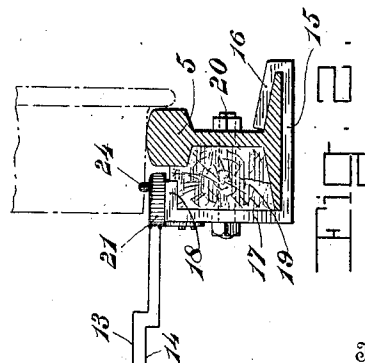
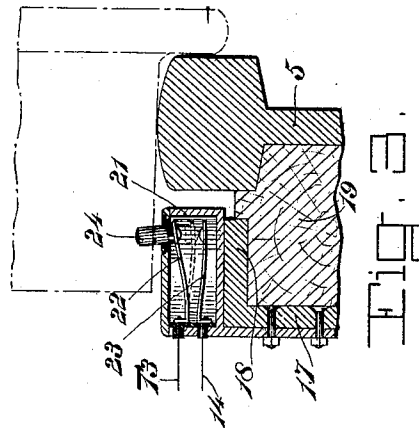
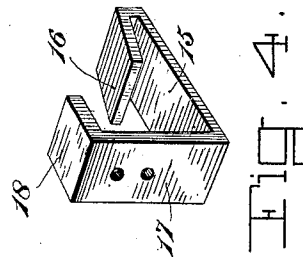
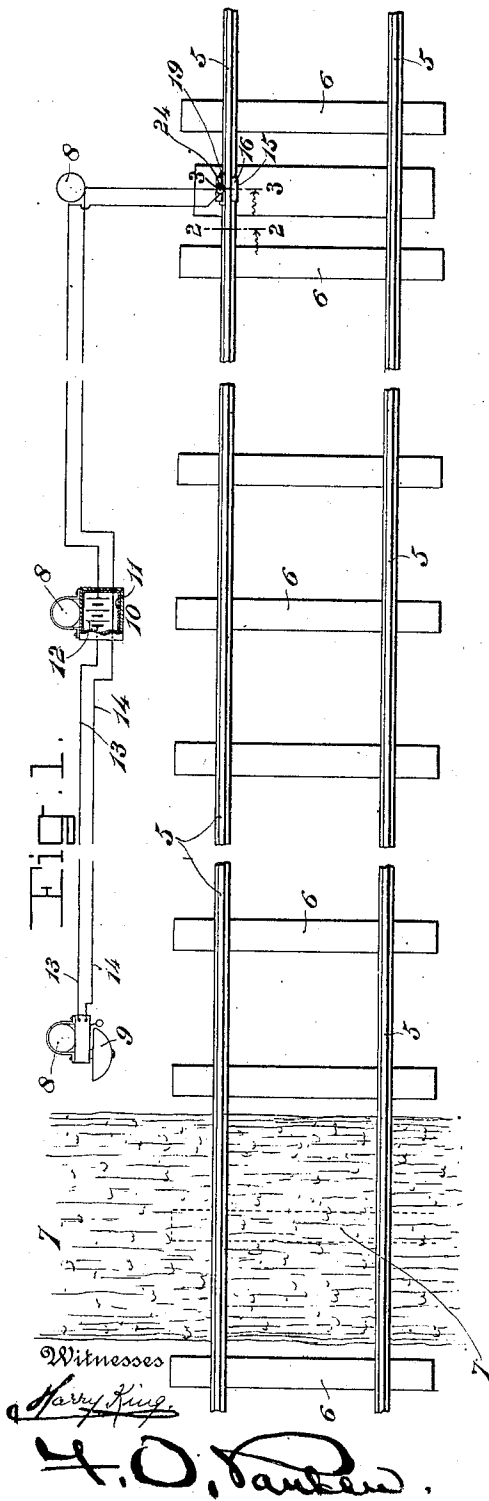


P. J. RUSSELL.
RAILWAY CROSSING SIGNAL.
APPLICATION FILED MAR. 11, 1911.

995,910.

Patented June 20, 1911.



Inventor

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PETER J. RUSSELL, OF STEVENSVILLE, MONTANA.

RAILWAY-CROSSING SIGNAL.

995,910.

Specification of Letters Patent. Patented June 20, 1911.

