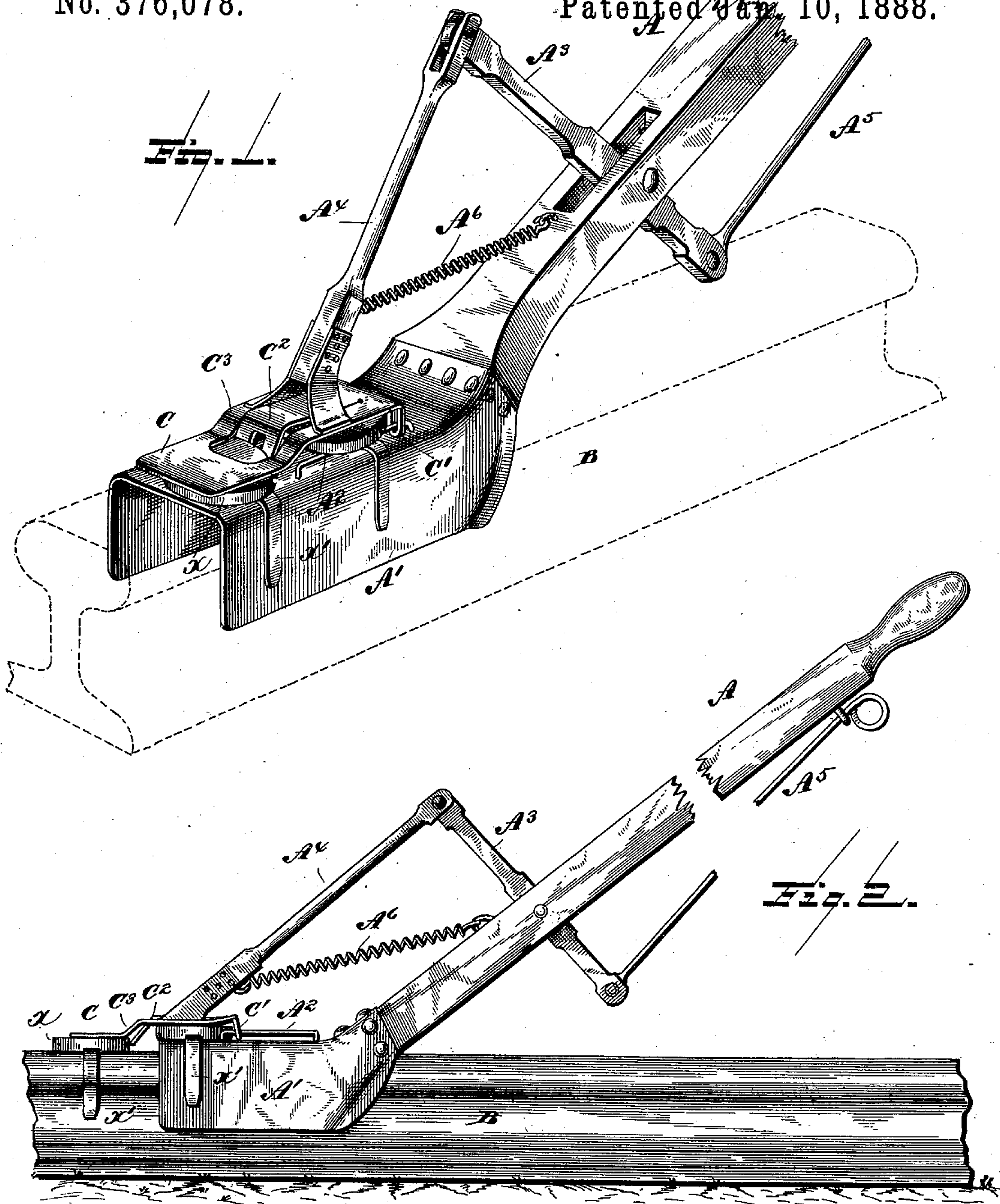


(No Model.)

S. W. DOANE.
RAILROAD TORPEDO PLACER.

No. 376,078.

Patented Jan. 10, 1888.



Witnesses:

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UNITED STATES PATENT OFFICE.

STEPHEN W. DOANE, OF HORNELLSVILLE, NEW YORK.

RAILROAD TORPEDO-PLACER.

SPECIFICATION forming part of Letters Patent No. 376,078, dated January 10, 1888.

Application filed June 4, 1887. Serial No. 240,298. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN W. DOANE, a citizen of the United States, residing at Hornellsville, in the county of Steuben, State of New York, have invented certain new and useful Improvements in Railroad Torpedo-Placers, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of this invention is to provide a device for laying torpedoes upon railroad-tracks from moving trains, whereby time usually lost in slowing up and starting, which is very often dangerous, owing to lack of time and other causes, is obviated; and the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

By my invention I construct a device by which torpedoes may be laid upon the track with certainty, and this without the necessity of slowing up or decreasing the speed of the train a particle, it being only necessary to place the torpedoes in the device, and from the rear platform place them in position upon the track for the purpose of signaling trains following.

