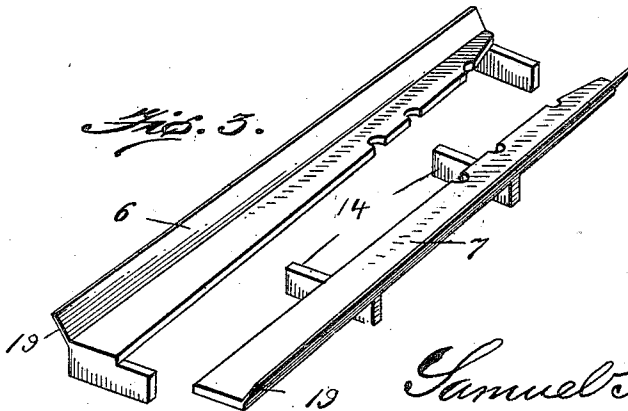
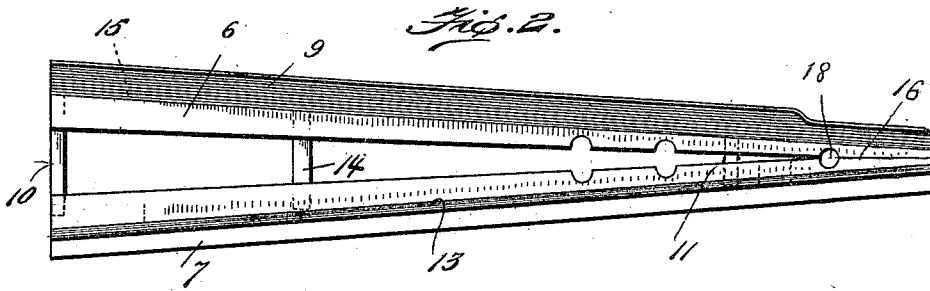
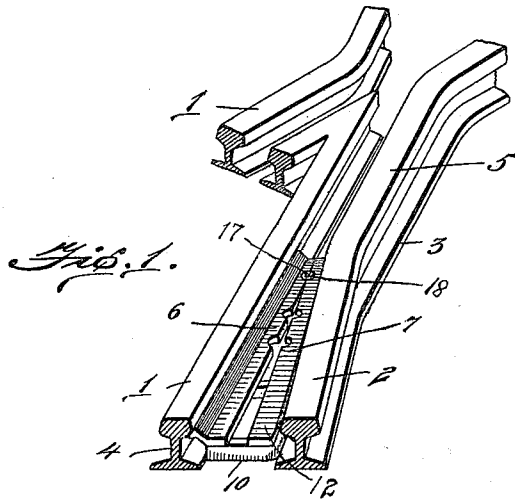


S. K. DUNKLE.
FOOT GUARD.
APPLICATION FILED OCT. 6, 1910.

994,134.

Patented June 6, 1911.



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Inventor

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UNITED STATES PATENT OFFICE.

SAMUEL K. DUNKLE, OF WHEELING, WEST VIRGINIA, ASSIGNOR TO THE SAFETY FOOT GUARD AND RAILWAY APPLIANCE COMPANY, OF COLUMBUS, OHIO.

FOOT-GUARD.

994,134.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed October 6, 1910. Serial No. 585,693.

To all whom it may concern:

Be it known that I, SAMUEL K. DUNKLE, a citizen of the United States, residing at Wheeling, in the 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.

My invention relates to improvements in railway foot guards, for use in preventing the foot of a person or animal from being caught or wedged between the main and guard rails or the switch frog.

The leading object of my invention is the provision of a readily adjustable foot guard which can be quickly placed to fill in the space between the main and guard rails or frog wings to prevent the catching of a foot in said space, which guard will be adapted for use in filling different widths of such spaces and will automatically adjust itself to the width and angle of divergence of said space.

The further object of the invention is the provision of a guard of this character having a plurality of sections with means for so closing the space between the sections as to prevent a foot from passing therebetween, and means for preventing a foot from being caught under the end of the guard, which guard will at all times be out of the path of movement of the car wheels and will in no way interfere therewith.

To attain the desired objects, my invention comprises a pair of angular members having interlocking basal supporting portions and having flanges making tight engagement with the web of the rail and the under face of the ball thereof, the invention further residing in the novel features of construction and combination and arrangement of parts for service substantially as described and as illustrated in the accompanying drawings.

Figure 1 represents a perspective view of a main and a guard rail with my foot guard applied in position thereto. Fig. 2 represents an enlarged top plan view of the guard removed, and, Fig. 3 represents a perspective view of a modified form of my guard with the two sections slightly separated.

