No. 676,327. Patented June 11, 1901.

E. S. LAFFERTY.

RAILROAD TORPEDO.

(Application filed Apr. 29, 1901.)

(No Model.)

Fig. 1.

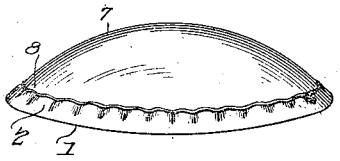


Fig. 2.

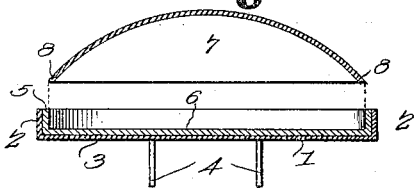


Fig. 3.

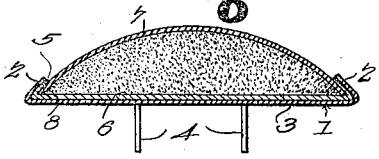
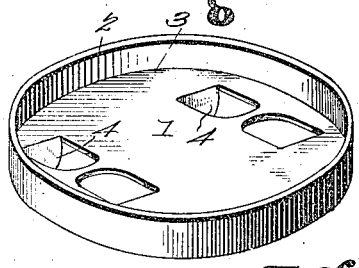


Fig. 4.



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UNITED STATES PATENT OFFICE.

ERASTUS S. LAFFERTY, OF GALESBURG, ILLINOIS.

RAILROAD-TORPEDO.

SPECIFICATION forming part of Letters Patent No. 676,327, dated June 11, 1901.

Application filed April 29, 1901. Serial No. 57,975. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS S. LAFFERTY, a citizen of the United States, residing at Galesburg, in the county of Knox and State of Illinois, have invented a new and useful Railroad-Torpedo, of which the following is a specification.

This invention relates to railroad-torpedoes; and the object of the present construction is to provide a device of this class which is simple and inexpensive in the cost of manufacture, wherein the parts are easily assembled, and when secured produce a thoroughly waterproof torpedo which is readily applied to a track-rail and positive in its explosion.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a torpedo embodying the features of the invention. Fig. 2 is a transverse vertical section of the same with the top or cap shown separated therefrom and ready to be placed therein. Fig. 3 is a view similar to Fig. 2, showing the parts assembled and secured. Fig. 4 is a detail perspective view of the body or main supporting member of the torpedo.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the body or main support of the torpedo, consisting of a suitable sheet-metal cup-like device having a normal vertically-disposed peripheral flange 2, a flat bottom 3, and opposite pairs of clips 4, cut from the metal of said bottom and bent downwardly at a right angle thereto to engage the usual lead or other band employed for holding torpedoes on the track-rails. Within the said body a second cup-like lining 5 is disposed, which is preferably formed from suitable paper saturated with paraffin or the like to render the same waterproof, and has a completely-closed flat bottom 6 with a normal vertically-extending peripheral flange, having its upper edge approximately flush with the edge of the flange 2 of the body 1. The bottom of the lining fully covers the openings formed in the bottom 3 of the body 1 by cutting and bending down the clips 4 from the latter, and after the said lining is inserted in the body, as stated, and fully shown by Fig. 2, the explosive material is suitably placed in the said lining and body and the torpedo is ready to be sealed. The sealing device consists of a dome-shaped cap 7, having a lower horizontal circumferential edge 8 with a diameter approximating the diameter of the bottom 6 of the lining inside of the flange of the latter. The said parts being thus prepared, the explosive material is placed in the lining and the cap 7 is closed over the same with its edge closely fitting against the inner lower portion of the flange of the said lining. By suitable means the flange 2 of the body 1 is bent inwardly toward the lower edge portion of the cap 7 and simultaneously the flange of the lining is likewise bent inwardly by the pressure exerted on the flange of the body, the latter flange being preferably crimped, as shown by Fig. 1, to provide a more positive securement of the same. When this joint is completed, as clearly shown by Fig. 3, the flange of the lining provides an interposed waterproof packing for the same, and thus completely excludes moisture, and the contained explosive material will be invariably kept in a dry condition, and thereby insure an explosion of the same, and thus avoid the disadvantages now found in torpedoes failing to explode by reason of entrance of moisture thereinto and a consequent impairment of the explosive. In some instances the lining will be formed of material of such close and naturally waterproof texture that it will be unnecessary to first treat the same with a paraffin coating or the like, and also the joint can be rendered effective without resorting to crimping the flange 2. The proportions of the improved torpedo may be varied at will, and other minor changes may be resorted to within the scope of the invention.

Having thus described the invention, what is claimed as new is—

1. A torpedo of the class set forth comprising a body with a normal vertically-disposed peripheral flange, a lining fitted in the said body and having a vertical flange approximately flush with that of the body, and a cap having a lower circumferential edge to fit within the lining and bear against the inner lower portion of the lining-flange, the flange

of the body being bent over on the adjacent edge portion of the cap and simultaneously similarly bending the flange of the lining, the latter flange forming a packing for the joint.

2. A torpedo of the class set forth comprising a body with a peripheral flange, a lining snugly fitted in the body and also having a peripheral flange, and a cap having its lower edge fitted in the lining and the flanges of the body and lining bent over against the said cap edge, the lining-flange forming a moisture-excluding packing between the body-flange and cap edge.

3. A torpedo of the class set forth comprising a body with a peripheral flange, a paper lining saturated with paraffin and snugly fitted in the said body, the lining also having a peripheral flange, and a cap having its lower edge portion fitted in the lining and the flanges of the body and said lining bent over thereon, the flange of the lining forming an interposed moisture-excluding packing for the joint.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ERASTUS S. LAFFERTY.

Witnesses:
JOSEPHINE GALVIN,
J. B. ARNOLD.