

S. K. DUNKLE.

FOOT GUARD.

APPLICATION FILED JUNE 12, 1909.

945,501.

Patented Jan. 4, 1910.

Fig. 1

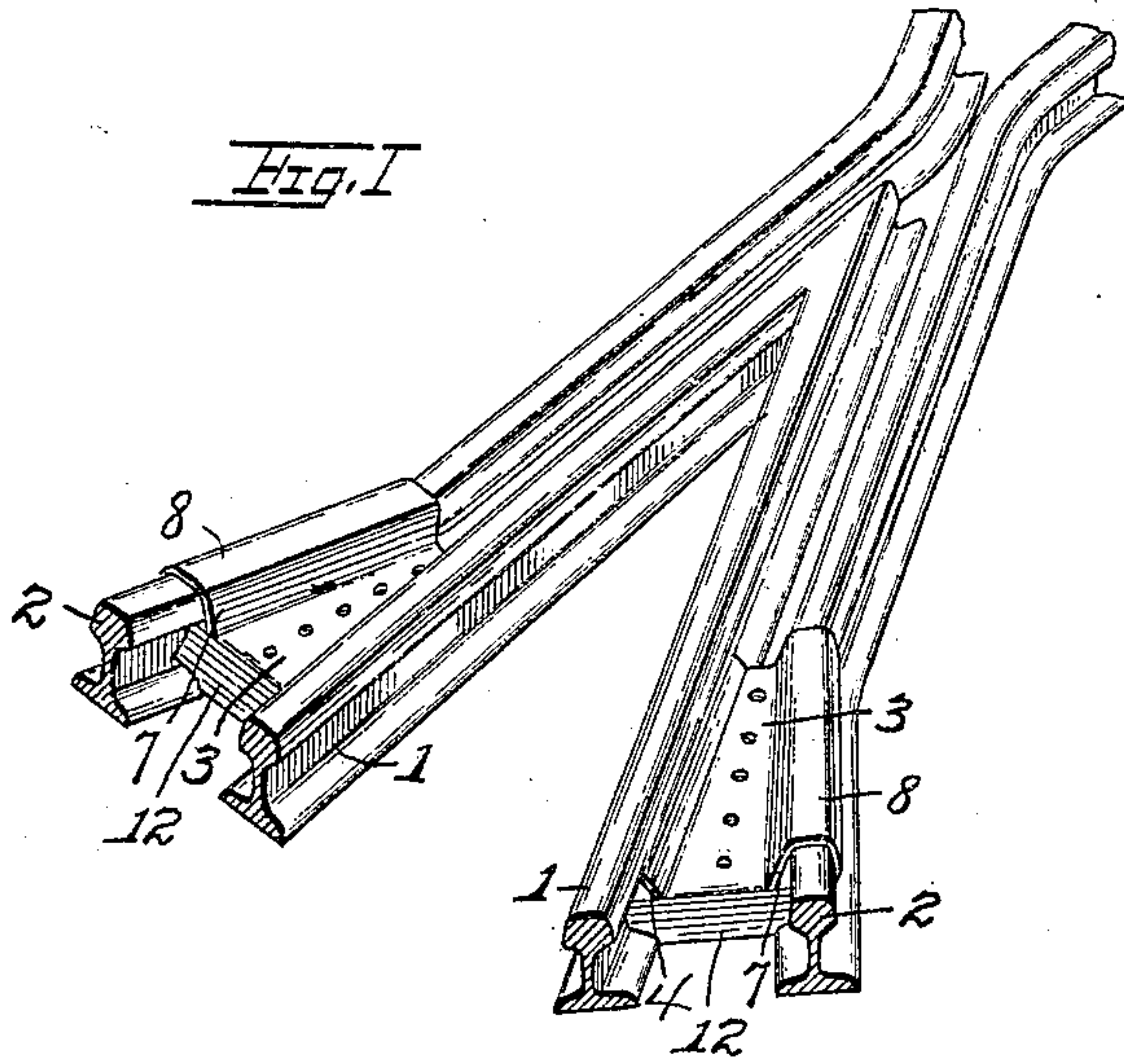


Fig. 2

