

C. ORENSTEIN.
RAIL CLAMP.
APPLICATION FILED JULY 11, 1911.

1,016,849.

Patented Feb. 6, 1912.

Fig. 1,

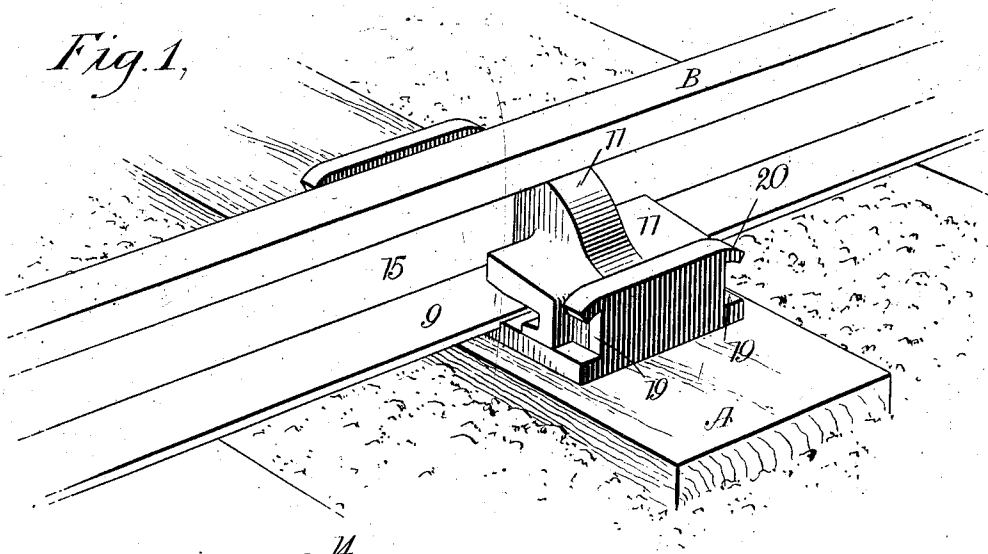


Fig. 2,

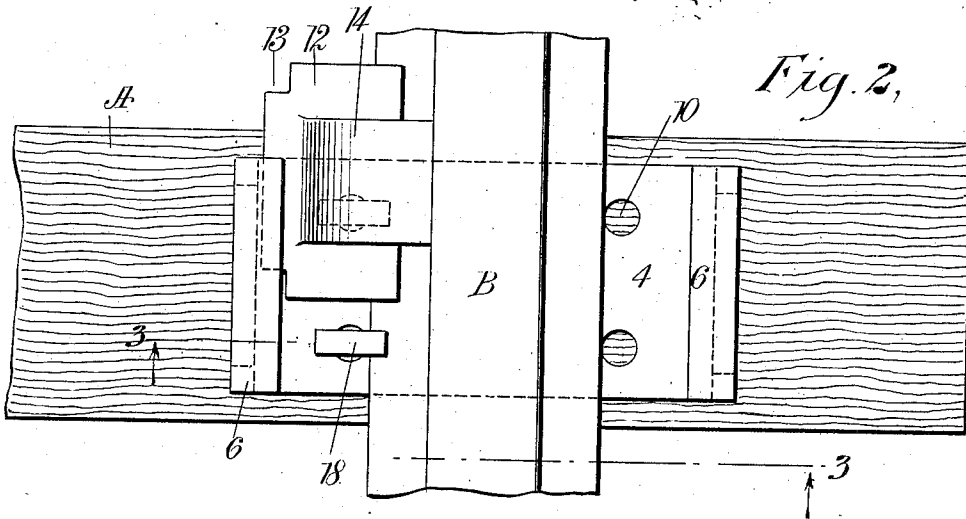
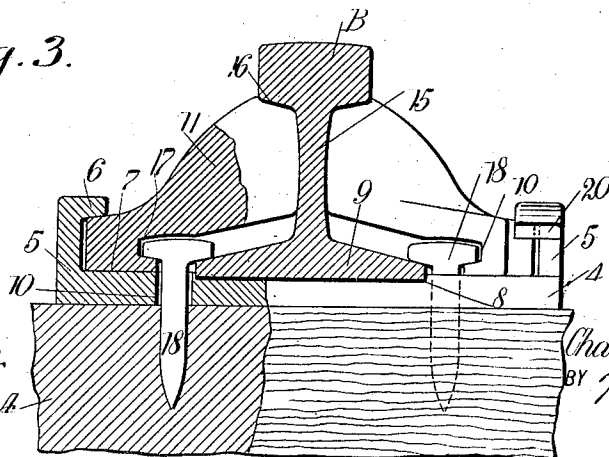


Fig. 3.



WITNESSES

Edw. Thorpe.
W. S. Ostow.

INVENTOR

Charles Orenstein
BY *Morris Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES ORENSTEIN, OF SEDALIA, MISSOURI.

RAIL-CLAMP.

1,016,849.

Specification of Letters Patent.

Patented Feb. 6, 1912.

Application filed July 11, 1911. Serial No. 637,907.

To all whom it may concern:

Be it known that I, CHARLES ORENSTEIN, a citizen of the United States, and a resident of Sedalia, in the county of Pettis and State of Missouri, have invented a new and Improved Rail-Clamp, of which the following is a full, clear, and exact description.

