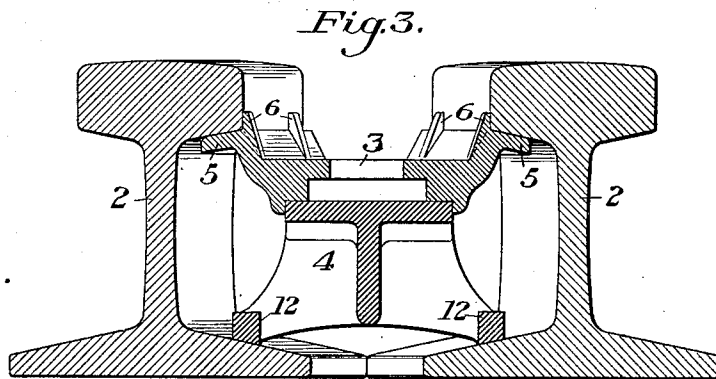
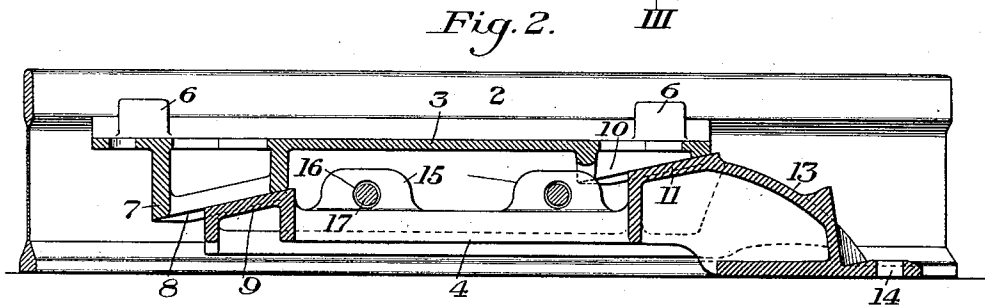
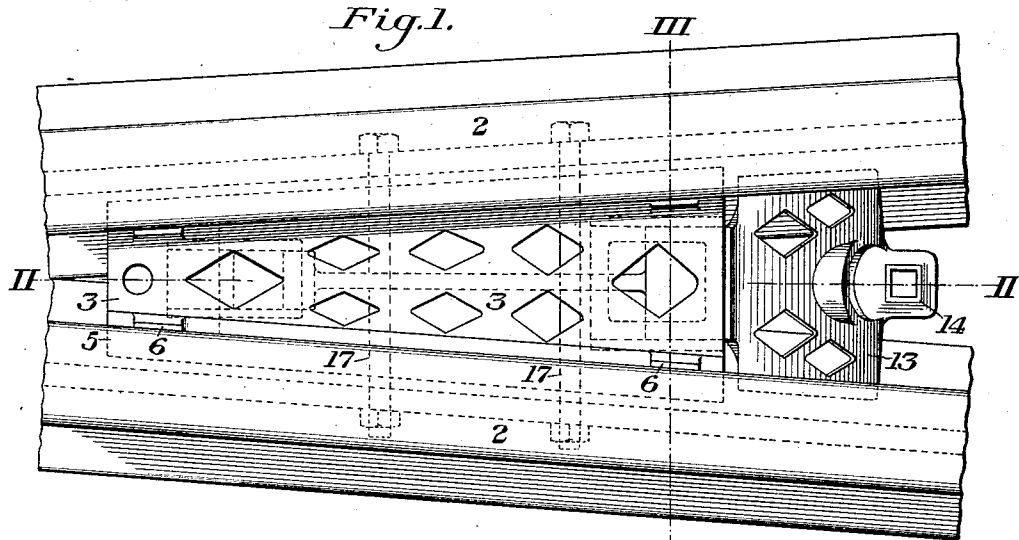


J. W. STEPHENSON.
FOOT GUARD FOR RAILWAY TRACK STRUCTURES.
APPLICATION FILED APR. 8, 1911.

1,011,653.

Patented Dec. 12, 1911.

2 SHEETS-SHEET 1.



WITNESSES

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Fig. 4.

