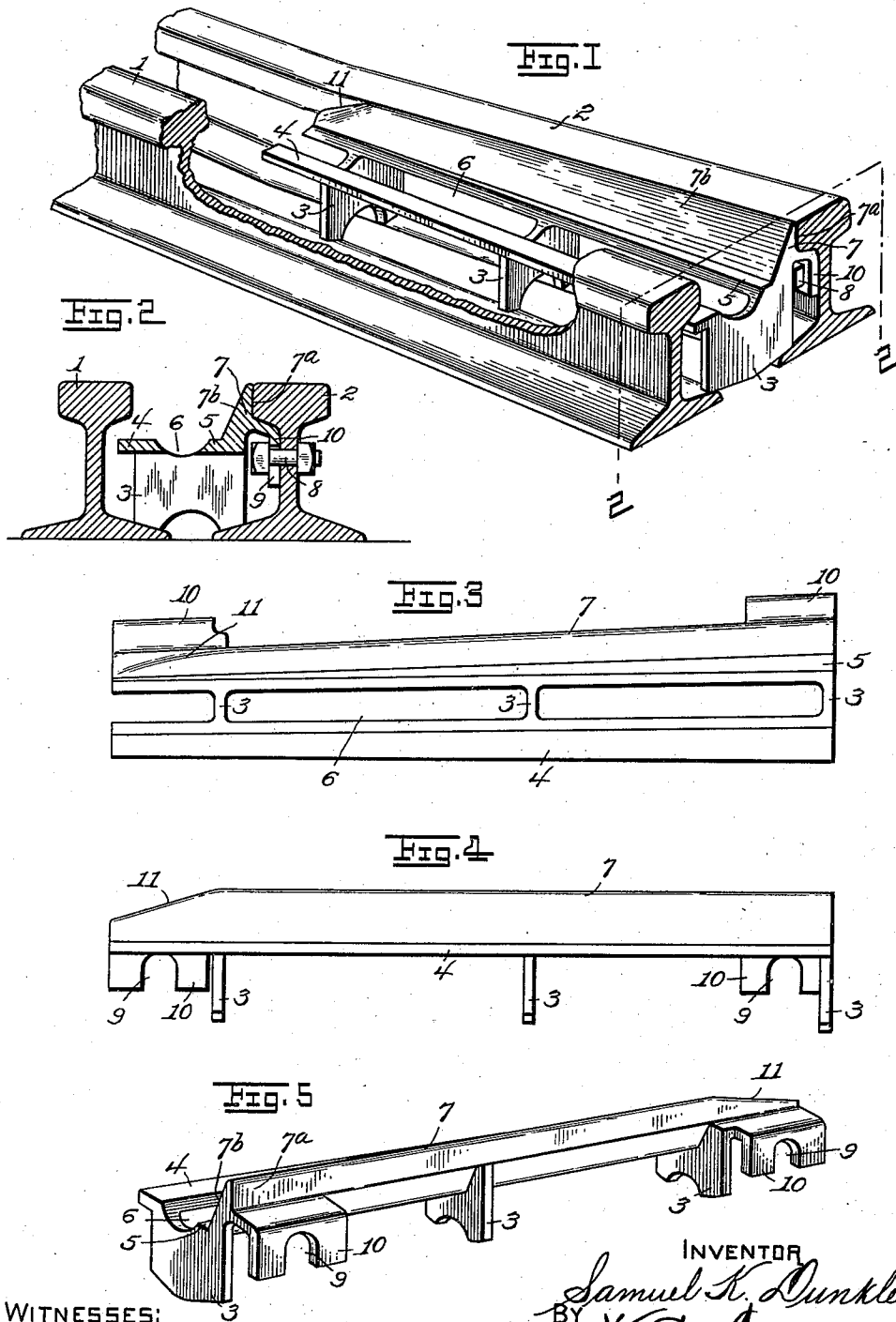


S. K. DUNKLE.
FOOT GUARD.
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1,014,286.

Patented Jan. 9, 1912.



WITNESSES:
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FOOT-GUARD.

1,014,286.

Specification of Letters Patent.

Patented Jan. 9, 1912.

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To all whom it may concern:

Be it known that I, SAMUEL K. DUNKLE, a citizen of the United States of America, and resident of Wheeling, county of Ohio, and State of West Virginia, have invented certain new and useful Improvements in Foot-Guards, of which the following is a specification.

This invention relates to foot-guards for railway switch-frogs, and has for its chief object to provide an improved device whereby the wedging of a shoe sole between the rails of switch-frogs is effectually prevented.

A further object of the invention is to provide a guard of the character mentioned which is so constructed that a single size thereof is readily applicable to different rail angles. And a still further object within the contemplation of the invention is to provide a foot-guard which may be adjusted to the point of greatest danger in any of various rail angles.

Another object is to provide a foot-guard which is so constructed that one size thereof is applicable to rails of various sizes.

Other objects will hereinafter be made apparent.

