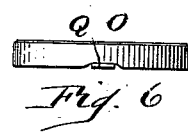
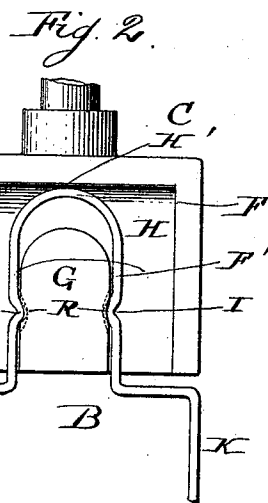
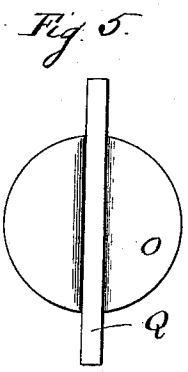
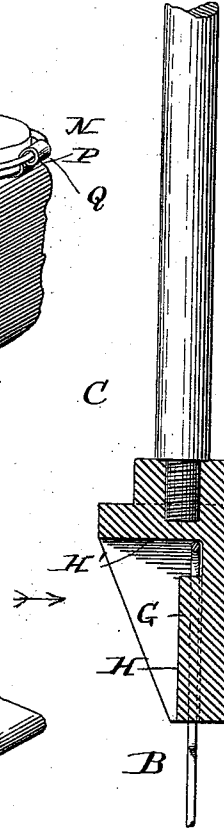
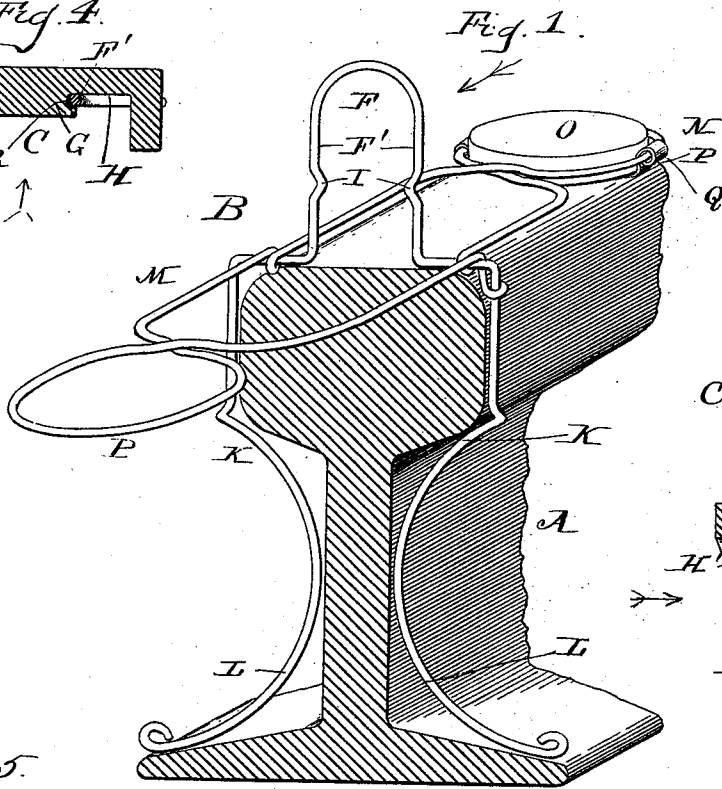
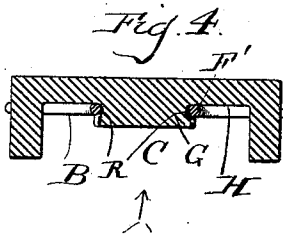


(No Model.)

T. REGAN.
TORPEDO PLACER.

No. 532,907.

Patented Jan. 22, 1895.



WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS REGAN, OF NEW YORK, N. Y.

TORPEDO-PLACER.

SPECIFICATION forming part of Letters Patent No. 532,907, dated January 22, 1895.

Application filed May 28, 1894. Serial No. 512,619. (No model.)

To all whom it may concern:

Be it known that I, THOMAS REGAN, a citizen of the United States, residing at 11 Clinton Place, in the city, county, and State of New York, have invented certain new and useful Improvements in Torpedo-Placers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates in general to devices for placing torpedoes upon a railway to signal approaching trains, and is particularly designed for placing a torpedo upon the rail from the rear car of a train in motion.

The general object of my invention is to provide a simpler, cheaper and more efficient torpedo placer for this purpose than has heretofore been devised.

In accordance with my invention, I construct the torpedo-placer in two parts, namely, a torpedo-holder to carry the torpedo and fasten it to the rail, and a carrier to which the torpedo-holder is detachably secured and which is to be manipulated by a train-hand on the rear of the moving train to deposit the torpedo-holder on the rail and simultaneously detach it from the carrier.

The invention comprises, particularly, novel means for attaching the torpedo-holder to and detaching it from the carrier; for securing the torpedo to the holder; and for fixing the torpedo-holder on the rail; and in order that my invention may be clearly ascertained, I shall first describe in detail the mode in which I perform the same, and then point out its distinctive features in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in the various figures of which the same parts are designated by the same letters.

Figure 1 is a perspective view illustrating a torpedo-holder applied to a rail in accordance with my invention. Fig. 2 is a face view illustrating the attachment of the said torpedo-holder to the carrier. Fig. 3 is a side partly sectional view of the same. Fig. 4 is a sectional plan view of the same. Figs. 5 and 6 are under side and edge views, respectively, of an ordinary railway torpedo.

A designates an ordinary railroad rail, to which the torpedo-placer shown is adapted.

