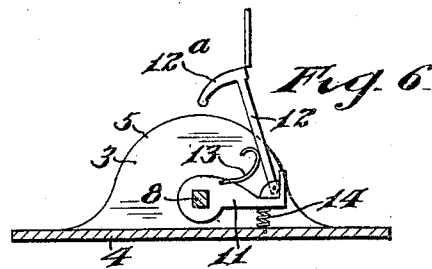
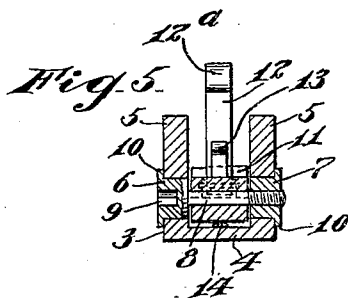
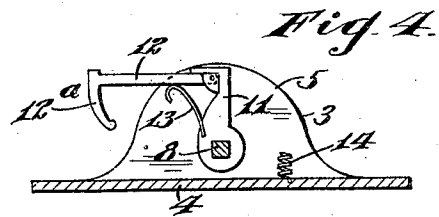
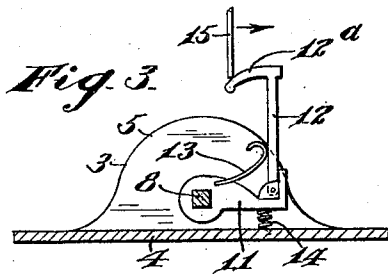
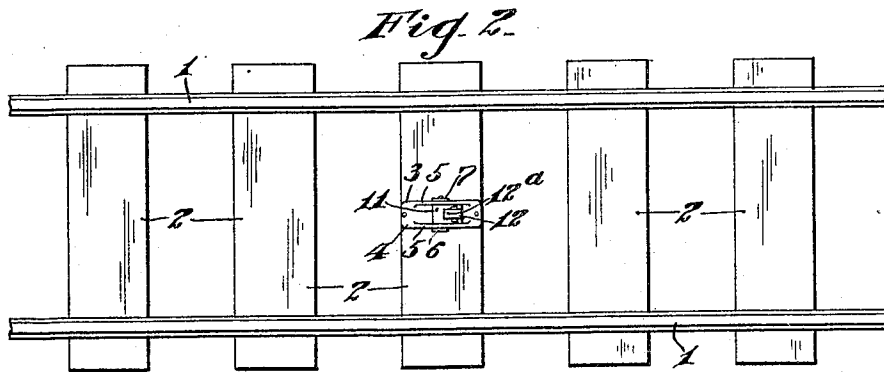
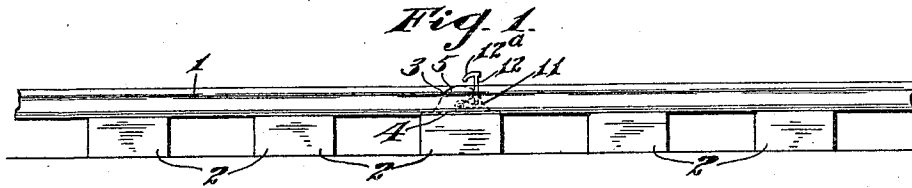


W. WHITMAN.
AUTOMATIC WARNING SIGNAL AND STOPPING DEVICE FOR THE SAFE MOVEMENT OF
PUBLIC CONVEYANCES.

APPLICATION FILED MAY 28, 1909.

942,388.

Patented Dec. 7, 1909.



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AUTOMATIC WARNING-SIGNAL AND STOPPING DEVICE FOR THE SAFE MOVEMENT OF
PUBLIC CONVEYANCES.

942,388.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed May 28, 1909. Serial No. 498,864.

To all whom it may concern:

Be it known that I, WILLIAM WHITMAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Automatic Warning-Signals and Stopping Devices for the Safe Movement of Public Conveyances, of which the following is a specification.

