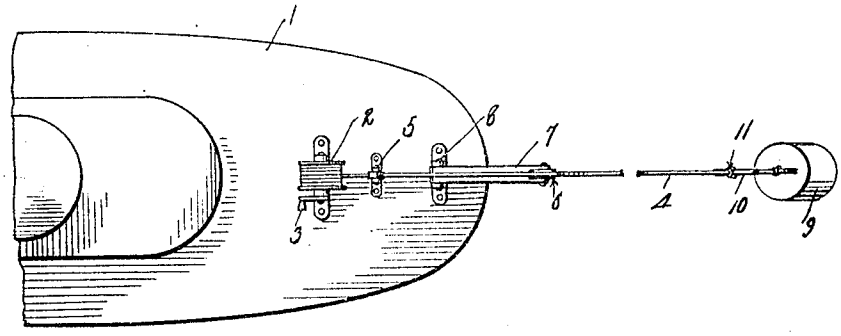


FIG. 2.



INVENTOR

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WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM H. CHERRY, OF SHIPMAN, ILLINOIS.

MINE.

1,292,255. Specification of Letters Patent. Patented Jan. 21, 1919.

Application filed February 1, 1918. Serial No. 214,897.

To all whom it may concern:

Be it known that I, WILLIAM H. CHERRY, a citizen of the United States, residing at Shipman, in the county of Macoupin and State of Illinois, have invented certain new and useful Improvements in Mines, of which the following is a specification.

This invention relates to mines and has for its object the production of a simple and efficient means for supporting the mines in such a position as to cause the same to hang a considerable distance below the supporting means and cause the explosion of the mine should the same come in contact with a submarine.

Another object of this invention is the production of a simple and efficient means for raising and lowering the mine and permitting the same to be positioned at a desired point for causing the mine to explode when the same is engaged by a submarine in a submerged condition.

With these and other objects in view, the invention consists in novel construction and arrangement of parts to be hereinafter fully described.

In the drawings:

Figure 1 is a side elevation of a ship showing the mines and operating mechanism carried thereby.

Fig. 2 is a top plan view of a ship showing the mine raising and lowering apparatus carried thereby.

By referring to the drawings, it will be seen that 1 designates the ship which supports a suitable winding drum 2, upon the upper deck thereof, this drum 2 being operated by an operating handle 3. A suitable mine supporting cable 4 is wound upon the drum 2 as shown in Fig. 1 and this cable 4 passes over a guiding pulley 5 supported upon the upper deck of a vessel 1. The cable 4 also passes over a pulley 6 carried by the upper end of the supporting standard 7 and this supporting standard 7 is pivotally secured upon a bracket 8 carried upon the upper deck of the vessel 1.

A mine 9 is carried by the lower end of the cable 4 and is of the compact type for causing the mine to explode when the same is engaged by a submarine in a submerged condition. This mine 9 is connected to the lower end of the cable 4 and an abutment bar 10 is carried by the cable 4 a considerable distance above the upper end of the mine 9 for the purpose of limiting the movement of the cable 4 over the pulley 6, while the mine 9 is being raised, to an inoperative position. This abutment bar 10 is extended through a loop 11 formed in the cable 4 for anchoring the bar 10 upon the cable 4.

It should be understood that while the mine 9 is being raised, the standards 7 may be thrown horizontally or downwardly as shown in Fig. 1 for the purpose of preventing the mine 9 from coming in contact with the stern of the ship 1. By having the arm or standard 7 overhanging the rear end of the ship or hull of the vessel as shown in Fig. 1, the bar 10 will come in contact with the pulley 6 and limit the movement of the cable 4 over the pulley and suspend the mine 9, in the rear of the ship. When it is so desired, however, the standards 7 may be swung to the position shown in dotted lines in Fig. 1 thereby raising the mine above the deck of the vessel and permitting the same to be easily handled by the crew for the purpose of renewing the mine or replacing the same. It should be understood that should you desire to again lower the mine, the same may be readily accomplished by unwinding the drum 2, the cable 4 unwinding from the drum and permitting the mine 9 to submerge to a proper depth.

In actual operation, the mine is lowered to a desired depth and the vessel 1 is preferably navigated to a proper position to cause the bomb or mine 9 to come in contact with a submarine. It is to be understood, that the vessel of course, may remain stationary if so desired and the mine 9 supported in a proper position to cause the same to be engaged by a submarine while traveling at a desired depth.

It of course, should be understood, that certain mechanical changes may be made in the details of the present device without departing from the spirit of the invention so long as the changes fall within the scope of the appended claim.

What is claimed is:

A device of the class described comprising a vessel, a drum carried thereby, a standard hingedly secured to the deck of said vessel and capable of being swung to a horizontal position and lie flat upon the deck of said vessel, the end of said standard being adapted to project beyond the stern of said vessel when swung to a horizontal

position, a guiding pulley carried by said vessel upon the deck thereof directly in the rear of said standard, a cable passing over said drum and under said guiding pulley and over said standard, means connecting said cable to a mine, an abutment bar of material length carried by said cable and extending transversely thereof and engaging said standard for constituting a positive stop for limiting the movement of said cable upon said standard.

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

WILLIAM H. CHERRY.

Witnesses:
JNO. E. RANDLE,
M. M. OLMSTED.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."