(No Model.)

S. MYERS.

MACHINE FOR PLACING TRACK TORPEDOES.

No. 523,542. Patented July 24, 1894.

Fig. 1.

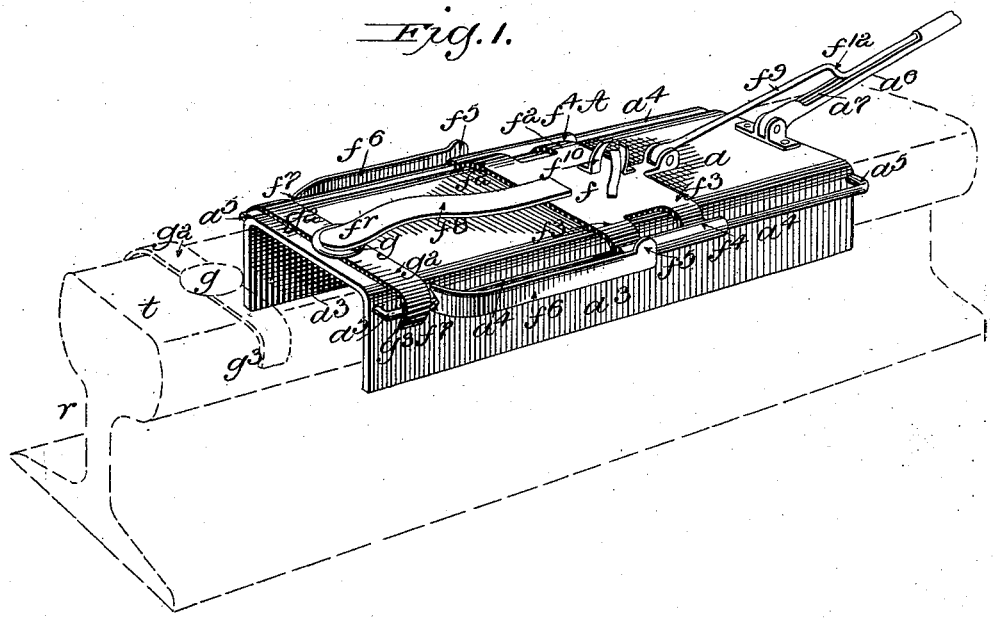


Fig. 2.

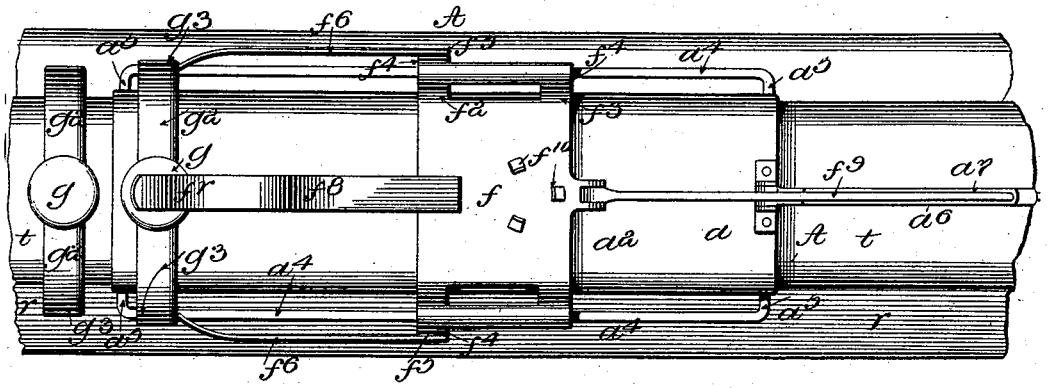
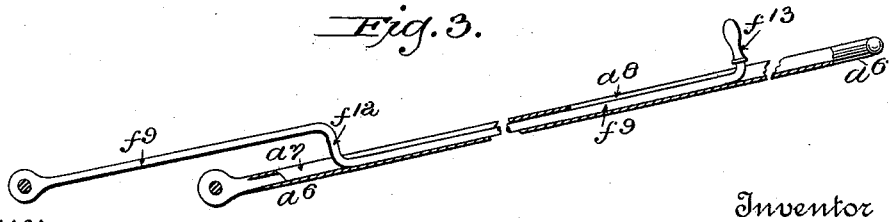


Fig. 3.



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MACHINE FOR PLACING TRACK-TORPEDOES.

SPECIFICATION forming part of Letters Patent No. 523,542, dated July 24, 1894.

Application filed March 26, 1894. Serial No. 505,089. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL MYERS, a citizen of the United States, residing in the city of Crestline, in the county of Crawford, in the State of Ohio, have invented a new and useful Machine for Placing Track-Torpedoes, of which the following is a correct description.

The invention relates to the class of devices which are operated upon the rear of a railway-car, to apply upon a railway-track, a signal-torpedo, which is adapted to be exploded by contact therewith of one of the wheels of a following car or train.

The invention consists in various novel elements, or combinations of elements in a machine, operated from the rear of a railway train, for placing and securing detonating torpedoes upon the tread of a track-rail in advance of a following train, as will appear from the following detailed description, and from the specific and distinct claims which succeed the same.

