

(No Model.)

T. H. HUEWE.

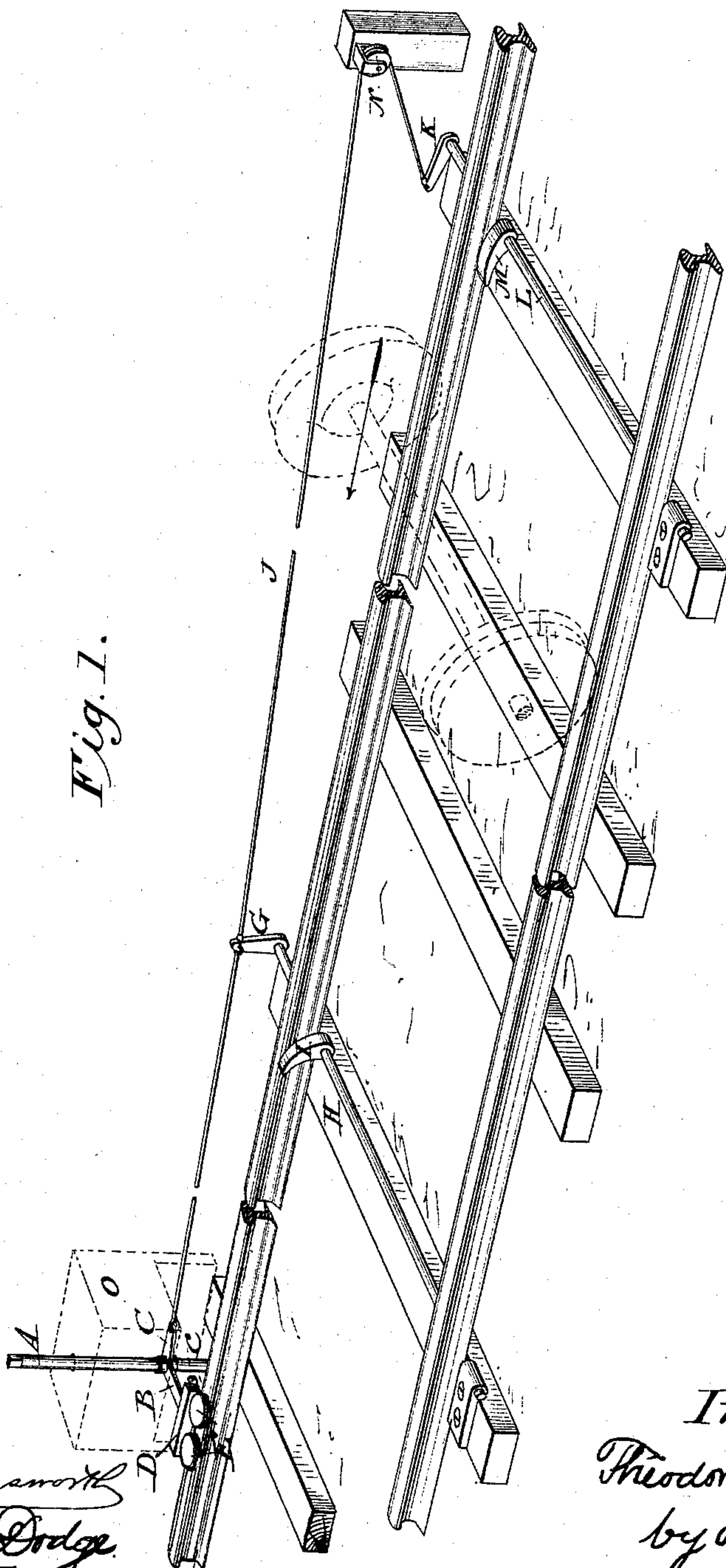
2 Sheets—Sheet 1.

APPARATUS FOR PLACING TORPEDOES UPON TRACKS.

No. 262,950.

Patented Aug. 22, 1882.

Fig. 1.



Attest.