Application filed March 11, 1911. Serial No. 613,749.

To all whom it may concern:

Be it known that I, PETER J. RUSSELL, a citizen of the United States, residing at Stevensville, in the county of Ravalli and State of Montana, have invented new and useful Improvements in Railway-Crossing Signals, of which the following is a specification.

The invention relates to signaling device, and more particularly to the class of railway crossing signaling apparatus.

The primary object of the invention is the provision of a signaling apparatus in which an alarm will be sounded prior to the approach of a train to a crossing or at the point of intersection of a roadway with the track, thus indicating to vehicles or pedestrians that a moving train is approaching the crossing, thereby avoiding danger, such as injury or the loss of life.

Another object of the invention is the provision of a signaling apparatus which is electro-mechanically operated, so as to give warning at a railway crossing of the approach of a moving train on the track, thereby avoiding collision with pedestrians or vehicles traveling in the roadway at the point of intersection thereof with the track.

A further object of the invention is the provision of a signaling apparatus which is simple of construction, thoroughly reliable and efficient in operation, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claim hereunto appended.

In the drawings: Figure 1 is a fragmentary plan view with the signaling apparatus applied thereto constructed in accordance with the invention. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a sectional view on the line 3—3 of Fig. 1. Fig. 4 is a detail perspective view of the track clamp removed from the track rail.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, 5 designates the rails of an ordinary well-known railway track, the same being supported upon the usual ties 6, and 7 indicates the roadway intersecting the track which

serves as a crossing to permit pedestrians and moving vehicles to pass over the track.

Spaced the desired distance at one side of the track and also to one side of the roadway are vertical posts 8, the same being arranged at intervals for a distance longitudinally relative to the track. Upon one of these posts is suitably mounted an electrically controlled signaling bell 9, while upon an adjacent post 8 is mounted a box 10, the same being lined with a suitable water-proof lining 11, preferably asbestos, and in which is disposed a dry battery 12, to which is connected a circuit, comprising conductors 13 and 14, the latter being also connected to the electric bell 9 for operating the same on the closing of the circuit in a manner as will be hereinafter more fully described.

At the desired point spaced from the crossing 7 and engaging one of the track rails 5, is a clamp, comprising a bar bent to provide a horizontal base portion 15, an upwardly and inwardly bent inner clip extremity 16 and an outer vertical extremity 17, the same being formed with an inturned lug 18, the base portion 15 being adapted to contact with the under face of the base flange of the rail 5, while the clip 16 is engaged with the said base flange at the inner edge thereof and the vertical extremity 17 rises from the base portion 15 at the outside of the said rail. Interposed between the web of the rail 5 and the vertical extremity 17 is a wood filling block 19, preferably constructed from oak, the block 19 being held fast upon the rail 5 in any suitable manner, preferably by means of a bolt 20 passed therethrough and through the web of the rail.

Secured to the inturned end 18 of the clamp, which end is slightly below the plane of the ball or tread of the rail 5, is a push button shell 21, within which are arranged normally separated resilient contact fingers 22 and 23, respectively, one of which is connected with the conductor 13 and the other with the conductor 14, so that upon the bringing together of the said fingers, a circuit will be closed for the sounding of the electric bell 9. Slidably fitted in the push button shell 21 is a depressible push button 24, the latter being normally held protruded by the resilient finger 22, so that the button 24 will project slightly elevated above the plane of the tread of the rail 5, and close

thereto, whereby on the passing of the train, the wheel thereof will depress the button 24, thus bringing the contact finger 23 in contact with the finger 22, thereby closing the
5 circuit for the sounding of the bell 9 prior to the approach of the train traveling upon the track to the crossing, thereby giving warning to pedestrians or moving vehicles at the crossing.

10 What is claimed is:

In a signaling apparatus, a clamp adapted to embrace a railway rail, a block engaged between the clamp and such rail, a normally open switch mounted upon the

block, a push button adapted to be auto- 15
matically operated by a passing train for closing the switch, a circuit including conductors connected with the switch, and an audible signaling element connected with the circuit and adapted to be sounded on the 20
closing of the switch.

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

PETER J. RUSSELL.

Witnesses:

WINSOR A. RUSSELL,
FRED W. HOWARD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
