

J. W. STEPHENSON.
FOOT GUARD FOR RAILWAY TRACK STRUCTURES.
APPLICATION FILED APR. 8, 1911.

1,011,654.

Patented Dec. 12, 1911.

2 SHEETS—SHEET 1.

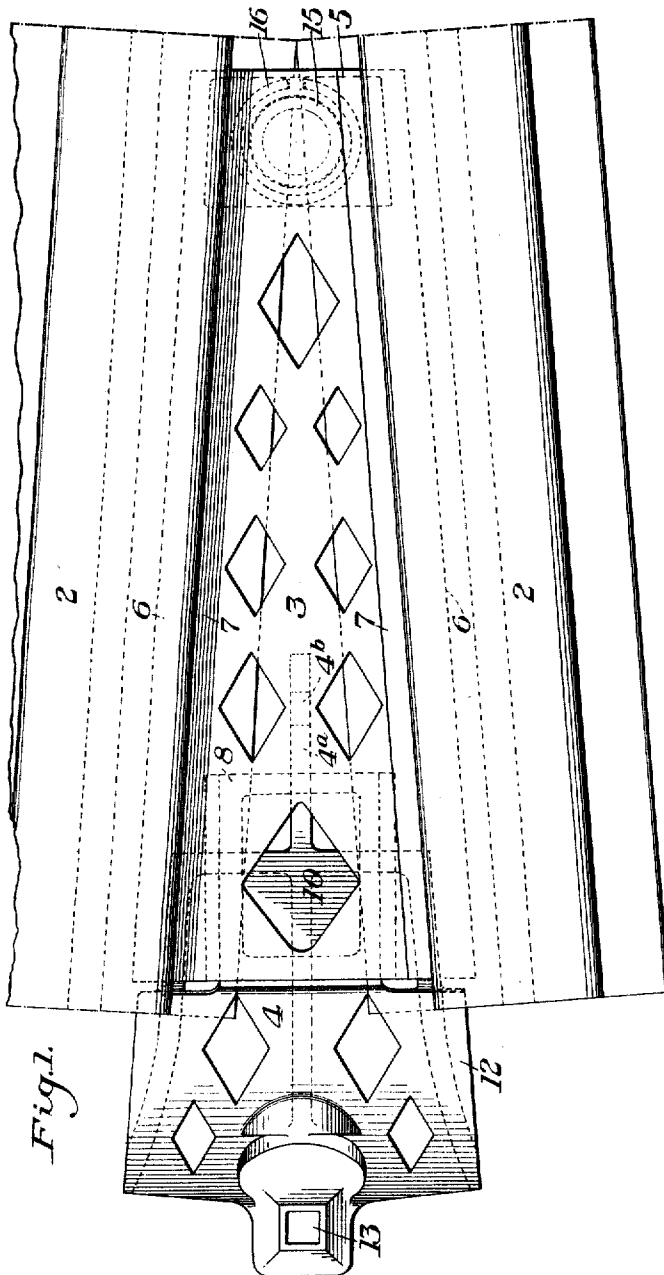


Fig. 1.

WITNESSES
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W. H. Marries.

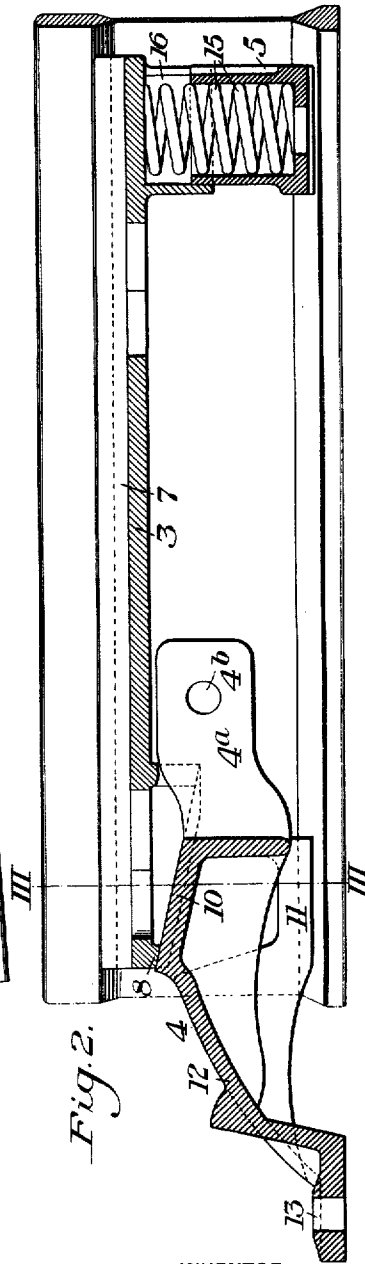


Fig. 2.