Sydney P. Hoelingworth
Walter J. Dodge

Inventor.
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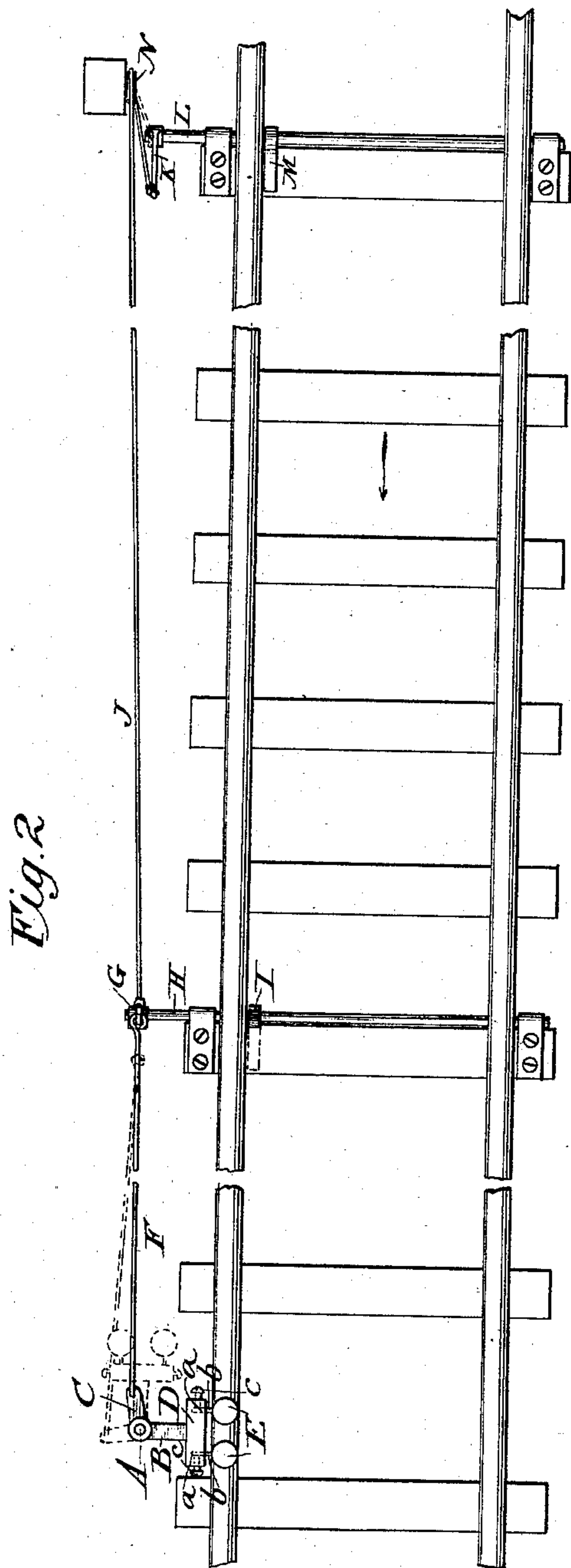


Fig. 2

Attest.

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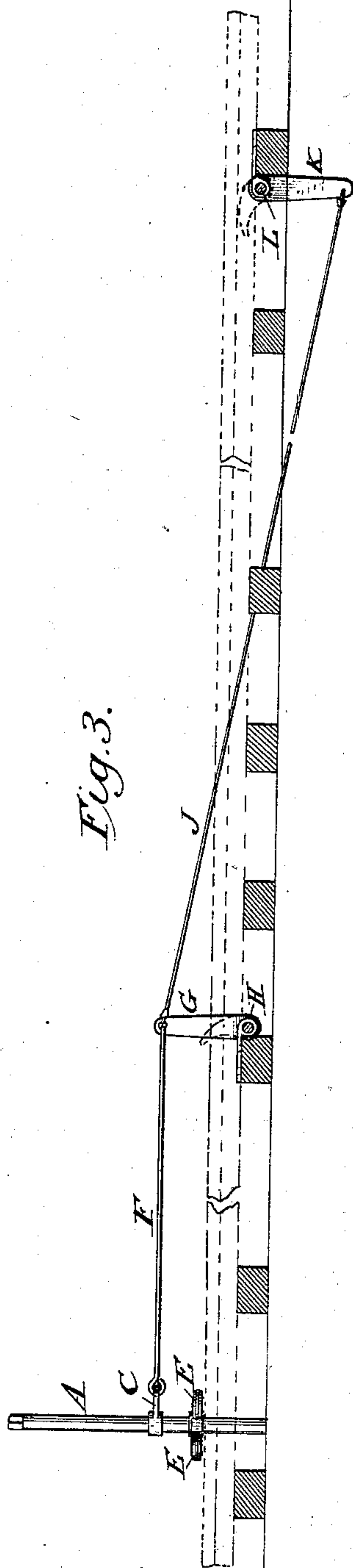


Fig. 3.

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UNITED STATES PATENT OFFICE.

THEODOR H. HUEWE, OF DAYTON, OHIO, ASSIGNOR OF ONE-HALF TO JOHN B. BOLLMAN, OF SAME PLACE.

APPARATUS FOR PLACING TORPEDOES UPON TRACKS.

SPECIFICATION forming part of Letters Patent No. 262,950, dated August 22, 1882.

Application filed February 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, THEODOR H. HUEWE, of Dayton, in the county of Montgomery and State of Ohio, have invented certain Improve-
5 ments in Apparatus for Placing Torpedoes upon Tracks, of which the following is a specification.

My invention consists in a mechanism or apparatus designed to be actuated by a moving
10 train and to place a torpedo upon the track at a considerable distance ahead thereof to give warning to a train approaching from the opposite direction, should there be one, and also to remove the torpedo from the track when
15 reaching a given point, the danger being over.