My invention relates to a new and improved form of rail clamp.

10 An object of my invention is to provide a device whereby the rail may be rigidly and firmly attached to the railroad tie.

A further object of my invention is to provide a means for tying the rail to the tie, 15 whereby the spikes holding the plate to the tie are protected.

A further object of my invention is to provide a means for holding the rail to the tie to give a broad bearing on the rail, to 20 firmly hold the same in position.

I attain the above-outlined objects by disposing on each tie beneath each rail, a plate having an overhanging ledge on each transverse side thereof and a shoe disposed beneath the ledge resting on top of the spikes holding the plate on the tie, said shoe adapted to conform to and engage the web and head of the rail.

With the above and other objects in view, 30 as will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and more 35 particularly pointed out in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all 40 the figures, and in which—

Figure 1 is a perspective view showing a preferred embodiment of my invention applied to a rail and tie; Fig. 2 is a plan view 45 looking down upon the same with the shoe partly in position; and Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2 and looking in the direction of the arrow.

50 In the several figures, I have shown a tie A carrying a rail B of the general T construction. Resting on the tie A and positioned beneath the lower flange of the rail B, is a plate 4, the opposite transverse edges 55 of which are formed into sides 5, the tops of which sides are bent inward, to form an

overhanging ledge 6. Intermediate the sides 5, the top 7 of the plate 4 is recessed, as shown at 8, into which recessed portion the lower flange 9 of the rail B rests. Adjacent to the outside of the recess 8, the plate 4 has extending therethrough spike carrying recesses 10. Resting on the plate 4 to the outside of the recesses 10, is a shoe 11, which shoe comprises a flat rectangular 65 portion 12 having its outer edge recessed at 13, for a purpose hereinafter described. Extending upward from each flat portion, is a rail-engaging boss 14, which boss conforms to and engages the web 15 of the rail B and fits under and engages the under portion of the top flange 16. The under side of the shoe 11, to the outside of the recesses 10, has a recessed head 17, as shown in the illustration. A double-headed spike 18 is driven 70 into the tie A through the recess 10 before the shoe 11 is forced into place. As shown, one head of the spike 18 rests on the top of the lower flange 9 of the rail B, thus leaving a space between the other end of the head of the spike 18 and the top of the plate 4. As 80 shown in Fig. 2, the shoe 11 is slid longitudinally into place with the outer edge disposed beneath the ledge 6 and the boss 14 disposed beneath the flange 16 and engaging the web 15. The recess 17 will receive the free head of the spike, thereby holding the spike firmly in its position. 85

Each end of the sides 5 is recessed, as shown at 19, to form a projecting lip 20, 90 which lip is bent downward, as shown in Fig. 1 after the shoe is in position, thus firmly locking the shoe in the position shown in the figures.

While a preferred embodiment of the invention has been described, it is to be understood that many changes could be made in the above construction and many apparently 95 widely different embodiments of this invention could be made without departing from the scope thereof. 100

It is intended that all matters contained herein in the above description or shown in the accompanying drawings, shall be interpreted as illustrative and not in a limiting 105 sense.

It is also to be understood that the language used in the following claims is intended to cover the full scope of the invention and is not to be given any narrower 110 construction than the prior art demands, and that materials, sizes and relativities of

parts are non-essential, except as called for in the claims.

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

1. In a means for attaching a railroad rail to a tie, a plate adapted to rest on the tie beneath the rail, said plate having its opposite ends upturned to form a ledge, said plate having apertures extending there-through on opposite sides of the base flange of the rail, a shoe disposed on each side of the rail, said shoe being disposed beneath said ledge, and having a recessed portion adjacent the aperture in said plate, and a spike adapted to be driven through each aperture in the plate into the tie, one side of the head of said spike adapted to rest on the lower flange of the tie and the other side of said head adapted to be positioned in the aperture in the under side of the shoe, to hold said shoe firmly in position.

2. In a means for attaching a railroad rail to a tie, a plate adapted to rest on the tie beneath the rail, said plate having its opposite ends upturned to form a ledge, said plate having apertures extending there-through on opposite sides of the base flange of the rail, a shoe disposed on each side of the rail, said shoe being disposed beneath said ledge and having a recessed portion ad-

jacent the aperture in said plate, and a spike adapted to be driven through said aperture in the plate into the tie, one side of the ledge of said spike adapted to rest on the lower flange of the tie and the other side of said head adapted to be positioned in the aperture in the under side of the shoe to hold said shoe firmly in position, said ledge being adapted to be bent to clamp said shoe in position.

3. In a means for fastening a rail to a tie, a plate resting on the tie and disposed transversely beneath the rail, the ends of said plate being upturned and inturned to form a ledge, a shoe disposed on opposite sides to and in close engagement with the web and head of the rail and having a portion disposed beneath said ledge and resting on said plate, a spike passing through said plate, the head of said spike holding said rail, shoe and plate in position on the tie, said shoe covering said spike, and means locking said shoe in position, thereby preventing access to said spike.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES ORENSTEIN.

Witnesses:

JOSEPH A. CHESNOFF,
WILLIAM MENDELL.

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