The invention resides in the features of construction, combinations of elements and arrangement of parts which will hereinafter be described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the invention applied, a portion of the main rail being shown broken away; Fig. 2 is a transverse section on the line 2—2, Fig. 1; Fig. 3 is a top plan view of the invention; Fig. 4 is a front side elevation of the same; and Fig. 5 is a perspective view showing the rear side.

Referring to said drawings, in which like designating characters distinguish like parts throughout the several views—1 indicates the track-rail and 2 the guard-rail of a switch-frog of an ordinary type, and mounted upon the tops of the adjacent base flanges of said rails is a plurality of vertically disposed members or legs 3 which support a longitudinally-extending horizontal table comprising substantially parallel ledges 4 and 5 separated by a longitudinal channel or slot 6 which is adapted to receive therein the flanges of car wheels traveling over the rail 1. Said legs 3 are of web form, extending transversely from one ledge to the other

and rigidly connecting said ledges. Extending along the outer lateral edge of ledge 5 and formed integral therewith is a bearing wall 7, substantially triangular in cross section, having a vertical face 7^a adapted for resting close against the side of the head of the guard-rail 2, as shown in Figs. 1 and 2. The opposite face 7^b of said wall is inclined, as shown, an acute angle being formed at the topmost portion of the wall.

The device is held firmly seated against the guard-rail by means of bolts 8 projected through the web of the latter, said bolts being received in open slots 9 provided in lugs 10 carried laterally of the wall 7 and conforming in contour to the under side of the head and to the web of the guard-rail. The depending portions of the lugs are spaced from the lateral edge of the table, or from the wall 7, a sufficient distance to allow ample space for the heads of the bolts 8.

The guard is preferably formed of cast steel or malleable iron in a single piece, or an integral structure, wherein the ledge 5 and bearing wall 7 are inclined with relation to the ledge 4 to correspond substantially with the usual inclination of the guard-rail with relation to the track-rail. The outer lateral edge of the ledge 4 does not engage the track rail web when properly positioned in a frog the rails of which are placed at the usual or ordinary angle, but projects under the head of said track rail sufficiently close to prevent a foot from becoming wedged between it and said head. Thus, a sufficient space is allowed for longitudinal adjustment of the guard when such is desirable or for adjustment to suit unusual angles when such are encountered. The end of the bearing wall 7 at the tapered end of the guard is preferably inclined downward, as shown at 11, so that by no possibility may it present an obstruction to a wheel flange approaching the guard over the track rail from the direction of the angle of the frog. The leg 3 at the outer, or larger, end of the guard is adapted to prevent the entrance, in walking, of a foot of a person beneath the horizontal table. When applied to rails of large size the table occupies a position in which the ledge 4 underlies and is not engaged by the flanges of wheels traveling over the track-rail. When applied to rails of small size the guard is adjusted to a position where the ledge 4 par-

tially underlies the head of the track rail, allowing the wheel flanges to travel in the slot or channel 6.

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

1. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal and comprising a horizontal table located on a plane below the heads of said rails, transverse supporting legs for said table, said table having the edge thereof adjacent to the track rail out of engagement with the latter and having a bearing wall on its opposite edge adapted for resting against the side of the head of the guard rail, and lugs carried by said wall and resting against the web of said guard rail.

2. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal and comprising a horizontal table located on a plane below the heads of said rails, transverse supporting legs for said table, said table having the edge thereof adjacent to the track rail out of bracing engagement with the latter, a bearing wall, substantially triangular in cross section, formed on the opposite edge of said table and seated against the inner face of the guard-rail, lugs having open slots therein formed on said wall and resting against the web of said guard-rail, and bolts projected through said guard-rail and resting in said slots.

3. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal adjustably mounted between said rails and comprising a horizontal table located on a plane below the heads of said rails, said table having a slot for wheel flanges therein, that portion of said table adjacent to the track-rail being plain and being out of contact with said rail, and an upwardly extending longitudinally directed wall formed on the opposite portion of said table seated against the inner face of the

head of the guard-rail, means for securing the last mentioned portion to the guard-rail, and transverse web-like supporting legs for said table.

4. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal adjustably mounted between said rails and comprising a horizontal table located on a plane below the heads of said rails, said table having a slot for wheel flanges therein, that portion of said table adjacent to the track-rail being plain and being out of contact with said rail, and an upwardly extending longitudinally directed wall formed on the opposite portion of said table seated against the inner face of the head of the guard-rail, securing lugs formed on said wall and conforming in contour to the under side of the head and to the web of the rail, and legs supporting said table.

5. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal adjustably mounted between said rails and comprising a horizontal table located on a plane below the heads of said rails, said table having a slot for wheel flanges therein, that portion of said table adjacent to the track-rail being plain and being out of contact with said rail, and an upwardly extending longitudinally directed wall formed on the opposite portion of said table seated against the inner face of the head of the guard-rail, securing lugs formed on said wall and conforming in contour to the under side of the head and to the web of the rail, and legs supporting said table, one of said legs constituting a guard-member for preventing the entrance of a foot beneath said table.

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

SAMUEL K. DUNKLE.

Witnesses:

ARTHUR OKON,
EDWARD DON.