

(No Model.)

W. A. BROWNSON.
FOOT GUARD FOR RAILWAY FROGS, &c.

No. 506,413.

Patented Oct. 10, 1893.

Fig. 1.

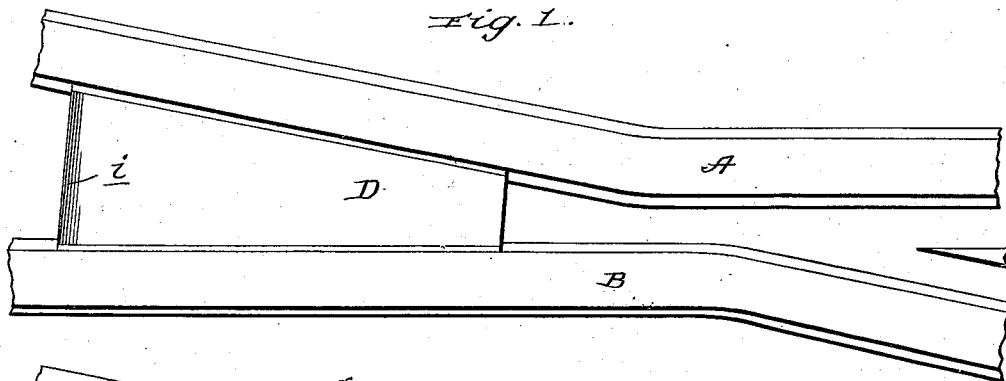


Fig. 2.

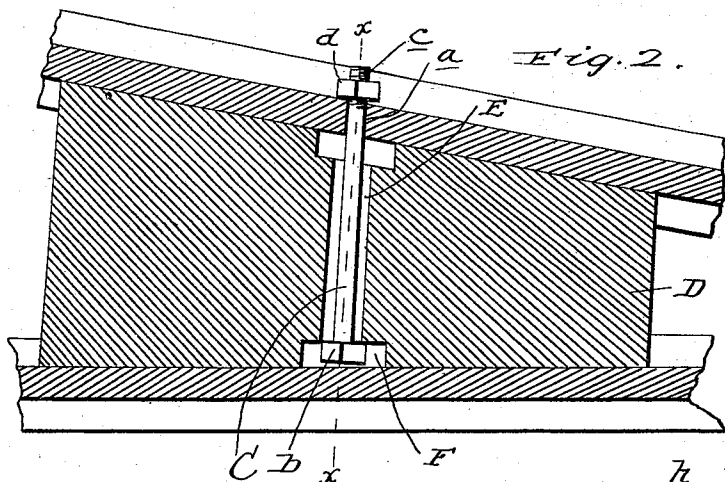


Fig. 3.

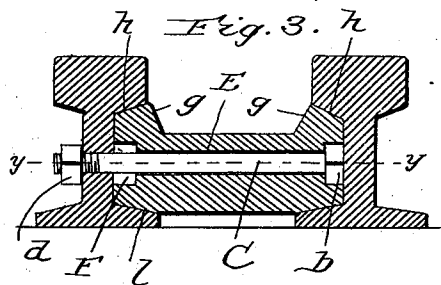
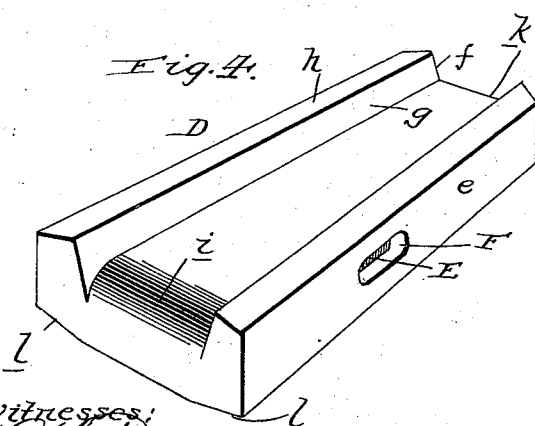


Fig. 4.



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WILLIAM A. BROWNSON, OF VIOLA, ILLINOIS.

