(No Model.)

S. J. GRAY.

RAILWAY GUARD.

No. 264,078. Patented Sept. 12, 1882.

Fig 1.

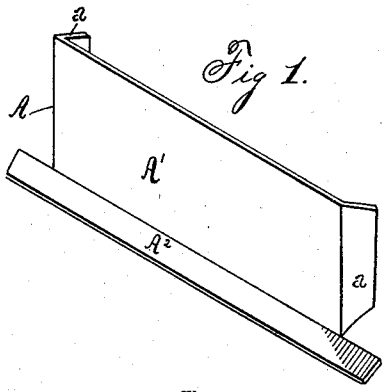


Fig. 2.

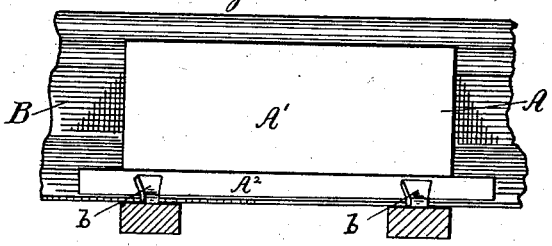
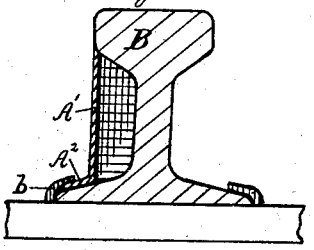


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

SAMUEL J. GRAY, OF FORT GRATIOT, MICHIGAN, ASSIGNOR OF ONE-HALF TO JOSEPH TUCKER, OF SAME PLACE.

RAILWAY-GUARD.

SPECIFICATION forming part of Letters Patent No. 264,078, dated September 12, 1882.

Application filed July 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. GRAY, of Fort Gratiot, county of St. Clair, State of Michigan, have invented a new and useful Improvement in Railway-Guards; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in the device hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of an apparatus embodying my invention. Fig. 2 represents its attachment to a rail. Fig. 3 is a cross-section.

Hitherto numerous accidents have occurred on railway-tracks from the position and construction of the frogs and guide-rails, whereby the foot is liable to be caught and held so firmly as to prevent its being extricated soon enough to avoid danger from approaching trains. Persons are not infrequently run over in consequence, resulting in loss of life or limb.

The object of my invention is to overcome this difficulty by providing a suitable metallic guard which may be cheaply constructed and easily adjusted to the frog and the guide-rail to prevent any liability of accident such as has been described.

In carrying out my invention as shown in the drawings annexed, A is a metallic guard, which may be made of sheet or cast metal of any proper thickness. From one-eighth to one-quarter of an inch would be a very suitable thickness. This guard is constructed with an upright shield, A', adapted to fit in below the projecting edge of the upper portion of any ordinary rail or frog, B, and to reach down to the projecting base of the rail in the manner shown in Figs. 2 and 3, and with a flange, A^2, adapted to be adjusted upon the upper beveled edge of the base of the rail and to be secured thereto under the spikes ordinarily used for securing the rails to the ties, as shown at *b*. I prefer to construct this guard with the ends *a* turned inward, as shown in Fig. 1. This is not an essential feature of the device, but serves to make it stronger on the ends. I design to construct this guard of any desired length and to fit any form of rail, whether straight or crooked.

It is evident that guards so constructed can readily be attached to any common rail or frog. The guard drops inside the edge of the rail and so forms no obstruction to the wheel, while it is adapted to effectually prevent the foot being caught, as above indicated.

Heretofore a safety-guard for railway frogs and switches has been composed of a metal-faced wooden block placed in the recess between the base and upper flange on the inner side of each of the converging rails of a railway-track to create an intervening V-shaped space with straight or curved sides, wider at the top than at any other part of the space. Such, however, is not my invention and is not claimed by me.

What I claim is—

1. A metallic guard for railways, consisting of an upright shield and flanging base, substantially as and for the purpose described.

2. A metallic guard for railways, consisting of an upright shield and flanging base, the construction being such that the shield is adapted to fit in between the projecting upper edge of the rail and its projecting base, and to be held in place by engaging the flange under the spikes driven into the ties, substantially as and for the purposes described.

3. A metallic guard for railways, consisting of an upright shield and flanging base, the ends of said shield bent inward, the construction being such that the shield is adapted to fit in between the projecting upper edge of the rail and its projecting base, and to be held in place by engaging the flange under the spikes driven into the ties, substantially as and for the purposes described.

4. The combination, with a railway frog, rail, or guide-rail, of a metallic guard consisting of an upright shield and flanging base, the construction being such that the shield is adapted to fit in between the projecting upper edge of the rail and its projecting base, and to be held in place by engaging the flange under the spikes driven into the ties, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

SAMUEL J. GRAY.

Witnesses:
J. EDWARD WARREN,
N. S. WRIGHT.