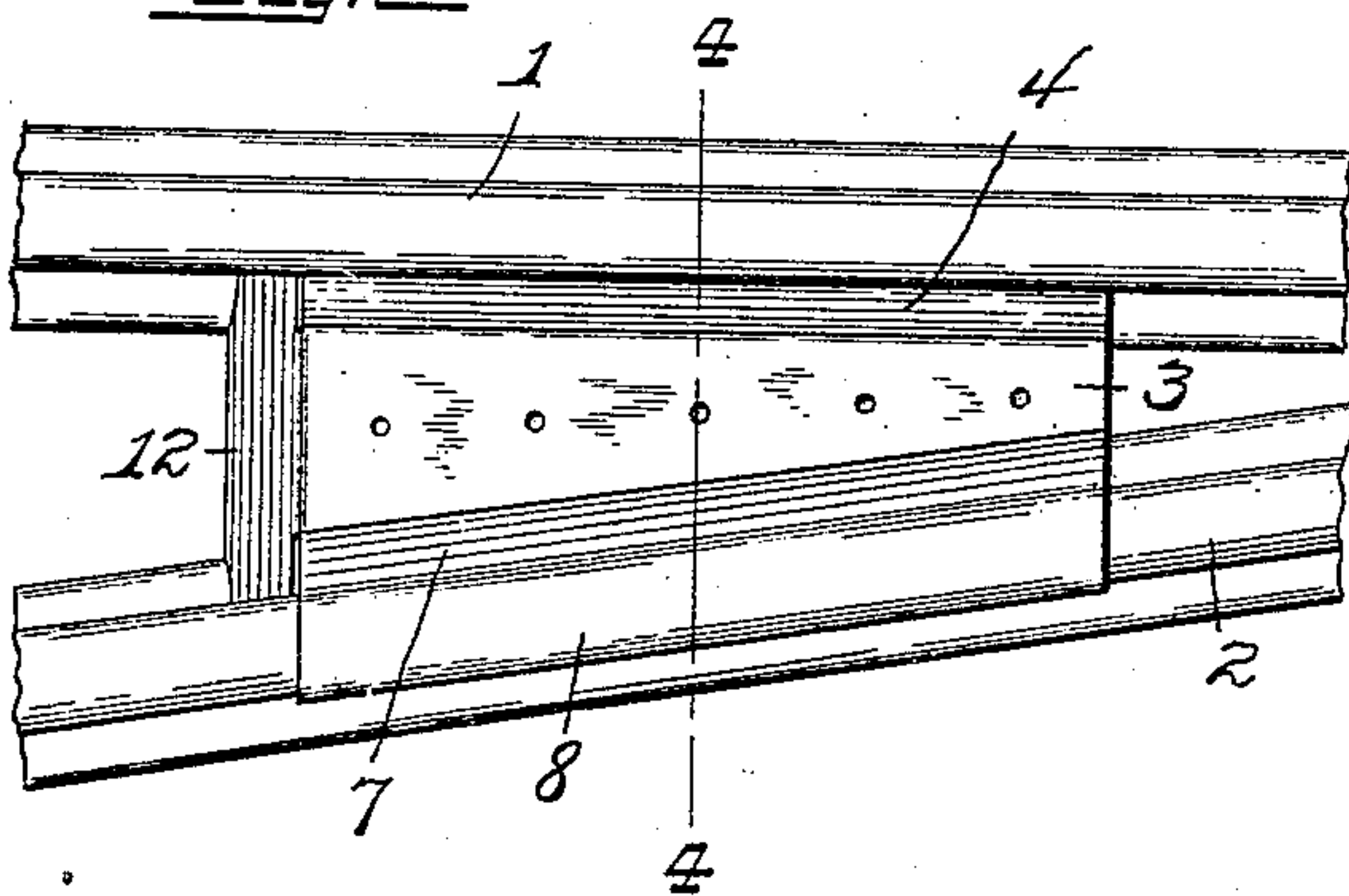


Fig. 6

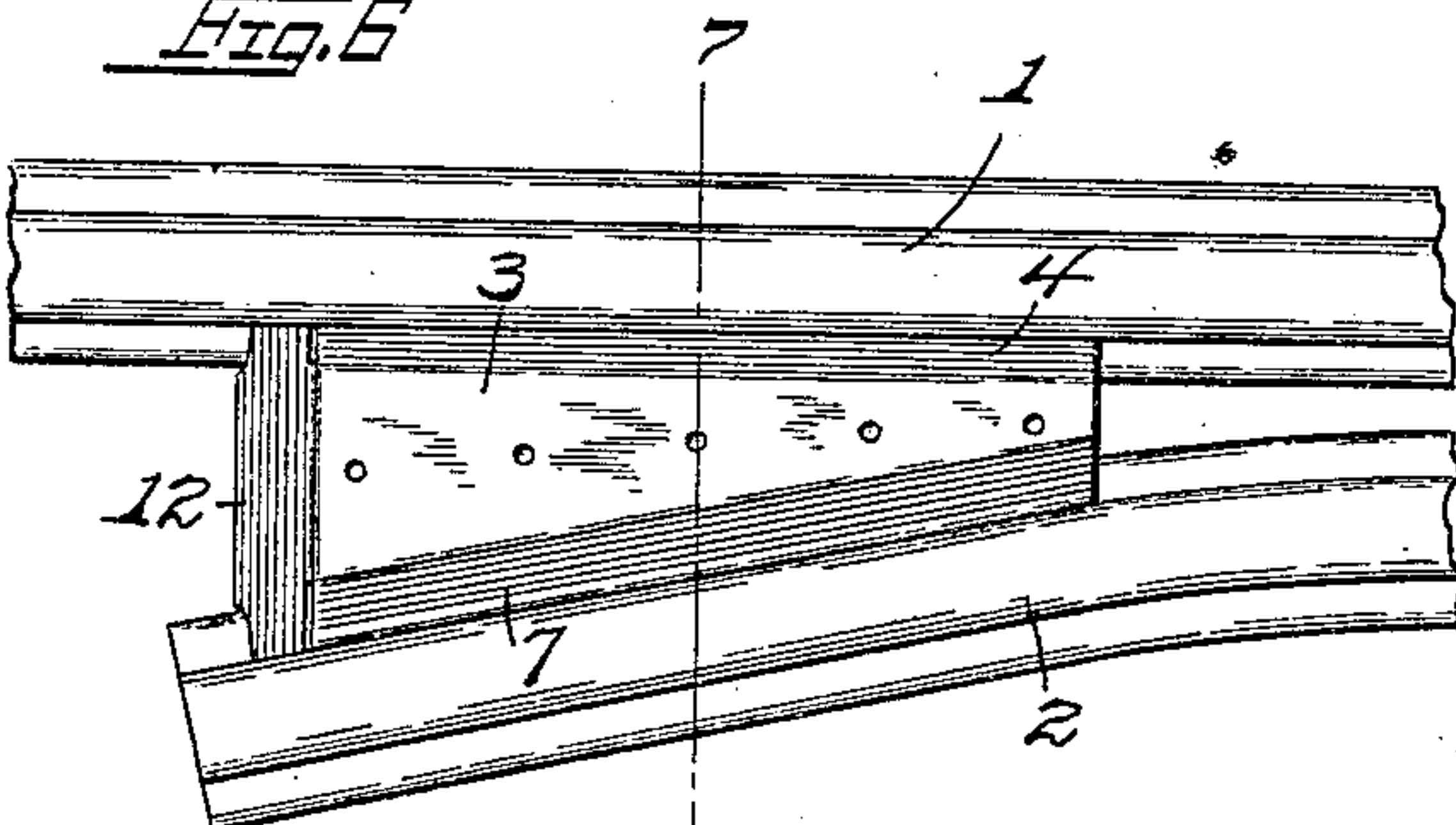