Referring to the drawings, Figure 1 is a perspective of a torpedo-placer constructed in accordance with my invention, the device being shown in position to place the torpedo; and Fig. 2 is a side elevation of the same, the device being in the position assumed after placing a torpedo.

Like letters of reference indicate like parts in both figures of the drawings.

In carrying out my invention I provide a handle, A, of sufficient length to reach from the platform of a car to the track-rail B, and to the lower end of the handle is secured a flanged shoe, A', adapted to loosely fit the rail, and the flanges of which extend down at each side of said rail.

C represents the pusher or placer plate mounted and adapted to be reciprocated upon the shoe A', the rear end of said plate being bent and perforated to form eyes C', adapted to receive guiding-bars A², secured at each side of the shoe A'.

Centrally pivoted to the handle or bar A is a lever, A³, the forward end of which is pivotally connected to the pusher-plate C by

means of a rod, A⁴, and the rear end of which is connected to an operating-rod, A⁵, extending up to within easy grasp of the hand at the top of the handle. A spring, A⁶, connects the rod A⁴ and handle-bar A, thus retaining the push-plate in the position shown in Fig. 1.

Integral with the push-plate C, or it may be secured thereto, is a spring-tongue, C², the forward end of which is bent downwardly, so as to project below the under surface of said plate.

The form of torpedo used is so well known that it is unnecessary to enter into a detailed description thereof; but suffice it to say, however, that it comprises an exploding-chamber or body portion, X, adapted to rest upon the rail, and depending arms X', adapted to embrace the same.

The device is designed in this instance to receive but two torpedoes; but it is evident that the parts receiving the same may be enlarged so as to receive any desired number. In this instance one of the torpedoes is placed under the raised portion C³ of the push-plate, between it and the parallel guides A² and in front of the depending eyes C', and the other in front of the guides and spring-tongue and under the forward end of the said push-plate, all as clearly shown in Fig. 1.

The device, after being provided with the torpedoes, is trailed from the rear platform of a car along the top of the track-rail, and by drawing upon the operating-rod A⁵ against the tension of the spring A⁶ the push-plate is caused to travel toward the end of the shoe, the spring-tongue C² thereof pushing the torpedo from the shoe onto the rail. At the forward reciprocation of the push-plate the depending rear eye, C', carries the rear torpedo to the position assumed by the first torpedo, and in removing the pull upon the operating-rod the spring A⁶ retracts the rod A⁴ and push-plate C to its normal position, leaving the torpedo in front of the guides A², the spring-tongue being of sufficient resiliency to ride over the torpedo and leave it in the described position. When the push-plate is drawn to its normal or rear position, the spring-tongue drops behind the remaining torpedo, and a second pull upon the operating-rod A⁵ repeats the operation and leaves the torpedo upon the track or rail.

By the means described a following train

may be signaled to stop or slow up in accordance with the number of torpedoes exploded, which number are in accordance with a code of signals in operation upon the road.

5 Having described my invention and its operation, what I claim is—

1. A device for placing torpedoes upon a rail from a moving train, comprising a handle provided at its lower end with a rail-embracing shoe adapted to receive torpedoes, a push-plate movably mounted thereon, and a lever for operating said plate, substantially as specified.

2. A device for placing torpedoes upon a rail from a moving train, comprising a handle having a torpedo-receiving shoe at its lower end adapted to embrace the sides of the rail, a push-plate provided with a spring-tongue mounted on said shoe, and a push-plate operating-lever pivoted to said handle, substantially as specified.

3. A device for placing torpedoes upon a rail from a moving train, comprising a handle having a torpedo-receiving shoe at its lower end provided with parallel guides, a push-plate having a spring-tongue mounted on said

guides, a lever for operating the push-plate pivoted to the handle, and a retracting-spring connecting the lever and handle, substantially as specified.

4. The combination of the handle A and the shoe A', affixed to its lower end and provided with the guides A², with the push-plate C, having the downwardly-projecting eyes C' at its rear end and mounted on said shoe, and with the bar A⁴, lever A³, and rod A⁵, substantially as specified.

5. The combination of the shoe A' and its handle A with the push-plate C, movably mounted thereon, bent, as at C³, and having the spring-tongue C², and with the torpedoes X, substantially as specified.

6. The handle A, in combination with the lever A³, rods A⁵ and A⁴, the spring A⁶, the plate C, and the shoe A', substantially as specified.

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

STEPHEN W. DOANE.

Witnesses:

SHIRLEY E. BROWN,
CHARLES W. STEVENS.