In the accompanying drawings, which constitute a part of this specification: Figure 1 represents a perspective plan view of a construction in which my invention is embodied. Fig. 2 is a top plan view, showing the placer proper, in connection with a portion of the track-rail. Fig. 3 is a side elevation, partly in section,—showing the tubular draw-bar, and the inclosed placer-operating rod.

The base a of the machine A, is composed, in the main, of the central horizontal trunk or body a^2, and the two parallel depending sides a^3, a^3, which are adapted to receive between them the tread b, of the rail r.

Along each side of the base a, near the upper extremity thereof, and at a little distance outwardly therefrom, is provided a guide-way and supporting-rod a^4, which is suitably attached to such sides, by its inturned ends a^5, a^5; and at its front it is provided with a loosely attached tubular tongue or draw-bar,—which has longitudinal slots a^7 and a^8,—by which such base is adapted to be attached, for propulsion, to the rear extremity of a car.

Upon the base a, is mounted the slidable discharging-frame f, which is composed essentially of a front cross-plate or bars f^2, f^3, which have bottom loops or ways f^4, f^4, to loosely receive the guide-ways or supporting-rods a^4, of the base a; upturned ends f^5, f^5; lateral, rearwardly-projecting, inwardly-bent thrusting-arms f^6, f^6, which at their front extremity are secured to the upturned ends f^5, of the cross-plate or cross-bars f^2, f^3, and which at their rear extremity are each provided with a notch f^7, by which the body of the rod or way a^4 is lightly engaged; a rearwardly-extending spring-arm f^8, which at its front extremity is secured to the cross-plate or cross-bar, and which by its rear extremity f^r, presses upon the body a^2, or upon a torpedo which rests upon such body; and a hinged or pivoted operating-rod or arm f^9, which is received, by its main portion, within the body of the tubular draw-bar or tongue a^6, which has end-cranks f^{12}, f^{13}, which move along the slots a^7, a^8, of the tongue or draw-bar a^6, and by means of which the frame is manipulated, in discharging the torpedo and placing it upon the track-rail. Upon the front portion of the discharging-frame, are provided upright spring-arms f^{10}, preferably three or more in number, and arranged concentrically, to receive and secure, as in a socket, the body of a suitable lamp, which will serve to sufficiently illuminate the track.

The torpedoes g, which for the purposes of this invention may be of an ordinary construction, are maintained in a transversely-central position upon the base a, by means of the laterally-extending arms g^2, g^2, the downwardly and inwardly extending extremities g^3 of which, somewhat loosely engage the guideway and supporting-rod a^4; and are held against displacement, longitudinally, by the frictional contact of the rear extremity or free end f^r, of the spring-arm f^8.

In the drawings, but a single torpedo is represented as applied upon the base,—the arms of the torpedo engaging the guide-way and supporting-rod, and the extremity of the longitudinal spring-arm resting upon the body of the torpedo; but it will be apparent that, if desired, two or more torpedoes may be simultaneously applied, to be successively discharged, as occasion may require.

In the operation of the apparatus, the machine having been first attached by its tongue or draw-bar, to the car, and then lowered into position upon the track,—which may readily be done from the platform of the car, even when it is moving at a high rate of speed,—the

actuating-arm or push-rod f^9, is forced rearwardly, until the notched extremities f^7, of the thrusting-arms f^6, come into contact with the lateral arms g^2, g^2, of the torpedo g, whereupon, the movement being continued, the lateral arms g^2, will slip from the rear extremity of the guiding and supporting rods a^4, and descending, will engage the body of the tread of the track-rail,—centrally upon which the body of the torpedo will rest. The described movement being repeated until all the torpedoes have been discharged, the machine may be lifted upon the car, for an additional supply.

The invention having been thus fully described, what is claimed is—

1. In a machine for placing track-torpedoes, the combination with the supporting-base, having plain central horizontal portion, parallel depending side-walls, which are adapted to embrace the tread of a track-rail, and longitudinal outstanding guide-rods; of the described discharging-frame, movable loosely upon, and engaging the guide-ways or rods,—provided with the central spring-arm for engaging the torpedo by downward pressure, and provided also with the lateral, longitudinally-extending thrusting-arms, for moving the torpedo beyond its point of engagement with the ways or rods; substantially as described.

2. In a machine for placing torpedoes upon a railway-track, a base which has a flat central portion or body, vertical side-walls for embracing the tread of a track-rail, and guiding and supporting rods which extend along the side-walls, from end to end thereof; combined with a discharging-frame which embraces a transverse portion which engages and has movement along the guiding and supporting rods, a central longitudinal spring-arm, for frictionally engaging the body of the torpedo, side arms for thrusting the torpedo along and beyond the guiding and supporting rods, and an operating-handle for moving the discharging-frame along the base; substantially as set forth.

3. In a machine for placing track-torpedoes, a base which bestrides the tread of the track-rail, which has longitudinal guide-ways or rods which are adapted to be engaged by the arms of a torpedo, and which has a tubular tongue or draw-bar, for connection with a railway-car; combined with a discharging-frame which is loosely mounted upon the base, which engages the longitudinal guide-ways or rods, and which has a thrusting arm or rod which is received within and has movement along the tubular tongue or draw-bar of the base; substantially as specified.

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