As before stated, I construct the torpedo-placer in two parts, namely, a torpedo-holder

B, as shown in Fig. 1, and a carrier C, as best shown in Fig. 3, to which the torpedo-holder is detachably secured, and by which the torpedo-holder is deposited on the rail and simultaneously detached from the carrier by a hand on the rear of the signaling train, as hereinafter described. I form the carrier C, for ease in handling, of a straight wooden handle, rigidly secured to a metallic head-piece, but I may make the carrier wholly of metal, and may mount it permanently to slide in vertical guides over one rail on the rear of the car.

For the sake of simplicity and economy, I make the torpedo-holder B wholly of spring steel wire, bent into form, as shown.

For detachably securing the holder B to the carrier C, I provide the holder B with a fastener, which I by preference make in the form of a spring-clamp F, to embrace a corresponding clamping-head G formed on the carrier C, as shown in Figs. 2 and 3. The clamping-head G projects rearward from a vertical bearing H, against which the front of the clamp F bears, so as to be held plumb, and over the clamping-head G is a horizontal bearing H' for the top of the clamp F. To better secure the clamp F to the clamping-head G, I form catches I on the opposite head-clamping jaws F' to enter catch-holes R in opposite sides of the head G. I, by preference, make the spring-clamp F in the form of an inverted "U," or loop, the arms of which form the head-clamping jaws F', and extend downward and are bent to form the opposite rail-clamping jaws K, below which they diverge to form opposite cam-jaws L, which thus practically form continuations of the rail-clamping jaws K, and of the head-clamping jaws F', and spring apart therewith. I likewise form the holder B with forwardly and rearwardly extending horizontal arms M, N, to rest upon the head of the rail A, and thus plumb the holder B, and I prefer to form said arms M, N, of an elongated loop, the spring-wire sides of which are secured to the respective sides of the head and rail-clamping jaws, and reinforce the same. One, or, as shown, both arms M and N are adapted to receive in their ends a torpedo O, in this instance, by the formation of a wire coil P, and the torpedo is further secured therein by means of the ordinary at-

tached pliable strap Q; but in lieu thereof the torpedo O may be simply inserted within a double coil on the end of either arm M or N, or secured to the said arm in any other
5 suitable manner, with or without the pliable strap Q.

In use, the torpedo-holder B is clamped, as described, to the carrier C, and the latter held vertically over the rail by the operator on the
10 rear of the train, with the clamping-head G facing rearward and the torpedo O on the rear arm, M or N, as the case may be, of the holder. At the proper time, the carrier C is forced downward quickly, thereby causing
15 the diverging cam-jaws L on the holder to "find" the rail-head and be spread apart thereby, until the rail-clamping jaws K spring under the rail-head and secure the torpedo holder to the rail. Simultaneously, the
20 carrier-head-clamping jaws F' are spread apart by the spreading of the cam-jaws L, and the catches I withdrawn from the catch-holes R, so that the torpedo-holder is freed from the carrier-head G. The carrier is thus
25 retained by the operator on the train and used repeatedly to place other holders, carrying torpedoes, on the rail.

The head bearing arms M and N insure the proper setting of the holder on the rail. The
30 said arms M, N, may be made to fold on the head and rail-clamping-jaws, if desired, for the sake of portability.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-
35 ent, is—

1. In a torpedo placer, a torpedo holder provided with a fastener to secure it to a carrier, fastener-operating cam-jaws to be spread
40 apart by the rail and free the holder, and rail-clamping jaws, substantially as herein described.

2. The torpedo holder provided with rail-clamping jaws, forwardly and rearwardly extending arms to rest upon the rail and means
45 for fixing the torpedo on one of said arms, substantially as herein described.

3. The carrier provided with the clamping head projecting as a boss rearward from a
50 the clamp on the torpedo holder, substantially as herein described.

4. The carrier provided with a clamping-head projecting as a boss rearward from a

vertical transverse bearing to be embraced by the catch-clamp on the torpedo-holder, said
55 clamping head formed with catch holes, substantially as herein described.

5. The torpedo-holder provided with a clamp to embrace the clamping head on the carrier, rail clamping jaws, and cam-jaws to
60 be spread by the rail and operate the clamp, substantially as described.

6. The torpedo holder formed of spring wire bent to form the clamp, the clamp-operating cam-jaws, and the rail-clamping jaws, sub-
65 stantially as shown and described.

7. The torpedo holder formed of wire bent to form the clamp, the clamp-operating cam-jaws, the rail-clamping jaws, and the oppo-
70 sitely extending arms to rest on the head of the rail, substantially as shown and described.

8. The torpedo holder formed of wire bent to form the clamp, the clamp-operating cam-jaws, the rail clamping jaws, the oppositely
75 extending head bearing arms, and a torpedo receptacle on one of said arms, substantially as shown and described.

9. The torpedo carrier having the vertical transverse bearing, the clamping-head projecting as a boss rearward therefrom formed
80 with catch-holes on opposite sides, and a horizontal bearing over the clamping head, substantially as shown and described.

10. The torpedo holder formed of spring wire bent to form the clamp loop, the arms of
85 which are extended to form the rail-clamping jaws, and the cam-jaws to be spread by the rail and spread the clamp loop, substantially as shown and described.

11. The combination, with the carrier having the clamping head, of the torpedo holder
90 having the clamp, the clamp-operating cam-jaws, and the rail-clamping jaws, substantially as herein described.

12. The combination, with the carrier having the clamping head, of the torpedo-holder
95 having the clamp, the clamp-operating cam-jaws, the rail-clamping jaws, and the head-bearing arms, on one of which the torpedo is fixed, substantially as herein described. 100

Signed at New York, N. Y., April 13, 1894.

THOMAS REGAN.

In presence of—

CLARENCE L. BURGER,
J. CULBERT PALMER.