J. E. MARPOLE.

TORPEDO GUARD.

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1,264,112.

Patented Apr. 23, 1918.

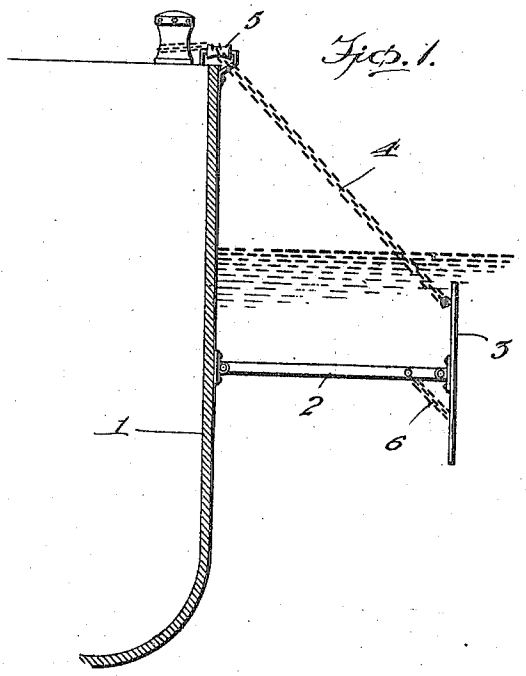


Fig. 1.

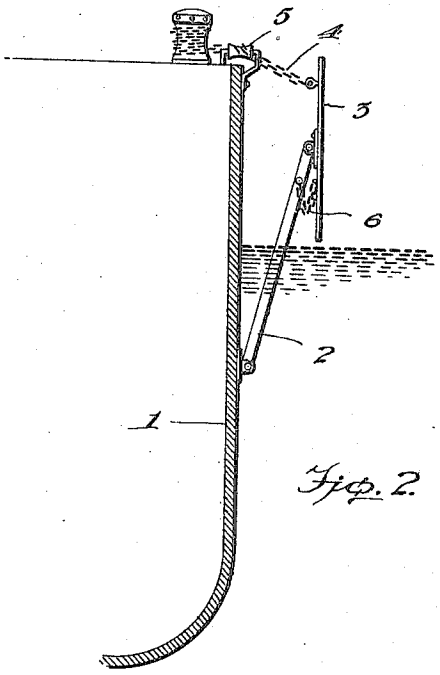


Fig. 2.

Fig. 3.

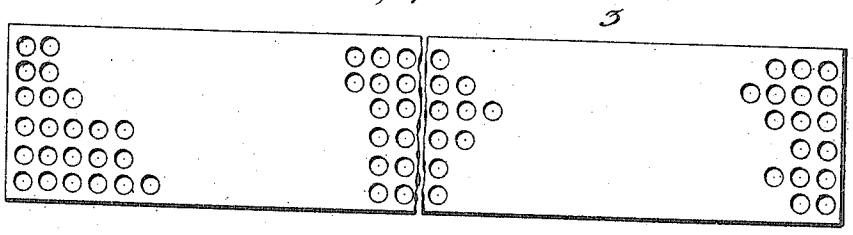
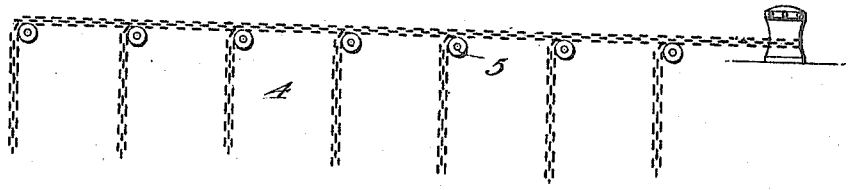


Fig. 4.



Witness

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TORPEDO-GUARD.

1,264,112. Specification of Letters Patent. Patented Apr. 23, 1918.

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To all whom it may concern:

Be it known that I, JOHN EVANS MARPOLE, a citizen of Canada, residing at Cumberland, Province of British Columbia, Canada, have invented new and useful Improvements in Torpedo-Guards, of which the following is a specification.

This invention relates to new and useful improvements in torpedo guards for vessels and the principal object of the invention is to provide a barrier around the hull of the vessel to guard the same from torpedoes or mines.

Another object of the invention is to provide means whereby the barrier may be swung up against the vessel's side when not in use.

Another object of the invention is to provide a device of this character which is simple and durable in construction, reliable and efficient in operation and one which can be manufactured and placed upon the market at a minimum cost.

The invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 shows the invention applied to a vessel and in operative position.

Fig. 2 is a like view with the device in inoperative position.

Fig. 3 is a detail view showing the formation of the barrier.

Fig. 4 is a detail view showing the lifting means.

In these views 1 indicates the vessel to the sides of which a plurality of arms 2 are pivoted. The pivotal point of said arms is located below the water-line as shown in Fig. 1. To the outer ends of the arms is pivoted a plurality of plates 3. These plates are preferably made of steel and are provided with perforations. Chains 4 are connected to the upper sides of the plates and said chains extend up over the deck of the vessel where they pass over suitable pulleys 5 and are connected to a suitable form of winding device so that by winding up the chains the plates with the arms will be swung upwardly into the position shown in Fig. 2. A short chain 6 connects the underside of the plates to each arm so as to prevent the lower edge of the plate from swinging outwardly beyond the vertical plane.

It will be seen that when the device is swung up into inoperative position that the plate is carried above the water-line so as to not retard the passage of the ship through the water. When the device is in operative position the plates are carried parallel to the vessel's side so that they will receive the torpedo or mine and thus prevent it from striking the vessel, it being understood that the arms are sufficiently long to render the explosion of the torpedo, if it should strike the plate, harmless to the vessel. I prefer to make the holes in the plates of a sufficient size to catch and hold a torpedo, and thus prevent the same from exploding. Of course if the head of the torpedo should strike between the holes the same would explode, but owing to the great number of holes in the plate the chances are that the torpedo will be caught and held without exploding. When so caught the supply of compressed air by which the torpedo is propelled will soon be exhausted, and then the same will drop to the bottom.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make slight changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:—

1. A device of the class described comprising a plurality of arms pivoted to the vessel's side, a series of perforated plates pivoted to said arms intermediate their width, means for preventing the plates from mov-

ing out of a vertical plane when in operative position, and means associated with the before mentioned means for raising and lowering the plates and arms.

2. A device of the class described comprising a plurality of arms pivoted to the vessel's side, a plurality of perforated plates pivoted intermediate their width to the arms, cables connected with the upper sides of the plates, winding means for said cables, and a cable connecting the underside of each arm with the underside of the plates.

In testimony whereof I affix my signature.

JOHN EVANS MARPOLE.

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