(No Model.)

M. RILEY.

FOOT GUARD FOR RAILWAY TRACKS.

No. 485,480. Patented Nov. 1, 1892.

Fig. 1

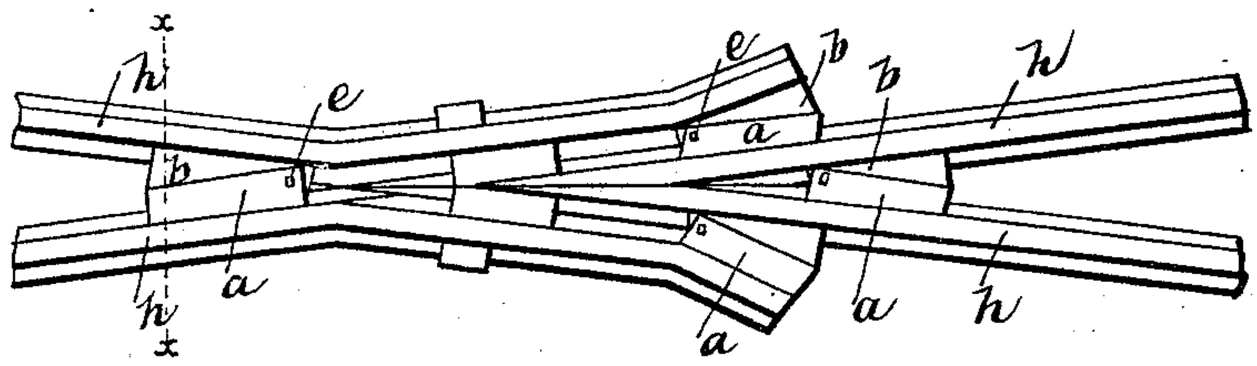

Fig. 2

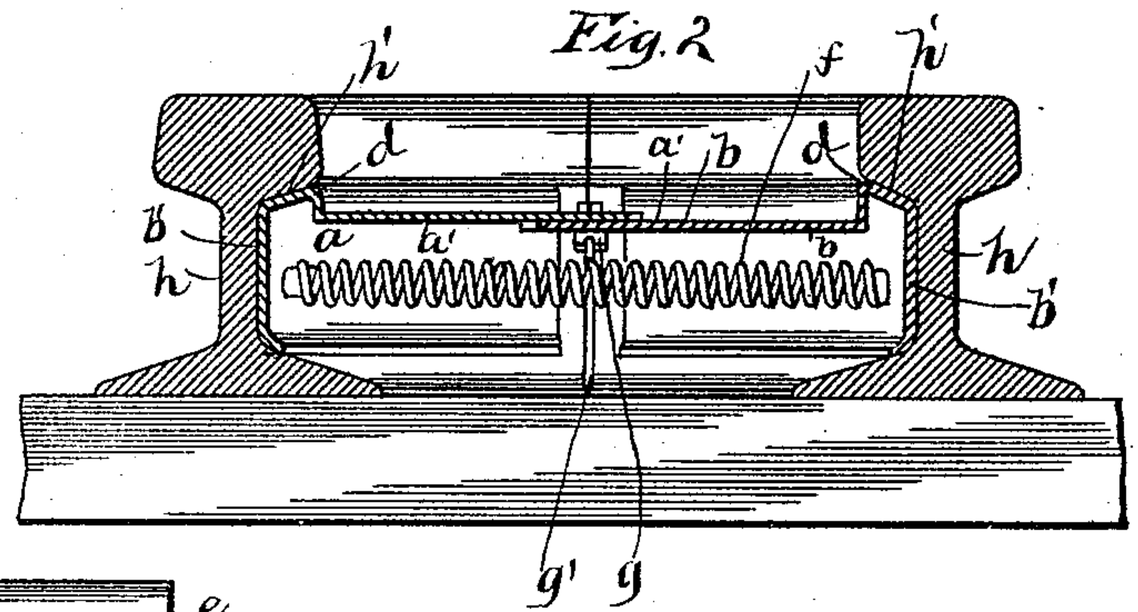

Fig. 3

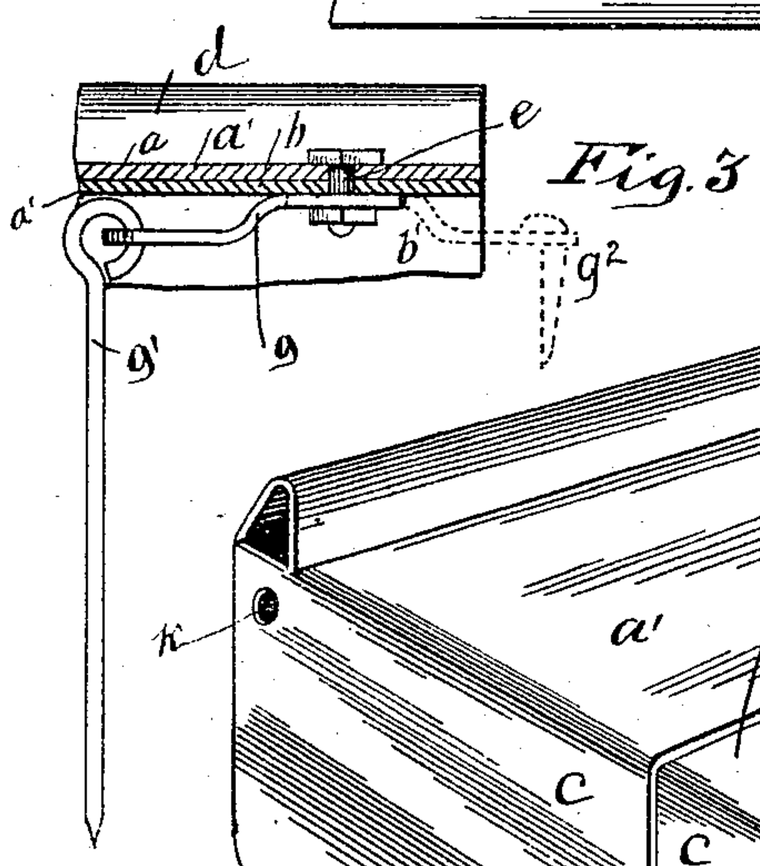

Fig. 4

WITNESSES:

H. B. Bradshaw

Frank N. Slade.

INVENTOR

Michael Riley

BY Staley and Shepherd

ATTORNEYS.

UNITED STATES PATENT OFFICE.

MICHAEL RILEY, OF LONDON, OHIO.

FOOT-GUARD FOR RAILWAY-TRACKS.

SPECIFICATION forming part of Letters Patent No. 485,480, dated November 1, 1892.

Application filed July 5, 1892. Serial No. 438,890. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL RILEY, a citizen of the United States, residing at London, in the county of Madison and State of Ohio, have invented a certain new and useful Improvement in Foot-Guards for Railway-Tracks, of which the following is a specification.

My invention relates to the improvement of foot-guards for railways, and has particular relation to that class of foot-guards which forms the subject of my former applications for patent, Serial No. 425,539, filed April 9, 1892, and Serial No. 434,552, filed May 27, 1892.

The objects of my invention are to construct a guard of this class of a shape which will conform to the shape of the rails against which the guard-sections bear, to so form said guard as to allow the flanges of car-wheels to clear the same, to provide improved means for anchoring the guard in its place, and to produce other improvements which will be more specifically pointed out hereinafter. These objects I accomplish in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a railway-frog having its angles filled or provided with my improved foot-guard. Fig. 2 is an enlarged transverse section on line *x x* of Fig. 1. Fig. 3 is a detail sectional view on line *y y* of Fig. 4, showing my improved anchor in elevation; and Fig. 4 is a view in perspective of my improved guard.