Fig. 7

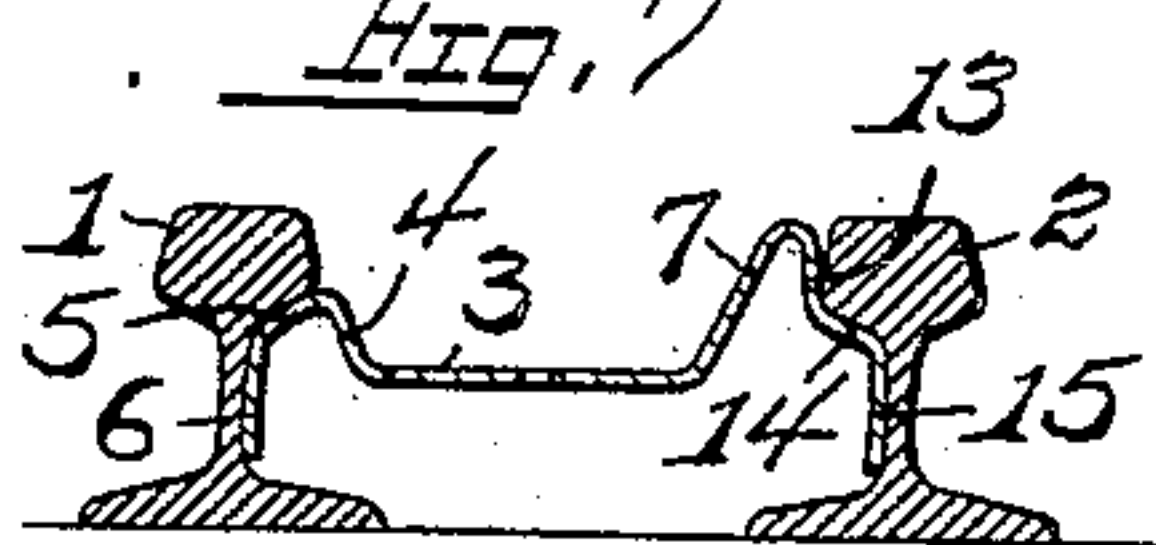


Fig. 3

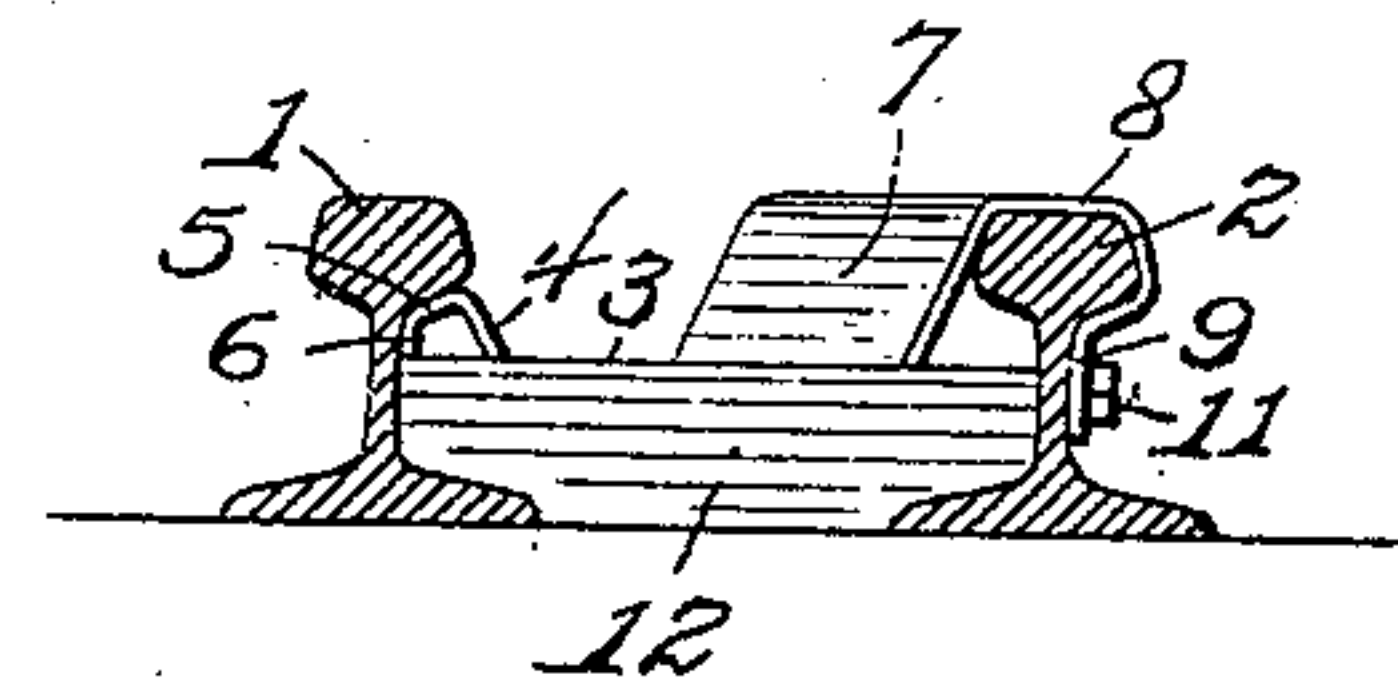