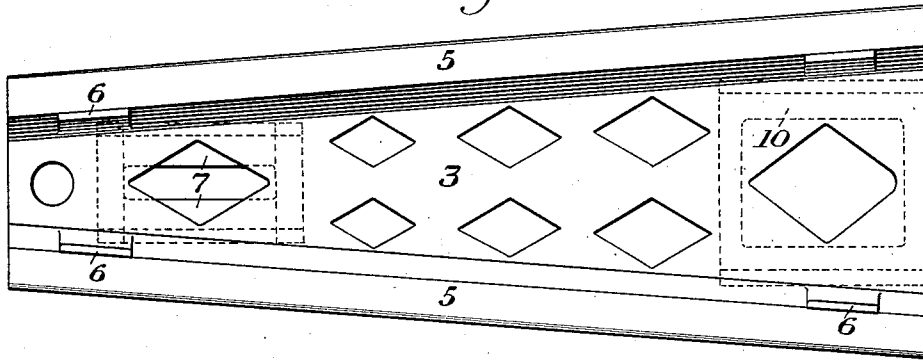


Fig. 5.

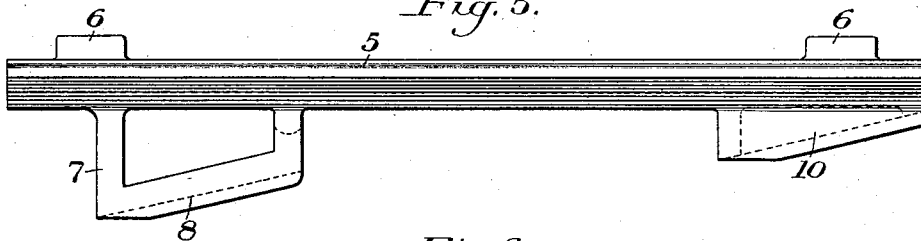


Fig. 6.

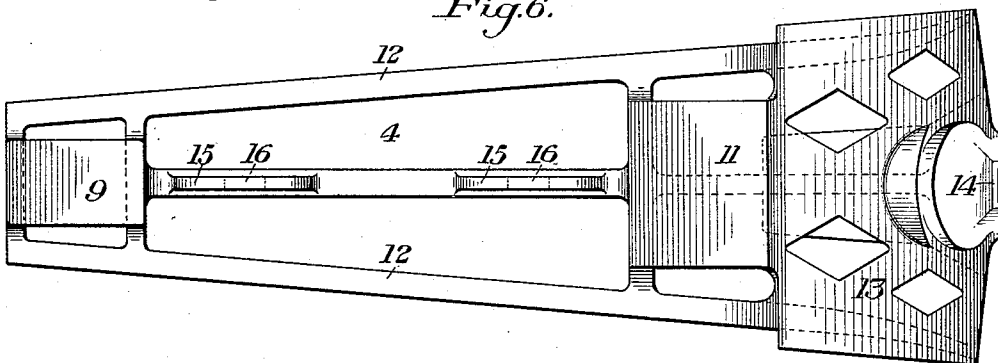
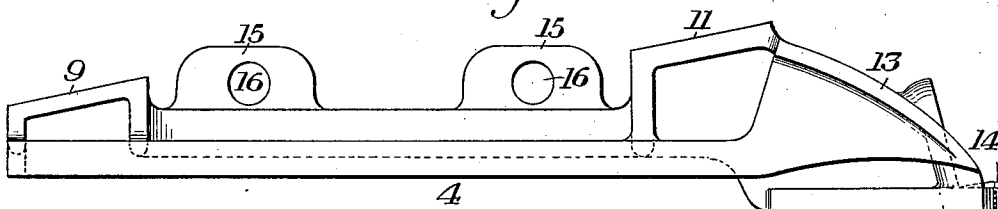


Fig. 7.



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.

1,011,653.

Specification of Letters Patent.

Patented Dec. 12, 1911.

Application filed April 8, 1911. Serial No. 619,871.

To all whom it may concern:

Be it known that I, JOHN W. STEPHENSON, of Toledo, Lucas county, Ohio, have invented a new and useful Improvement in

5 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—

10 Figure 1 is a plan view showing one form of my invention; Fig. 2 is a section on the line II—II of Fig. 1; Fig. 3 is a section on the line III—III of Fig. 1; Fig. 4 is a plan view of the top member of the guard; Fig.

15 5 is a side view of the same; Fig. 6 is a plan view of the lower member of the guard; and Fig. 7 is a side view of the same.