In the drawings, in which similar characters of reference are employed to denote corresponding parts in the several views, the numeral 1 designates the main track, and 2

the guard rail, each of said rails having the basal flange 3, web 4 and ball or tread portion 5.

The guard rail or frog wing, as is known to all familiar with track construction, diverges outward from the rail or track proper at each end, and it is at this diverging portion that there is liability of a person's foot becoming wedged, and I have therefore provided my improved guard to fill in said space. Said guard comprises two members 6 and 7, the member 7 being adapted to fit against the main rail while the member 6 fits against and engages the guard rail, as best shown in Fig. 1. From said figure it will be seen that the member 6 comprises a basal portion 8 having an upwardly inclined rib or flange 9 fitting against the ball of the guard rail, while the forward end of said flange 9 is of reduced height to prevent the wheel flange by any chance catching thereon as it enters or leaves the guard. It will be further observed that said member 6 has an L-shaped supporting leg 10 formed at its end, one portion of said leg resting on the basal flange 3 of the guard rail or frog wing and bearing against the web of the rail, while its other end extends across and rests on the basal flange of the main rail, while I preferably form near the other end of the member 6 a similar leg 11 which likewise engages the basal flanges of both rails.

The member 7 consists of a basal plate 12 having an upwardly inclined flange 13 which is shorter than the flange 9 and fits under the ball of the main rail to be held securely in position out of the path of movement of the car wheel flange, as shown in Fig. 1. The ends of the member 7 rest upon the supports 10 and 11 of the member 6 and are supported thereby, while formed on the plate 12 intermediate its length is a supporting leg 14 similar to the legs 10 and 11, said leg resting on the basal flanges of the two rail portions and extending under and supporting the central portion of the member 6.

The operation of my guard will be readily understood by reference to the drawings, and it will be observed that the supports 10, 11 and 14 all rest solidly upon the basal flanges of the rails and firmly support the two members 6 and 7 in position, and it will also be observed that the members are tapering in shape to provide inclined adjacent faces 15 terminating at their smaller ends in

more sharply inclined faces 16 which are in engagement with each other. To place the guard in position, the members 6 and 7 are placed with the legs 10, 11 and 14 mutually supporting said members, and the complete guard is then forced into the angle of the rails or the throat or heel of the frog as far as possible, the rails engaging the outer faces of the members and forcing their inner ends into tight engagement, said action rocking the members on the intersections of the two different inclines as pivots, spreading the rear portion of the guard to bring it into tight engagement with the rails. When the guard has been forced into position a spike 17 is driven through the corresponding openings 18 in the two members to secure the same in position and prevent them from working outward.

In Fig. 3 I have illustrated a slight modification of my invention especially adapted for use at the throat or heel of the switch frogs, said device comprising the two members 6 and 7 each having an inclined flange 19 similar to the flange 9 of the member 6, but without its reduced end, while I have shown the member 7 in this instance as provided with a pair of legs 14 instead of the single one, the construction of the two guards being otherwise identical.

From the foregoing description taken in connection with the drawings the construction and advantages of my improved guard will be readily understood and it will be seen that the support 10 at the outer end of the guard prevents a foot from entering under the guard, while the guard fills in the space between the rails and prevents a foot from being caught between or under the balls of the rails, and that I have therefore provided a simple, durable, efficient and inexpensive adjustable foot guard which will serve to fill up different widths of inclinations of dangerous angular spaces between rails, and which therefore fulfils every object of the invention.

It will be understood that I may employ

steel, cast or malleable iron or any other suitable material from which to form my improved guard, and that I may make numerous changes in the construction of my guard without departing from the generic idea of the invention, the two piece adjustable guard, and without exceeding the scope of said invention, which is a guard of the general character described which will serve to fill in any angular space between rails, either at the ends of guard rails, at the heel and throat of switch frogs, or in any like position.

I claim:

1. A foot guard, comprising a pair of plates having rail-engaging flanges, and interlocking supports carried by said plates for securing the parts in relative position and for filling the space between the plates.

2. A foot guard, comprising a pair of plates having adjacent tapering faces terminating in ends having an increased taper, and means resting on the basal flanges of the rails for supporting said plates.

3. A foot guard, comprising a pair of plates having rail engaging portions, supports formed on the under side of said plates and resting on the basal flanges of both rails, the plates having tapering meeting faces with ends having an increased taper and having recesses formed in said meeting faces for receiving a securing spike.

4. A foot guard, comprising a pair of plates having L-shaped lugs formed on their under side, one leg of the L engaging the flange and web of one rail and the other leg extending across to engage the base flange of the opposite rail, and rail engaging flanges formed on the plates, one of said flanges having a reduced end.

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

SAMUEL K. DUNKLE.

Witnesses:

A. J. PORTER,
H. H. SMITH, Sr.