Fig. 4

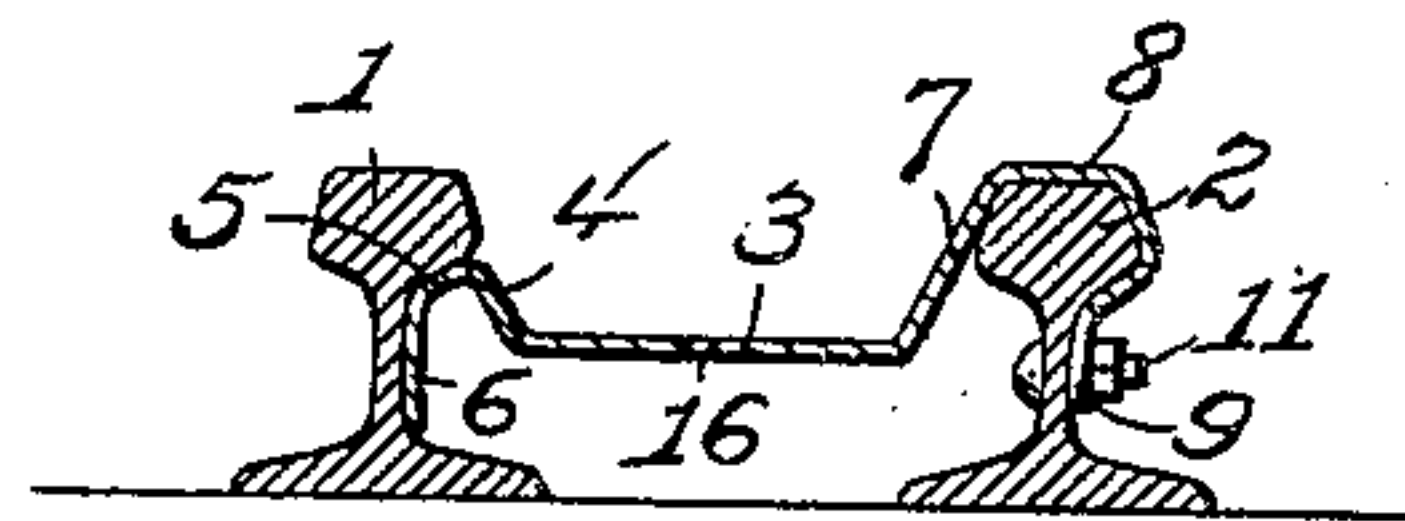


Fig. 5

