

(No Model.)

C. H. KRAUSS.
RAILWAY SWITCH.

No. 555,171.

Patented Feb. 25, 1896.

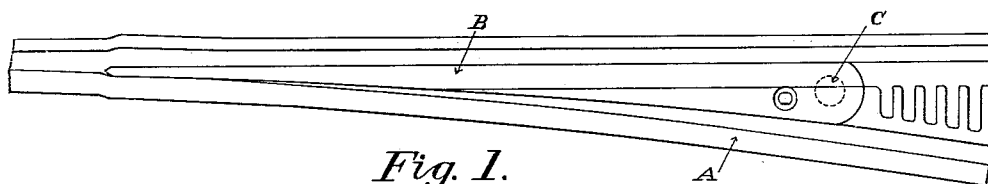


Fig. 1.

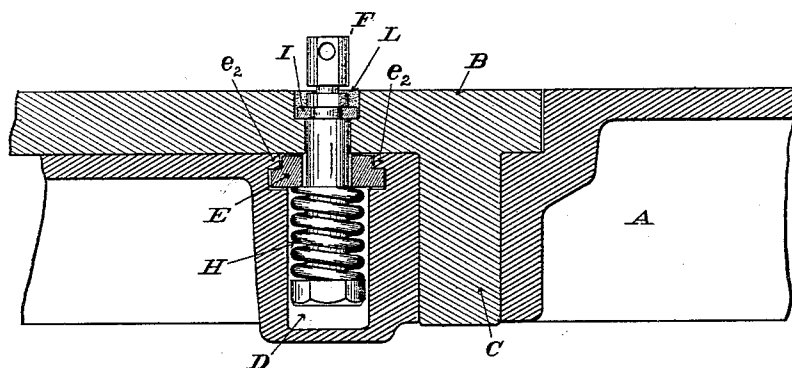


Fig. 2.

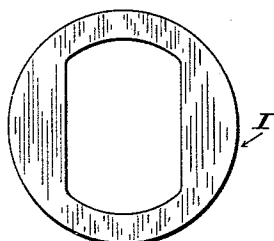


Fig. 3.

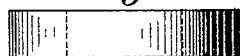


Fig. 4.

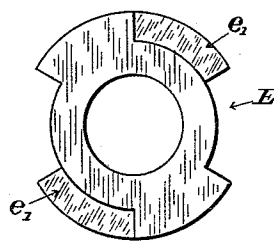


Fig. 5.

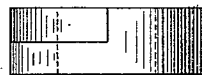


Fig. 6.

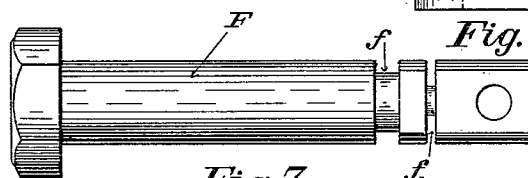


Fig. 7.



Fig. 8.

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES HENRY KRAUSS, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO
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RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 555,171, dated February 25, 1896.

Application filed December 4, 1895. Serial No. 571,011. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HENRY KRAUSS, of Johnstown, county of Cambria, State of Pennsylvania, have invented a new and useful Improvement in Railway-Switches, of which the following specification is a true and exact description, due reference being had to the accompanying drawings.

My invention relates to that class of switches in which there is a tongue hinged upon a vertical pivot near one end, and has for its object to provide a means for holding the tongue down in place.

Referring to the drawings, Figure 1 represents a top view of a switch embodying my invention. Fig. 2 is a vertical section through the fastening. Figs. 3 to 8 show various pieces in detail, as will be hereinafter described.

In general a switch embodying my invention has a hole through the tongue, a bolt passing through the hole and engaging a spring placed in the frame of the switch, the whole being so arranged that the spring acting upon the bolt serves to hold the tongue down in place.

In the drawings, A is the frame of the switch and B the tongue hinged upon the pin C.

In the frame of the switch I form the pocket D near the pivot-pin C, and through the tongue there is a hole above the pocket D. The top of pocket D is closed by the washer E, also having a hole concentric with that in the tongue. The shape of this washer is clearly shown in Figs. 5 and 6, in which it is seen that it has the locking-flanges e' adapted to register with corresponding flanges e^2 in the top of pocket D, the whole being so arranged that the washer may be dropped in from above and locked therein by a slight turn. Passing through the tongue and washer is the bolt F, and surrounding the bolt is spring H.

In the top of the tongue the hole is enlarged to receive the washer I. (Shown in detail in Figs. 3 and 4.) This washer has the oblong hole shown, and the upper end of the bolt is correspondingly flattened on the sides. The bolt F, as is shown in Figs. 7 and 8, has a recess formed in it at f , so that the washer I is free to turn upon it at this point.

The method of assembling the parts is as follows: Before the tongue is placed in the frame the bolt F and spring H are placed in

pocket D. The washer E is then dropped into place and given a turn to lock it. Next the tongue is put in so that the end of bolt F projects above it, and washer I is then slipped over top of the bolt. By means of a hook or lever inserted in the hole in the top of the bolt it (the bolt) is then drawn up until washer I registers with groove f , when it is turned around. This pulling up of the bolt compresses spring H, and it therefore exerts a downward pull on the tongue. The top of the bolt is then cut off, it having been previously grooved at f' for this purpose, and, if desired, the cavity around it may be filled with lead or other filling substance L. To remove the tongue it is necessary to first remove this filling substance and by means of a wrench turn bolt F until it will pass downward through washer I, when the tongue may be lifted out.

Having thus described my invention, what I claim, and desire to protect by Letters Patent, is—

1. In a railway-switch, a tongue-fastening comprising a bolt extending vertically downward from the tongue, and a spring in the frame of the switch and adapted to exert a downward force upon the bolt.

2. In a railway-switch, a tongue-fastening comprising a bolt passing through the tongue and removably secured therein, said bolt passing downward into a pocket in the switch-frame, and a spring encircling said bolt and adapted to exert a downward force thereupon.

3. In a railway-switch having a vertically-pivoted tongue, a pocket in the frame of the switch and beneath the tongue, a spring in said pocket and a bolt depending from the tongue and engaging the spring.

4. In a railway-switch having a vertically-pivoted tongue, an orifice in the frame of the switch and beneath the tongue, a member removably secured in the mouth of said orifice, a spring in said orifice and adapted to engage said member and a bolt removably secured to the tongue and passing down through said member and engaging said spring.

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

CHARLES HENRY KRAUSS.

Witnesses:

W. F. GONDER,
P. A. FITZPATRICK.