My invention has relation to foot guards for railway frogs and other track structures having converging rails, and is designed to provide a guard which is adjustable to suit different heights of rails, whereby the guard may be used between any two rails having substantially the same angle of convergence notwithstanding considerable variation in the height of the rails. By the provision of such a guard I largely reduce the pattern work required in their manufacture, and reduce the number of standard guards

25 which are required.

Referring to the drawings, the numeral 2 designates two converging track rails, between which my improved guard is shown as applied. This guard comprises an upper

35 member 3 and lower member 4, the two members having a sliding engagement with each other whereby the height of the guard may be varied. The upper member comprises a central web portion, which may be

40 cored out for lightness and drainage, and having at each edge a longitudinal upwardly and laterally projecting rib 5, adapted to fit underneath the head of a rail, as shown in Fig. 3. It is also provided with

45 the lugs 6, which fit against the inner sides of the heads of the rails, the inner faces of these lugs and the inner faces of the ribs 5 being beveled so as not to obstruct the free passage of car wheel flanges. The upper

50 member is provided at its front or narrowest end with a depending shoe 7, having an upwardly and rearwardly inclined lower face 8, which is adapted to fit a correspondingly inclined face of an upward lug or

projection 9 on the lower member 4. The

55 rear or wider end of the upper member 3 is provided with a similar, but shorter, depending shoe 10, which has a beveled face engaging the beveled face 11 on the lower member. The lower member 4 is shown as

60 of skeleton form with the side members 12 adapted to rest on the inner base flanges of the rails, and with the centrally arranged upward projections 9 and 11 before described. The rear or wider end of the lower

65 member has the extension 13, which projects beyond the rear end of the upper member, and is of downwardly curving form. It is preferably provided at its end with an aperture lug 14, by means of which it can be

70 spiked to a tie. If desired, the lower member may be provided with upwardly extending lugs 15, having bolt holes 16 there-through to receive the transverse tie bolts

75 17, by means of which it may be positively secured to the rails.

The two members are of tapering form, corresponding to the angle of the frog or track rails between which they are to be placed. The members can be inserted in place, and

80 by driving the lower member forwardly the inclined surfaces of its upward projections 9 and 11 engage the inclined lower faces of the shoes 7 and 10 of the upper member, and force it upwardly so that its side ribs take

85 a firm bearing underneath the heads of the rails.

The device forms a very simple and effective guard for track structures, and owing to its range of adjustment, to suit different

90 heights of rails greatly reduces the cost of pattern work and the number of standard guards required.

It will, of course, be understood that the upper and lower members of the guard may

95 be varied widely in form and detail of construction from that which I have shown, without departing from the spirit and scope of my invention as defined in the appended claims.

100

What I claim is:—

1. A foot guard for railway track structures, comprising upper and lower guard members having a vertically adjustable rigid engagement with each other; substantially as described.

105

2. A foot guard for railway track structures, comprising an upper guard member,

and a lower supporting member having a wedging supporting engagement with the upper member; substantially as described.

3. A foot guard for railway track structures, comprising upper and lower members having portions thereof provided with upwardly inclined engaging bearing surfaces; substantially as described.

4. A foot guard for railway track structures, comprising an upper member having side ribs adapted to fit underneath the heads of the track rails, and having depending shoes, and a lower member adapted to rest on the inner flanges of the track rails and having upward projections formed with inclined surfaces adapted to fit the shoes; substantially as described.

5. A foot guard for railway track structures, comprising an upper member having side ribs adapted to fit underneath the heads of the track rails, and having depending shoes, a lower member adapted to rest on the inner flanges of the track rails and having upward projections formed with in-

clined surfaces adapted to fit the shoes, together with means for positively securing the members in place; substantially as described.

6. A foot guard for railway track structures, comprising an upper guard member and a lower supporting member, the latter having an upwardly wedging engagement with the former and having an extension at its rear end; substantially as described.

7. A foot guard for railway track structures, comprising an upper guard member and a lower supporting member, the latter having an upwardly wedging engagement with the former and having an extension at its rear end, said extension being curved downwardly, and having securing means at its lower end; substantially as described.

In testimony whereof, I have hereunto set my hand.

JOHN W. STEPHENSON.

Witnesses:

ADOLPH F. SEUBERT,
JOHN J. MANNING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."