In the accompanying drawings, Figure 1 represents a perspective view of my improved mechanism applied to a track; Fig. 2, a plan
20 view, showing the action of the operating devices; Fig. 3, a modification of the trip-lever mechanism.

The purpose of this invention is to prevent collisions in passing curves and other places, where one train cannot be seen from the other
25 until too late; and to this end it consists in a horizontally swinging or moving lever carrying one or more torpedoes, and arranged to be thrown out to a position which will cause the torpedoes to be placed directly over or upon
30 the rail through the movement of a trip or lever connected with the torpedo-lever and actuated by the train, and also arranged to be withdrawn from over the rail by a second trip connected with the first in such manner that
35 the depression of either causes the other to stand in an upright position. Thus the train depressing the first trip or lever causes the second to be raised into position to be struck by the wheels of the train when reaching said
40 trip, at the same time placing the torpedo in position to be acted upon by a train coming in the opposite direction, while if the train reach the second trip-lever before the torpedoes are fired by a train from the opposite direction the
45 danger is past, and the torpedoes, being no longer necessary, are withdrawn by the depression of the said second trip-lever, which causes the first trip or lever to stand upright ready to be acted upon by the following train. The ar-
50 rangement will be duplicated but reversed on

the opposite side of the track, so that a train from either direction shall give the warning or place torpedoes on the track a long distance in advance, so that the train first nearing the dangerous point will first place torpedoes upon
55 the track, and thereby give warning to the other train.

Referring now to the drawings, A represents an upright post, carried and free to turn in suitable bearings, and provided with arms B
60 and C, projecting horizontally therefrom, substantially at right angles to each other. The arm B carries a block or cross-piece, D, provided with holes *a* to receive the stems or wires
65 *b* of torpedoes E, which are passed through the holes and secured by clamping-screws *c*.

The block or cross-piece D may, if preferred, be divided and the clamping-screws arranged to draw the two leaves or parts together, in-
70 stead of the arrangement mentioned.

The arm C is connected by a rigid bar or rod, F, to the upper end of an arm, G, extending upward from a rock-shaft, H, which also carries a trip-lever, I, and it is further connected
75 by wire, chain, or cable J, of any suitable kind, with a similar arm, K, mounted upon a second rock-shaft, L, also provided with a trip-lever, M, as shown.

The connecting wire or cable, of whatever nature it may be, is provided with a flexible
80 section to pass around a pulley, N, from which it extends to the top of the arm K, this arrangement being adopted to secure a reverse movement of the arms G and K and the trips I and M. It is obvious, however, that the
85 same result may be secured by extending the arm or lever K below the rock-shaft L and connecting the cable, wire, or rod J to said depending arm, as in Fig. 3.

The parts being constructed as above ex-
90 plained, and the road being clear, the torpedoes are swung back under a protecting box or cover, O, within which the shaft or post A is placed, and when the torpedoes are thus thrown back the trip M will stand in an upright posi-
95 tion, the trip I lying down in a horizontal position. If, now, a train approaches in the direction indicated by the arrow, Figs. 1 and 2, the trip M will be depressed thereby and the trip I elevated, the torpedoes being thrown out to
100

the position shown in Fig. 1 by the turning of the post or shaft A through the connections above explained.

5 The torpedoes are located at such distance from the trip M that a train coming from the opposite direction to that which depresses trip M shall run upon the torpedoes in time to reverse the engine and get well under way before the first train reaches it; but should there be
10 no such train from the opposite direction the first train reaching and depressing the trip I, raised by the depression of the trip M, will rotate or turn post A and swing the torpedoes from the track. At the same time and by the
15 same action the trip M will be raised, ready to be actuated by a following train.

As stated, a like arrangement of devices will be placed at the other side of the track, to be actuated by a train from the opposite direction
20 to that indicated, should that be the first train nearing the dangerous point. In this way the protection of the trains is rendered certain and the placing and the removing of the torpedoes are made entirely automatic, thus avoiding the
25 danger existing where the services of men are required in placing and removing the torpedoes.

The cables may be carried in boxes above or under ground.

The trips I and M may be jointed to fold down when a train comes from the opposite
30 direction from that by which they are to be operated, though I prefer to place them at the right-hand side of the track relatively to the advancing train, and to provide a special arm to strike and operate them. 35

I do not broadly claim a torpedo-signal placed upon and removed from the track by the moving train.

Having thus described my invention, what I claim is— 40

In combination with the movable torpedo-carrying arm B, trips I and M, connected with the torpedo-arm and with each other, as shown and described, whereby a moving train is caused to first depress the trip M and elevate
45 the trip I, thus placing the torpedo upon the track, then to depress the trip I, elevate trip M, and swing the torpedoes from the track, substantially as set forth.

THEODOR H. HUEWE.

Witnesses:

WILLIAM W. DODGE,
JOHN B. BOLLMAN.