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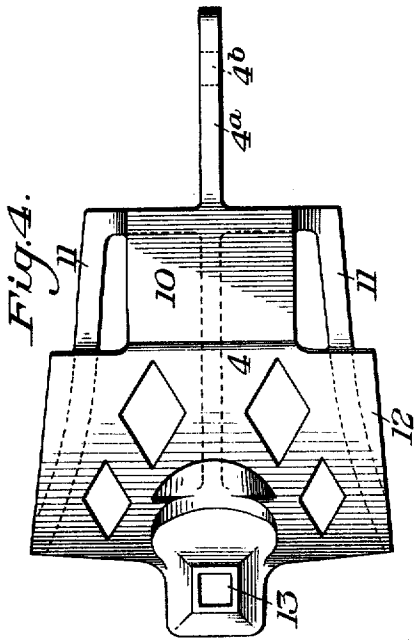


Fig. 6.

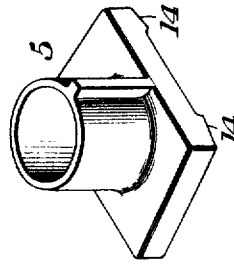
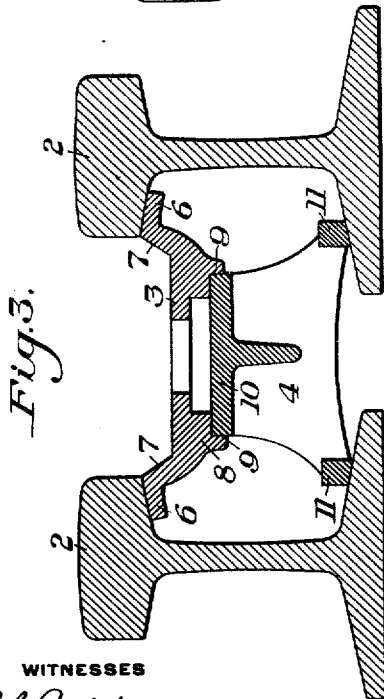
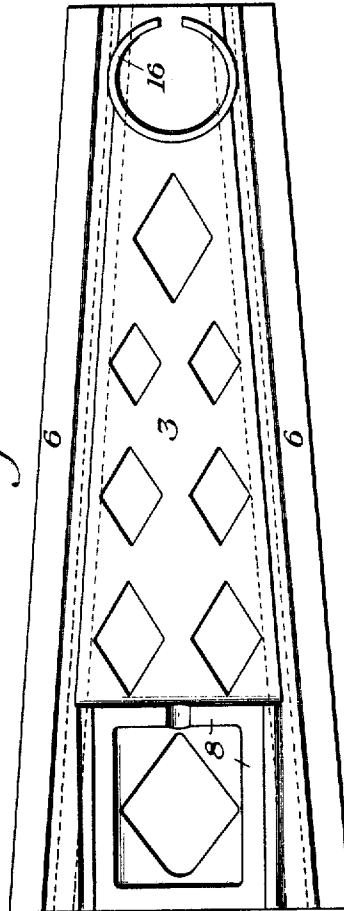


Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN W. STEPHENSON, OF TOLEDO, OHIO, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

FOOT-GUARD FOR RAILWAY-TRACK STRUCTURES.

1,011,654.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed April 8, 1911. Serial No. 619,872.

To all whom it may concern:

Be it known that I, JOHN W. STEPHENSON, a resident of Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Improvement in Foot-Guards for Railway-Track Structures, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view showing my invention applied; Fig. 2 is a longitudinal section of the same; Fig. 3 is a section on the line III—III of Fig. 2; Fig. 4 is a top plan view of one of the lower guard members; Fig. 5 is an inverted plan view of the upper guard member; and Fig. 6 is a detail view of the supporting foot or thimble.

My invention has relation to foot guards for railway track frogs and other track structures having converging rails, and is designed to provide a simple and efficient guard which can be cheaply manufactured and readily applied and which has a capability of adjustment to track rails of different heights, thereby reducing largely the pattern work required in the manufacture and also the number of standard patterns required.

