O. S. OBENCHAIN.

TORPEDO FORK.

APPLICATION FILED SEPT. 24, 1909.

983,394. Patented Feb. 7, 1911.

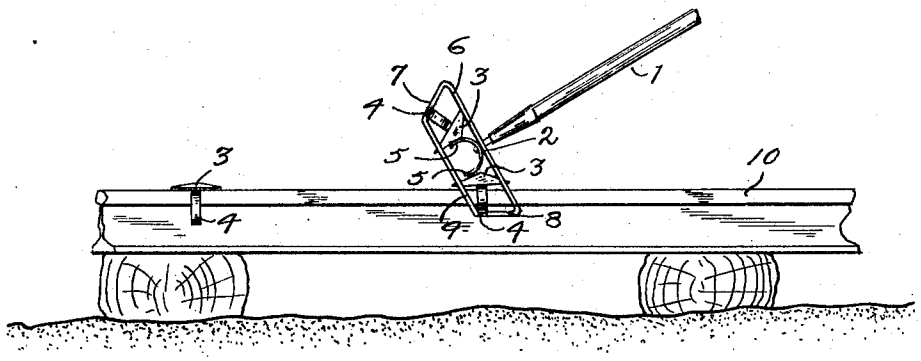

Fig. 1.

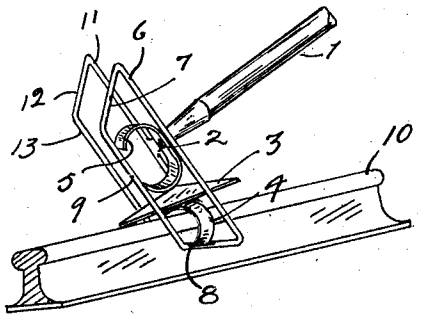

Fig. 2.

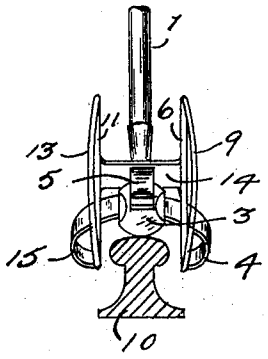

Fig. 3.

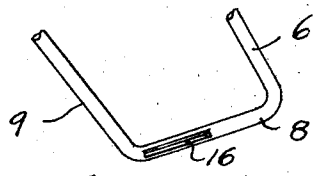

Fig. 4.

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TORPEDO-FORK.

983,394. Specification of Letters Patent. Patented Feb. 7, 1911.

Application filed September 24, 1909. Serial No. 519,332.

To all whom it may concern:

Be it known that I, OSCAR S. OBENCHAIN, a citizen of the United States of America, and a resident of Waterloo, Blackhawk county, Iowa, have invented certain new and useful Improvements in Torpedo-Forks, of which the following is a specification.

My invention relates to improvements in torpedo-forks, and the object of my improvement is to provide an appliance to be used to safely deposit torpedoes on the rails of a railway track from the engine or train while the latter is in motion, said fork being constructed to perform this function efficiently and surely. This object I have accomplished by the means which are hereinafter fully described and claimed, and which are illustrated in the accompanying drawings, in which:

Figure 1 is a representation of my improved torpedo-fork as used in depositing a torpedo upon one of the rails of a railway track. Fig. 2 is a similar view to that in Fig. 1, but on a larger scale and in perspective. Fig. 3 is another view of the appliance in use in the same manner, but showing it in rear elevation. Fig. 4 is a broken detail, enlarged, of the lower part of one of the side holders of the fork.

Similar numbers refer to similar parts throughout the several views.

My improved torpedo-fork has a long handle 1, whereby it may be manipulated in use from the rear platform of a caboose, when it is desired to lay a torpedo or torpedoes upon a rail of the track while the train is moving.

A ferrule secures the cross-bar 14 of the fork to the handle 1. Said cross-bar supports parallel spaced apart rods 6 and 11 at its ends at a right angle thereto, each rod forming a part of a closed loop. The loop on the left of said cross-bar is composed of the parts 6, 7, 8 and 9, of which the parts 7 and 8 extend respectively from each end of the rod 6 at an acute angle thereto, their outer ends being connected by a part 9 at obtuse angles therewith. The other loop on right-hand side of said cross-bar is composed of like parts 11, 12, 13 and a lower part not shown corresponding to the part 8 of the left-hand loop. These loops serve as holders on each side of the fork for a torpedo or torpedoes engaged therebetween.