FOOT-GUARD FOR RAILWAY-FROGS, &c.

SPECIFICATION forming part of Letters Patent No. 506,413, dated October 10, 1893.

Application filed June 15, 1893. Serial No. 477,736. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. BROWNSON, a citizen of the United States, residing at Viola, in the county of Mercer and State of Illinois, have invented certain new and useful Improvements in Foot-Guards for Railway-Frogs, Switches, &c.; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to an improvement in foot guards for railway frogs, switches, and other parts of a railway, where the rails converge, and the novelty will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1, is a plan view of a part of two rails, and a fragment of a switch point with my improved block in position. Fig. 2, is a longitudinal, horizontal, sectional view of the same, with the switch point omitted. Fig. 3, is a vertical, transverse, sectional view, taken in the plane indicated by the dotted line *x, x*, on Fig. 2, and Fig. 4, is a perspective view of the block or guard removed.

Referring by letter to said drawings: A, indicates a part of a railway rail, which may be that of the main track rail, and B, indicates a rail, which may be that of a guard rail. The neck of one or both of these rails is provided with a transverse aperture *a*, for the reception of a securing bolt C, having a head *b*, and screw threaded at its opposite end as shown at *c*, to receive a nut *d*, or the like.

D, indicates the guard or block. This block is of a peculiar construction, having its lateral, longitudinal walls *e*, approaching each other as shown, so as to form a truncated wedge. These walls extend above the upper surface of the block, forming vertically-disposed flanges *f*, which flare or incline outwardly and upwardly on their inner side as shown at *g*, and are beveled on their upper outer sides, as shown at *h*, so as to snugly engage the under side of the head of the rails. The top of the block which lies in a plane below the flanges *f*, is rounded or beveled at its enlarged end, as shown at *i*, and the opposite or reduced end may be straight as shown at *k*. This block or guard is provided transversely

at a suitable point in its length with a slot E, for the passage of the bolt C, and around each end of this slot, is formed a countersink or recess F, to receive the head of the bolt. The block is designed to be placed snugly against the adjacent walls of two railway rails, which flare or converge from a certain point with respect to each other and is adjustably secured in position by means of the bolt and nut.

In order to obviate the boring of holes in the neck of the rail and the consequent weakening of the same to secure the block in position, I form the recesses or countersinks so that the head of the bolt might be let into one of them, and by having one at each end of the slot E, the bolt may be passed from right or left of the block, using but one hole in the rail neck to receive it. The under sides of the block may be also beveled as shown at *l*, so as to snugly bear upon the flange of the rails as it is desirable that there should be as little play as possible to the block when adjusted in position.

From the foregoing description taken in connection with the annexed drawings, it will be understood that while I have shown the guard block in but one position, yet it is obvious that it may be used on any part of a railway where two rails are arranged adjacent to each other in a converging manner.

By the use of this device, a person walking upon or crossing the rails will be absolutely protected from having his foot catch in a frog, or other parts of a track where such blocks are arranged.

The device may be cheaply manufactured from a block of wood or other suitable material, and can be quickly applied and removed when desirable.

Having described my invention, what I claim is—

1. As an improved article of manufacture, the guard block described, consisting essentially of a single piece of material tapering longitudinally on its outer sides throughout its length and having the vertical longitudinal, lateral flanges *f*, beveled on their inner sides as at *g*, and beveled on their upper sides as at *h*, and also having the slot transversely of the block and the countersinks or recesses F, at each end of said slot, and furthermore provided with the bevel *i*, on its upper side

at its enlarged end, the whole adapted to be secured to a railway, substantially as and for the purpose specified.

2. The guard block constructed as described, and tapered from one end to the other, and also having the transverse slot E, and the countersinks or recesses F, at opposite ends of said slot, in combination with a railway rail having an aperture in its web,
10 the bolt passing through the slot of the block,

and having its head resting in one of the countersinks, and a nut on the outer end of the bolt, substantially as specified.

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

WILLIAM A. BROWNSON.

Witnesses:

JAMES M. POE,
J. W. PARKER.