

(No Model.)

C. A. WELLER.
TORPEDO PLACING MACHINE.

No. 489,054.

Patented Jan. 3, 1893.

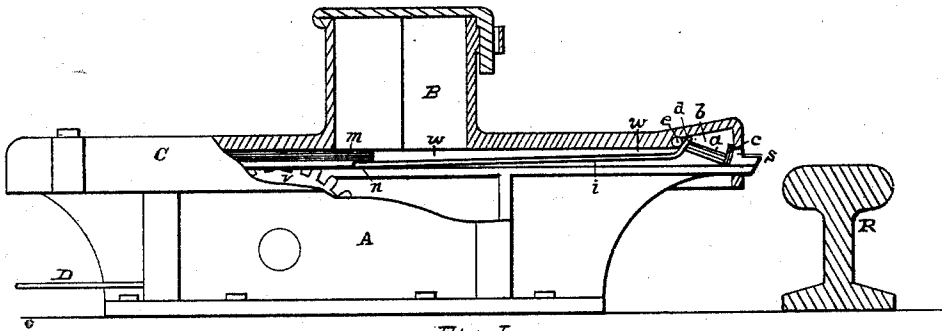


Fig. I

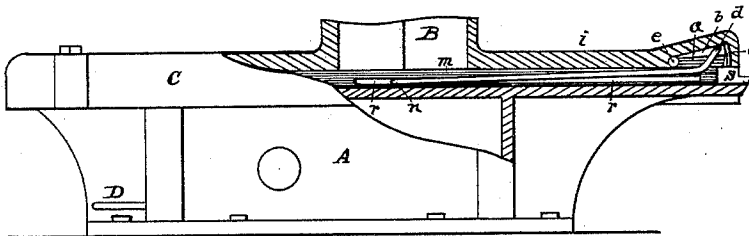


Fig. II

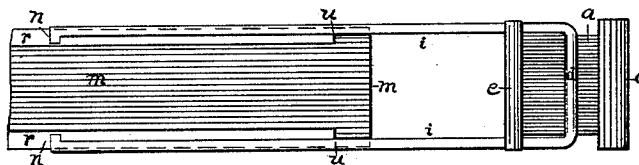


Fig. III



Fig. IV

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TORPEDO-PLACING MACHINE.

SPECIFICATION forming part of Letters Patent No. 489,054, dated January 3, 1893.

Application filed March 19, 1892. Serial No. 425,518. (No model.)

To all whom it may concern:

Be it known that I, CHESTER A. WELLER, a citizen of the United States, residing at Sing Sing, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Torpedo-Signaling Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to machines for placing and retracting torpedo signals on railroad tracks, and especially to the one for which a patent of the United States No. 470,729 was granted me March 15, 1892. The object is to automatically close the outlet from the machine through which the torpedo passes, and its accomplishment is effected by the means set forth in the accompanying drawings.

Figure I represents the form of my machine and sufficient of the details for the illustration of the present invention, showing the torpedo passage closed. Fig. II is a like illustration showing the torpedo passage opened. Fig. III is a plan view of the closing devices. Fig. IV is a cross-sectional view of the torpedo carrier.

In Fig. I it will be seen that the frame of the machine consists of two parts, a base A, and a cover C, carrying a torpedo magazine B. A space *w* between the cover and base is occupied by the slide *m* which carries the torpedo, no particular device for holding the torpedo being herein shown. The slide *m* traverses the full length of the said passage, and is moved by the gear wheel *v*, operated by means of a pinion, rack and the rod D, as fully described in the patent referred to above. The slide carries a torpedo from the magazine through the passage *w* and out the opening *s*, to the rail R, and is shown in Fig. I in its retracted position, ready for action. To close the outlet *s* when the slide is in the position shown, and in a manner that prevents outside tampering with the closing piece, I provide a chamber *b* over the end of the torpedo passage, its inner end terminating in a semi-cylindrical socket. In the chamber I fit a

block *a* having a cylindrical head at one end to fit the said socket, and a symmetrical arc *c* at the other end, the outside face of which is concentric with the head *e*. A top view of the block is shown in Fig. III. When this block is inserted in the chamber as shown in Fig. I it cannot drop out after the cover and base are united; but the outer end may be moved up and down freely moving on the head *e* as a pivot.

On the side of the slide *m* grooves *r* are cut, beginning a little distance from the torpedo end of the slide and extending back the length of the travel of the slide. A wire loop *i, i, d* is then formed, bending over the plain part of the block *a*, as shown in the several views, and extending back on each side of the slide. The ends of the wire are turned into hook form as at *n, n* these hooks projecting into the grooves *r, r*.

As will be seen in Fig. I when the slide is back to its limit, the shoulders *u, u*, (Fig. III) pull upon the hooks *n, n* and draw the loop *d* back to the position shown in Fig. I. The block *a* is so fitted that gravity causes it to drop when nothing is under it, and when the loop *d* is in the position shown in the figure it is evident the block cannot be raised. The loop *d* impinges against the projecting ends of the head *e* on the block *a*, shown in plan in Fig. III, so that it does not wedge itself tight when holding the block. If it were permitted to do so, provision would have to be made to dislodge it. Just as soon as the strain kept on it by the shoulders *u, u*, is relieved, the little friction of the slide when in motion against the lengths *i, i* causes its forward movement, so the advancing torpedo easily lifts the block and passes out, the parts assuming the positions shown in Fig. II.

This device is applicable to any machine where similar operations and results are to be effected.

What I claim and desire to secure by Letters Patent is—

1. In a torpedo machine substantially as described, the combination with the carrying slide having grooved edges substantially as shown, of a loop hooking into said grooves and passing over a closing pin, pivoted in a chamber above the end of the torpedo passage, the said closing pin having a face forming

an arc with the pivot on which it swings, substantially as shown and described.

2. In a torpedo setting machine substantially as described, the combination of the
5 grooved torpedo carrying slide *m*, loop *i*, *i*, *d*, hooking into the grooves in the slide and passing over a closing plate *c*, shoulders *u*, *u*, at the end of the slide to act upon the hooks *n*, *n*, of the said loops, and the closing pin *c*
10 pivoted in the chamber *b*, substantially as shown and described.

3. In a torpedo setting machine in which torpedoes are carried by a moving slide, an outlet closing device pivoted in a chamber
15 above the torpedo passage and opened by the torpedo as it issues from the outlet, closed by gravity on the removal of the torpedo, and

locked by the action of the loop *i*, *i*, *d*, substantially as herein shown and described.

4. The combination in a torpedo machine 20 of the magazine *B*, torpedo carrying slide *m*, slide moving gearing *v*, and outlet closing mechanism comprising the loop *i*, *i*, *d*, engaging with grooves in the side of the slide *m*, and the closing plate *c*, said closing plate be- 25 ing pivoted in a chamber above the passage *w*, substantially as shown and described herein.

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

CHESTER A. WELLER.

Witnesses:

JOHN GIBNEY,

ALONZO DRAPER.