Similar letters refer to similar parts throughout the several views.

As shown and described in my said former applications, the body of my guard is formed of two pivoted or hinged plate-sections *a* and *b*. Of these sections *a'* are the top plates, *b'* the side pieces, which extend downwardly at right angles from said top portions, and *c* are the end plates or pieces.

In my present construction I provide the outer longer side of each of the sections with an upwardly-extending longitudinal flange or projection, which is indicated at *d*. The outer edge of each of these projections *d* is inclined upwardly and inwardly, while the inner and vertical portion thereof meets the top plate of the section at right angles therewith, as shown.

As shown in the drawings and as described in said former applications, the top and end plates of one of the guard-sections are adapted to pass beneath and within the top and end plates of the remaining section, and said top plates are, near one end thereof, pivotally connected by a suitable pivot bolt or pin *e*.

f represents the connecting coiled spring, which, as shown, extends transversely between the side walls of the guard-sections, near the forward ends thereof and serves to press said forward end portions outward from each other.

To the inner end of the pivot-bolt *e* I pivotally connect one end of an arm *g*, the remaining end of which is provided with an eye, with which may be engaged, as shown, the hook or eye end of an anchor-pin *g'*, which depends therefrom. As indicated in dotted lines in Fig. 3 of the drawings, the outer end of this arm *g* may, however, for reasons hereinafter specified, have driven therethrough a suitable spike. (Indicated at g^2.)

As shown in Fig. 1 of the drawings, the guards formed as herein described are adapted to be inserted, pivoted ends first, in the angles formed by the convergence of the rails of the railway frogs or tracks, and in being thus inserted the said walls *b'* of each of the sections are pressed by the spring *f* into contact with the inner sides or faces of the webs of the rails *h*, while the inclined outer faces of the guard-flanges *d* find a bearing against the inclined under sides of the rail-treads, as indicated at *h'*. As shown in the drawings, the outer faces of the flanges *d* extend inwardly sufficiently to bring the vertical inner walls of said flanges in alignment with the inner sides of the rail heads or treads. In inserting one of the guards between the rails it will be seen that the anchor-pin *g'*, being longer than the height of the guard, will trail on the ground and thus incline said pin outward from the apex of the angle. In case there is any tendency of the guard to work loose from its position by being forced outward, it will be seen that said anchor-pin will, by engagement with the ground, aid in retaining the guard in its proper place. In case it is desired to anchor the guard to a tie or ground beam, it is evident that I may turn the arm *g* outward in the position shown in dotted lines in Fig. 3 of the drawings, remove the pin *g'*,

and drive through the outer end of said arm g a suitable spike g^2.

By the construction herein shown and described it will be seen that not only will the bearing portions of the guards be made to conform to the shapes of the rails against which they press, but that the use of the flanges d brings the top plates a' of the sections at such depth as to prevent any engagement therewith of the flanges of the wheels of passing cars.

To facilitate the removal of the guards from the track-angle, I provide in the end portion c of each guard an opening k, with which may be engaged any desirable tool for pressing the guard-sections toward each other. While the sections of the guard are, as shown, made to fit closely against the rail sides, it is evident that the spring f will operate to cause said sections to move with the rails in case of inward or outward movement or expansion or contraction of the latter.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a foot-guard for railways, the combination, with the pivoted sections a and b, one adapted to pass within the other, as described, of the longitudinal side extensions d, projecting upwardly from each of said sections, as described, and having inclined outer faces, substantially as and for the purpose specified.

2. In a foot-guard for railways, the combination, with the pivoted sections a and b, one adapted to pass within the other, as described, of an arm g, connected with the pivot connecting said sections, and a suitable pin or spike adapted to pass through the outer end of said arm, substantially as and for the purpose specified.

MICHAEL RILEY.

In presence of—
C. C. SHEPHERD,
O. P. BAKER.