Aug. 19, 1924. 1,505,115

H. WESTESON

SIGNALING DEVICE FOR RAILWAY SWITCHES

Filed Feb. 29, 1924

Fig. 1.

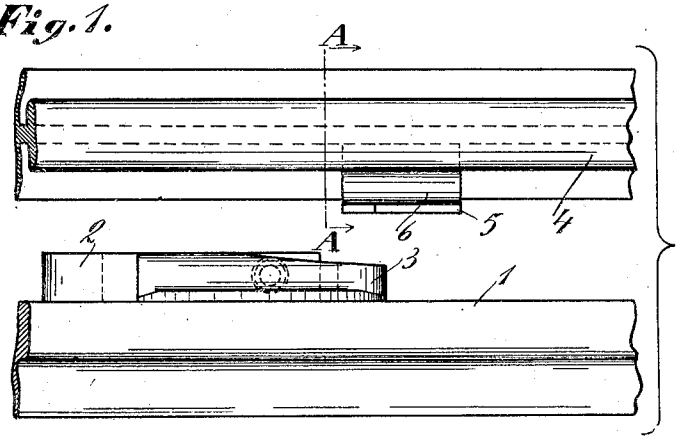


Fig. 2.

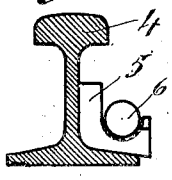


Fig. 3.



Fig. 4.

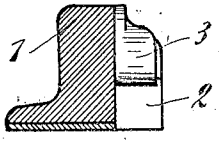
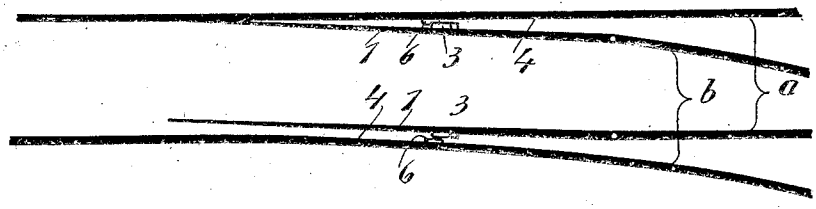


Fig. 5.



Hugo Westeson
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By
his Attorney.

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UNITED STATES PATENT OFFICE.

HUGO WESTESON, OF VASTERVIK, SWEDEN.

SIGNALING DEVICE FOR RAILWAY SWITCHES.

Application filed February 29, 1924. Serial No. 695,953.

To all whom it may concern:

Be it known that I, HUGO WESTESON, a subject of the King of Sweden, and resident of Brunnsgatan 22, Vastervik, in the Kingdom of Sweden, have invented certain new and useful Improvements in Signaling Devices for Railway Switches, of which the following is a specification, reference being had therein to the accompanying drawings.

Railway-switches may as known be passed from a track which is not switched in, that is from a track for which the switch is not adjusted. When the switch is forced open by the rolling wheels, the switch-tongues are often bent by the flanges of the wheels which also may break the tongues. If all the wheel pairs or all the joined cars do not pass through the forced open switch, it may be that the wheel pairs of the car or the joined cars by altered direction of movement (returning) will run on different tracks. It may further happen that the switch-tongues by one cause or another, for example, by sand or such like gathered on the slide plates of the switch, are not entirely switched over but are stopped in a socalled middle position, so that they, when the cars are passing the switch, by the vibration of for any other reason are caused to fall back, whereby the wheel pairs or the cars enter different tracks. Hereby may be caused accidents and costly damages regarding material and goods.

According to this invention a movable member is arranged between respective switch-tongue and the adjacent rail and fastened to said tongue, which member is arranged to be actuated by the wheels of cars coming from a track not switched in, and in its turn actuates a detonating cartridge or such like place between the rail and the switch-tongue and fastened to the former, so that a signal detonation is given to make the staff aware of the wrong position of the switch.

The invention is made plain in the accompanying drawings. Fig. 1 is a plan view of the signaling device on the rail and the switch-tongue and Fig. 2 is a cross section on the line A—A of Fig. 1. Fig. 3 is a side view of the movable member. Fig. 4 is an end view of the same the switch tonguue being shown in cross section. Fig. 5 is a diagram of the switch,

On the respective switch-tongue 1 is placed a block 2 in which a swingable spring actuated member 3 is arranged, which member is intended to be actuated by the wheel flanges of the cars. The adjacent rail 4 is provided with a holder 5 for a changeable detonating cartridge 6 or such like, known by itself. If the switch occupies the position shown in Fig. 5 and a car or a train enters from the rail *b* which is switched in, the device is not actuated so that the detonating cartridge is touched. If the wheel flange does not follow the rail but runs along the tongue the member 3 is certainly actuated but will not touch the detonating cartridge by being pressed down. On the contrary if a car or a train enters from the track *a* which is not switched in the member 3 on the switch-tongue, shown uppermost in Fig. 5 is evidently actuated whereby the member 3 in its turn actuates the detonating cartridge 6 lying beneath, so that a signal detonation is produced. Thereby the staff is made aware of the wrong position of the switch and can rectify it by the usual switch-operating mechanism.

The device may of course be altered in many ways without departing from the spirit of my invention, and I do not care to limit myself to any particular form or arrangement of the parts. The detonating cartridge may for instance be placed on the swingable member 3, which in that case ought to be provided with a holder for the cartridge, the signal detonation being produced for instance by the cartridge touching the rail or a member thereon when the member 3 is being forced down. According to the embodiment shown and described the member 3 is arranged on the switch-tongue and the detonating cartridge on the rail but evidently the case may be reversed, so that the member 3 is arranged on the rail and the detonating cartridge on the switch-tongue.

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

1. In a signaling device for railway switches, the combination with a switch tongue and the adjacent rail toward which said tongue moves when the switch is closed, a yieldably supported movable member carried by said tongue between the latter and said rail and arranged to be actuated by the wheels of cars entering from a track not switched in, and a detonating cartridge supported on the rail between the latter and

the switch tongue and disposed below the path of the said member in its movement with said tongue.

2. A signaling device, as claimed in claim 1, in which said movable member comprises a pivoted spring actuated trigger, the free end thereof being depressed engages said cartridge to cause the actuation thereof, and a holder disposed on said rail to support said cartridge, substantially as described.

In witness whereof, I have hereunto signed my name.

HUGO WESTESON.