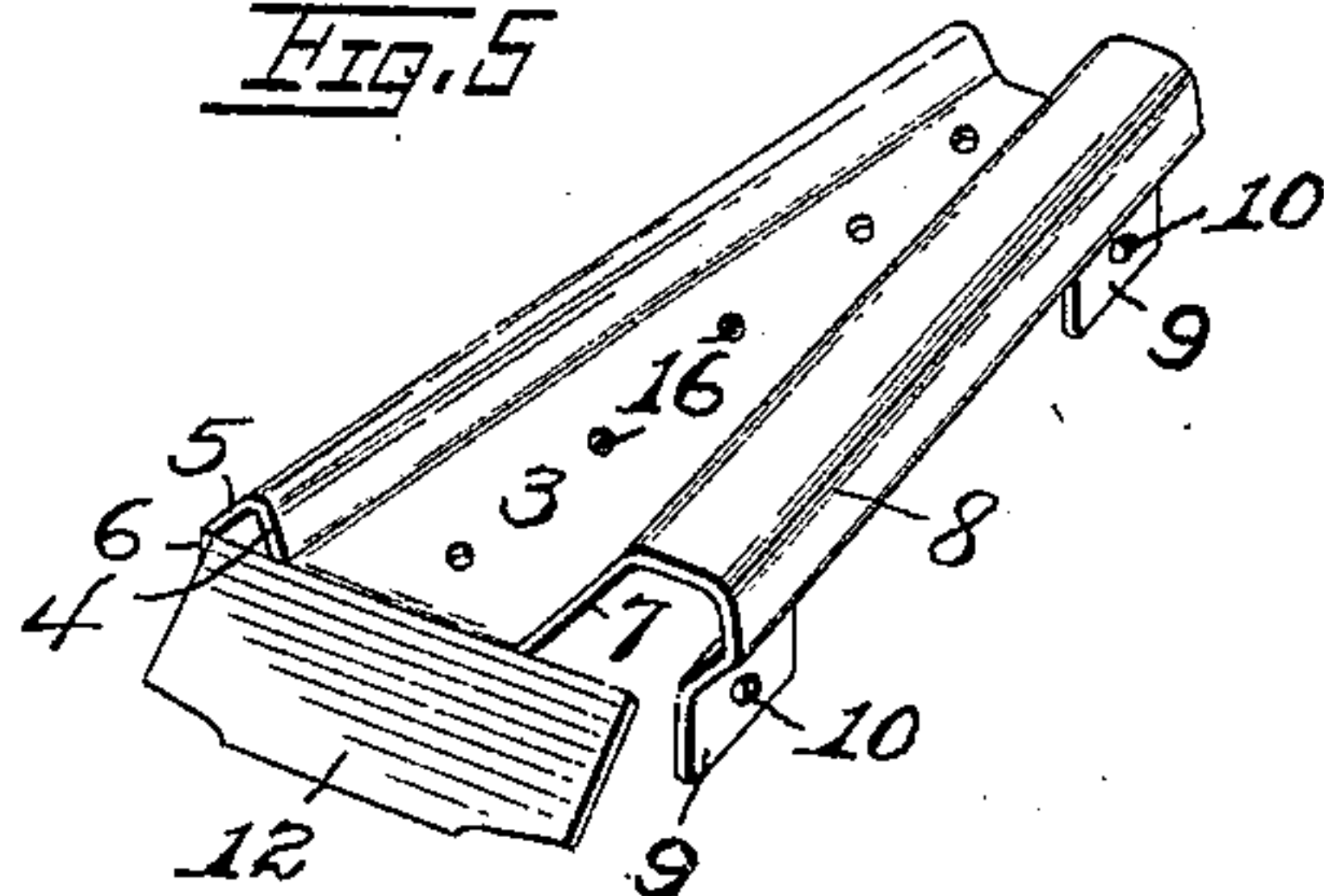
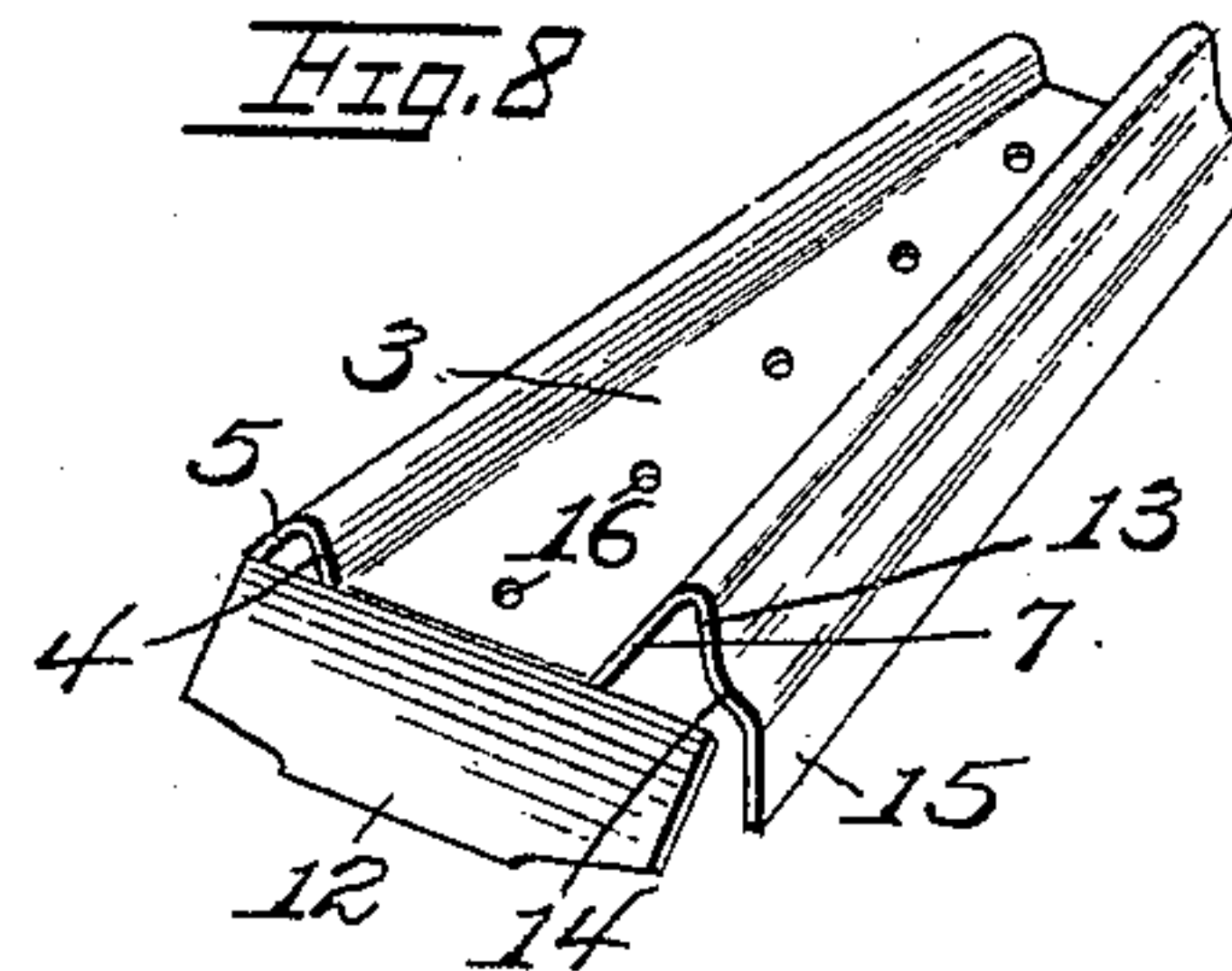