The nature of my invention will be best understood by reference to the accompanying drawings, in which I have shown the preferred embodiment thereof and which will now be described, it being premised, however, that various changes can be made in the details of construction and arrangement of the parts, without departing from the spirit and scope of my invention as defined in the appended claims.

In these drawings, the numerals 2 and 2 designate two converging track rails between which my improved foot guard is shown as placed. This guard comprises an upper guard member 3 and two lower members 4 and 5. The upper member 3 is of plate form tapering longitudinally to suit the angle of convergence of the track rails 2, and having at each of its longitudinal edges an upwardly and laterally extending flange 6. These flanges fit underneath the heads of the rails in the manner clearly shown in Fig. 3, and their inner surfaces are beveled, as shown at 7, so as not to interfere with the flanges of passing car wheels. The member 3 may be more or less of skele-

ton form, to provide for lightness and cheapness, as well as for drainage. It is formed on its under side near its wider or rear end with a depending projection 8, having therein the rabbets 9, which have a sliding and supporting engagement with the upward projection 10 of the member 4. This member 4 is shown as having the side portions 11 which rest upon the bases of the rail and also as having the downwardly curved portion 12, projecting beyond the rear end of the member 3 and provided with a perforated lug or projection 13 through which a spike may be driven to secure it to a tie.

The tapering surfaces of the rabbets 9 are inclined or beveled in the manner best shown in Fig. 2, and the tapering surface of the projection 10 of the member 4 has a corresponding bevel. The member 5 is placed underneath the forward or narrow end of the upper member 3, having depending rabbets 14 which rest upon the bases of the rail, with an upwardly extending sleeve or thimble portion in which is seated a helical spring 15, the upper end of this spring also seating within a hollow depending projection 16 of the member 3. The member 4 may be provided with a forward projection 4^a, provided with a perforation 4^b, to receive a securing bolt (not shown) whereby it may be positively fastened to the track rail.

The spring 15 provides means whereby the height of the forward portion of the member 3 may be adjusted to suit track rails of different heights, and by a corresponding adjustment of the sliding engagement between the members 3 and 4, the guard can be adjusted for this purpose. The spring 15, combined with the inclined bearing between the members 3 and 4, holds the guard member 3 closely up underneath the heads of the rails, and as the member 4 is positively secured either by its spiking projection 13 or by a bolt through the projection 4^a or by both, it will be seen that it is impossible for the guard to get out of place after it has once been seated and secured.

The parts of the guard, with the exception of the spring 15, may be in the form of simple castings which can be readily and cheaply manufactured, and by reason of the adjustability described, the number of standard patterns required will be very

greatly reduced. Instead of requiring a different pattern for each variation in the height of the rails, it will be seen that the same pattern will answer throughout wide
5 variation in the heights of the rails.

I do not wish to limit myself to the exact details of construction and arrangement which I have shown and described, as these may obviously be varied without departing
10 from the spirit and scope of my invention. Thus the member 3 may be varied in form; the supporting member 4 may also be varied, and the supporting spring for the forward end of the upper guard member may
15 be seated in various ways.

I claim:

1. A foot guard for railway track structures, comprising an upper guard member, a lower member upon which the upper member has an adjustable longitudinally sliding
20 support, and a spring device supporting the opposite end of the upper member, substantially as described.

2. A foot-guard for railway track structures, comprising a vertically adjustable guard plate having a spring support at one end portion, and a vertically adjustable rigid supporting means at the opposite end
25 portion; substantially as described.

3. A foot guard for railway track structures, comprising an upper plate member adapted to fit underneath the heads of adjacent rails, a rear supporting member upon
30

which the upper member has an inclined sliding bearing, and a supporting spring underneath the opposite end portion of the upper member, substantially as described. 35

4. A foot guard for railway track structures, comprising an upper plate member having portions to fit underneath the heads
40 of adjacent rails and also having a depending projection at its rear end, a supporting member upon which said projection has an inclined sliding bearing, and a supporting
45 spring for supporting the opposite end portion of the guard member, substantially as described.

5. A foot guard for railway track structures, comprising an upper plate member having portions to fit underneath the heads
50 of adjacent rails and also having a depending projection at its rear end, a supporting member upon which said projection has an inclined sliding bearing, and a supporting
55 spring for supporting the opposite end portion of the guard member, together with means for positively securing the bearing member to the track, substantially as described.

In testimony whereof, I have hereunto
60 set my hand.

JOHN W. STEPHENSON.

Witnesses:

JOHN J. WARRING,
ADOLPH F. SEUBERT.