My invention relates to an automatic warning signal and stopping device for the safe movement of public conveyances, and more particularly to an improved tripping mechanism designed for use in connection with a railway signal or other mechanism, whereby the trip will be thrown to a position to be engaged by a valve on a locomotive or car, so as to automatically apply the air brakes in the event the engineer or motorman disregards the danger signal.

A further object is to provide an improved device of this character, which will move in the direction of travel of the locomotive or car, when the latter is moving away from the point of danger, so as to prevent the operation of the valve mechanism on the locomotive or car.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1, is a view in side elevation illustrating my improvements. Fig. 2, is a plan view. Figs. 3 and 4, are views in longitudinal section illustrating the positions of the trip. Fig. 5, is a view in cross section, and Fig. 6, is a view showing the position of the trip when engaged and moved by the valve of a locomotive or car.

1 represents the ordinary rails of a track, and 2 the ties supporting the same. On one or more of the ties 2 my improved bracket 3 is secured, and comprises a base plate 4, having integral parallel ears 5 thereon, the latter made with alined openings, to receive the journals 6 and 7, of an angular shaft 8. The journal 6 is integral with shaft 8, while the journal 7 is internally screw threaded to screw upon the rounded and threaded end of shaft 8, and both of these journals are made with annular flanges 10 to prevent lat-

eral movement of the shaft in the bracket, and one of these journals is provided with a rectangular socket 9, to receive an operating shaft or other suitable device not shown, to throw the trip, more fully hereinafter described.

My improved trip comprises two members 11 and 12 respectively. The member 11 consists of an L-shaped lever having a square opening at one end to receive shaft 8, and the member 12 is straight, and provided with a curved contact 12^a at its free end is pivotally secured at one end to the member 11 adjacent the angle of said lever, and is normally held against the vertical portion of said member 11 by means of a spring 13, which latter permits the member 12 to be moved on its pivot, by the movement of an air brake valve passing over the same, in an opposite direction from the point of danger, and hence does not offer sufficient resistance to trip the valve. A coiled spring 14 is secured to the bracket, and serves as an elastic support for the member 11. When the parts are as shown in Fig. 3, and the part 15 which is designed to illustrate the operating member of an air brake valve is moved in the direction of the arrow toward the point of danger, it will engage the curved contact 12^a and will swing the members 11 and 12, and turn shaft 8 against the action of spring 14, until the part 15 passes the trip. This contact while yielding, is sufficient to trip the valve, and apply the air brakes, thus bringing the train, car or other vehicle to a stop, regardless of whether or not the engineer or motorman is doing his duty.

When the device is in an inoperative position, the parts are as shown in Fig. 4, and when it is desired to stop the train, it is moved to the position shown in Fig. 3.

I have not illustrated or described any means for operating the device, as it is to be understood that it may be operated in connection with a signal, a switch, or any other mechanism, and this invention is in no wise limited to any particular operating means.

Various slight changes might be made in the general form and arrangement of parts described, without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such changes and

alterations as fairly fall within the spirit and scope of the claims.

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

1. In a device of the character described, the combination with a trip, comprising an L-shaped member pivotally supported at one end, a second member pivoted to the L-shaped member adjacent the angle of the latter, and a spring normally holding said last mentioned member against the first mentioned member.

2. In a device of the character described, the combination with a shaft, an L-shaped member fixed to turn with said shaft, a second member having a curved contact at its free end and pivotally secured at its other end to said L-shaped member adjacent the angle of the latter, and a spring normally holding said second member against one arm

of said L-shaped member, and a spring below said L-shaped member.

3. In a device of the character described, the combination with a bracket, parallel ears on said bracket, a shaft having bearings in said ears and made angular between its ends, an L-shaped member having an angular opening in one end mounted on the shaft, a second member pivotally secured to the L-shaped member adjacent the angle of the latter, and a spring pressing the second member against one arm of said L-shaped member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM WHITMAN.

Witnesses:

R. H. KRENKEL,
J. A. L. MULHALL.