Fig. 8



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL K. DUNKLE, OF WHEELING, WEST VIRGINIA, ASSIGNOR OF ONE-EIGHTH TO HAVEN C. BABB AND ONE-EIGHTH TO MICHAEL AGNIC, BOTH OF WHEELING, WEST VIRGINIA.

FOOT-GUARD.

945,501.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed June 12, 1909. Serial No. 501,726.

To all whom it may concern:

Be it known that I, SAMUEL K. DUNKLE, a citizen of the United States of America, and resident of Wheeling, 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.

This invention relates to improvements in foot-guards of that class employed in connection with railway switch-frogs.

The primary object of the invention is to provide a device for mounting between the rails of switch-frogs and at points where the railway rails occupy positions adjacent to each other which will render it impossible for the sole of a shoe to become wedged between the rails.

A further object is to provide an extremely simple, inexpensive and efficient guard of the character mentioned having means whereby the foot of a person in walking will be prevented from entering beneath the guard.

With these and other objects in view, the invention finally consists in the particular construction, arrangement and combination of parts which will hereinafter be fully described, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of a railway frog, showing my invention applied thereto; Fig. 2 is an enlarged top plan view of the invention applied in position; Fig. 3 is an outer end elevation of the same; Fig. 4 is a section on the line 4—4, Fig. 2; Fig. 5 is a perspective view of the invention detached; Fig. 6 is a top plan view similar to Fig. 2, showing a modified formation of the invention; Fig. 7 is a section on the line 7—7, Fig. 6; and Fig. 8 is a view similar to Fig. 5, showing the modified structure.

Referring to said drawing, in which like reference numerals designate like parts throughout the several views, 1 indicates the track-rail and 2 the guard-rail of an ordinary type of switch-frog. Mounted between said rails 1 and 2, at or adjacent to the end of the frog, is the device which constitutes the present invention, said device consisting of a single piece of metal, preferably sheet iron, bent or shaped to form a longitudinal horizontal portion 3 which is tapered longitudinally to correspond with the inclination

of the guard-rail 2 with relation to the track-rail 1. The portion 3 occupies a plane slightly below the level of the under side of the rail-heads, and the metal at the side adjacent to the track-rail is inclined upward to the outer portion of the under side of the rail head, as shown at 4, and then is shaped to conform to the under side of said head and the web of said rail, an inclined member 5 and a vertical member 6 being thus formed, the latter having its edge portion resting upon the top of the rail-base. The metal at the opposite side of said horizontal portion 3 is inclined upward to the top of the rail 2, as shown at 7, and thence is bent over and around the rail-head, forming a supporting clamp 8, as shown in Figs. 1 to 5, inclusive. Integral vertical extensions 9 are adapted to fit closely against the outer face of the web of the rail 2 and have apertures 10 there-through through which and registering holes in the rail bolts 11 are projected for securely holding the device in place.