The ordinary type of railway track-torpedo has a sealed receptacle 3 for the inclosed explosive compound, said receptacle having attached to its base a pair of inwardly-curved spring clips 4 and 15 of like form and spaced apart. Each of the rearwardly-inclined parts of the loops or holders, 7, 8, 12 and the part opposite to and similar to 8 are provided near their rear connections respectively with the connecting parts 9 and 13, with a groove or indented seat 16, into which in each case one of the incurved spring-clips 4 or 15 is intended to fit detachably. The side-holder loops are spaced apart sufficiently to render it necessary for the clips 4 and 15 to be pressed apart considerably before their ends may become seated in the grooves 16. When so deposited, the resiliency of the springs keeps them in place. Between the side loops or holders described above, a curved spring-plate 5 whose ends are incurved rearwardly, is secured on a stud 2 to the middle of the rear face of said cross-bar 14, and each curved end of this plate 5 serves to bear against the top of a torpedo placed on either side, above and below it, tending to keep such torpedoes in place. As shown in Fig. 1, a torpedo may be secured between said side-holders at each end thereof, in a similar manner. The device may be used from a moving train, by simply extending the fork to a position over one of the track-rails as shown in Fig. 3 especially, so that the lower extremities of its side holders may extend on each side of the rail head at its broadened portion. When the torpedo comes in contact with the top of the rail, it becomes detached from the side holders, its spring-clips 4 and 15 leaving the grooved seats 16, the spring 5 aiding to prevent a fly-back on the part of the torpedo. The detached spring-clips 4 and 15 of the torpedo on becoming detached from the fork, immediately become retracted inwardly and embrace the broadened portion of the rail securely.

It will be observed that the outer connecting parts 9 and 13 of the side holders are curved so as to cause their intermediate parts to recede from each other, and this is to provide space for the torpedo to move therebetween without interference when detached. The parts of the side holders 7 and 12, like their corresponding parts on the opposite end of the fork, are arranged so that when in use their angle of inclination to the rods 6 and 11 causes them to lie parallel with the rail, and in this position the torpedo is more

reliably secured to the rail with less liability of accidental displacement, and loss. The tying together of the parts which hold the spring-clips 4 and 15 by connecting parts 9 and 13, keeps the loops rigid, and prevents accidental displacements of the torpedoes. The grooved seat 16 is preferably placed in the part 8 near its angle of connection with the part 9, as shown in Fig. 4, and this is to give the attached torpedo a wider clearance so as to not interfere in leaving the fork for the track. The fork is made reversible to hold two torpedoes, one at each end, and may be used as required in railway signaling by the placing of either one or two torpedoes on the rail, without recharging.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is:

1. A torpedo-fork, comprising connected holding-members spaced apart and provided at each end with holding-means for the spring-clips of a torpedo, and yieldable resilient arms located between said holding-members each adapted to bear against the adjacent torpedo to yieldably secure it in said holding-means.

2. A torpedo-fork, comprising connected holding-members in the form of closed loops spaced apart, the ends of said loops having sockets for the reception of the extremities of torpedo spring clips.

3. A torpedo-fork, comprising a handle having holding-members connected thereto in the form of loops in approximately parallel planes, said loops having sockets located oppositely and whose openings are directed outwardly from the planes of the loops, said sockets being adapted to receive detachably the inturned ends of the spring-clips of torpedoes, and elastic retaining means located between said loops adapted to detachably retain a torpedo therebetween.

4. A torpedo-fork, comprising a handle having spaced-apart looped bodies projecting therefrom, said bodies being in approximately parallel planes with their portions located farthest from the handle bent so as to be concave toward each other, said bodies having torpedo-clip receiving-means, and yieldable resilient means projecting from said handle between said spaced-apart bodies and adapted to yieldingly and detachably engage a torpedo on either side thereof to yieldingly and resiliently hold the spring-clips of such torpedoes detachably in said receiving-means.

5. A torpedo-fork, comprising holding-parts spaced apart, and yieldable resilient arms located between said holding-parts each adapted to bear against a torpedo included between it and one of said holding-parts to yieldably secure it therebetween.

6. A torpedo-fork, comprising holding-parts spaced apart, such parts having holding-means for the ends of the spring-clips of torpedoes, and yieldable resilient arms located between said holding-parts each adapted to bear against a torpedo included between it and one of said holding-parts to yieldingly hold the torpedo-clip ends in said holding-means.

7. A torpedo-fork, comprising connected holding-members in the form of closed loops spaced apart, the said loops having holding-means for detachably receiving the spring-clips of torpedoes.

Signed at Waterloo, Iowa, this 7th day of Sept. 1909.

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Witnesses:
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