Adjacent to the outer end the metal is sheared inward from opposite edges to the lateral edges of the horizontal portion 3, and the end portion is then bent or inclined downward to constitute a guard member 12 whereby the entrance beneath the horizontal portion of the foot of a person is prevented. The inclination given the member 12 is such that when it is struck by the foot of a person walking, the latter is caused to glance upward.

In the modification illustrated in Figs. 6 to 8, inclusive, the metal is shaped to conform with the inner face of the guard-rail 2 from its top to its base, the portions 13, 14 and 15 respectively resting snugly against the inner face of the head of the rail, the under side of said head, and the web of the rail, as shown. One or more apertures 16 are provided in the horizontal portion 3 to allow water to drain from the surface of said portion. As is obvious, the device fits between the track-rail and the guard-rail in such manner as to render it impossible for the sole of a shoe to slip beneath the rail-heads, and, consequently, the danger of a shoe becoming wedged between the rails at the point of danger is wholly eliminated.

While I have described my invention more or less in detail, it will be understood that various minor changes within the scope of the appended claims may be resorted to

without departing from the spirit or scope of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal shaped to form a central longitudinal flat horizontal member located on a plane below that of the under sides of the heads of said rails, and lateral longitudinal portions, that portion adjacent to the track-rail inclining upward to the outer side of the under face of the head of said rail and thence conforming to the shape of the under side of said head and the web of said rail and resting upon the top of the rail base, and the portion adjacent to the guard-rail inclining upward to the top of the head of said rail and being supported thereby.

2. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal shaped to form a central horizontal member located on a plane below that of the under sides of the heads of said rails, and lateral longitudinal portions, the portion adjacent to the track-rail inclining upward to the outer side of the under face of the head of said rail and thence conforming to the shape of the under side of said head and the web of said rail and resting upon the top of the rail base, and the portion adjacent to the guard-rail inclining upward to and clamping over the head of said guard-rail.

3. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal shaped to form a central horizontal member located on a plane below that of the under sides of the heads of said rails, and lateral longitudinal portions, the portion adjacent to the track-rail inclining upward to the outer side of the under face of the head of said rail and thence conforming to the shape of the outer side of said rail, and the portion adjacent to the guard-rail inclining upward to and being bent over the head of said guard-rail.

4. In combination with a track-rail and a

guard-rail, a foot-guard composed of a single piece of metal shaped to form a central horizontal member located on a plane below the under sides of the heads of said rails, and lateral longitudinal portions, the portion adjacent to the track-rail being supported by the latter, and the portion adjacent to the guard-rail being clamped about the head of the latter.

5. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal shaped to form a central longitudinal member located on a plane below the heads of said rails, and lateral longitudinal portions, the portion adjacent to the track-rail conforming in shape with the outer face of and being supported by the latter, and the portion adjacent to the guard-rail being extended over the head of the latter and supported thereby.

6. In combination with a track-rail and a guard-rail, a foot-guard composed of a single piece of metal shaped to form a central member located on a horizontal plane below the heads of said rails, and lateral longitudinal portions, the portion adjacent to the track-rail conforming in shape with the outer face of and being supported by the latter, and the portion adjacent to the guard-rail being supported by the head of the latter.

7. In combination with a track-rail and a guard-rail, a foot-guard interposed between said rails and supported thereby, said guard comprising a single piece of metal shaped to form a substantially horizontal body member whose lateral edges partially conform to that of the rails against which they abut, and a guard-member formed at one end of said body portion by shearing the metal transversely from opposite edges to the edges of the unbent portion of the body member, said guard-member being inclined downward and outward so as to lie transversely of the space between said rails.

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

SAMUEL K. DUNKLE.

Witnesses:

H. E. DUNLAP,

E. A. LENKARD.