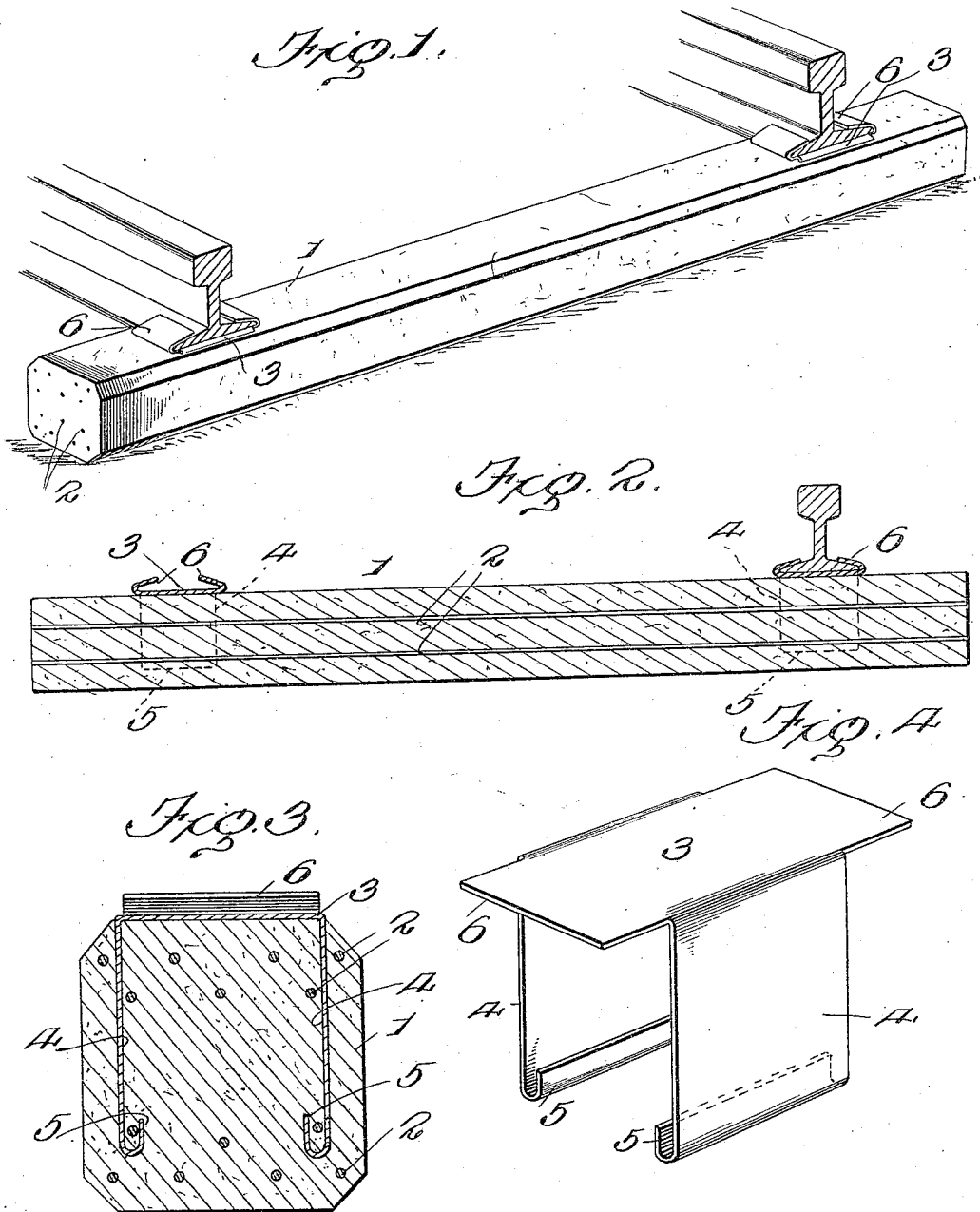


H. C. KREPPS.
RAILROAD TIE.

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942,650.

Patented Dec. 7, 1909.



Witnesses

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HENRY C. KREPPS, OF SEATTLE, WASHINGTON.

RAILROAD-TIE.

942,650.

Specification of Letters Patent.

Patented Dec. 7, 1909.

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To all whom it may concern:

Be it known that I, HENRY C. KREPPS, of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Railroad-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to provide a concrete railroad tie with simple and highly efficient means for securing the rails thereto, and at the same time add to the strength of the tie at the points at which the rails are seated.

The invention will be hereinafter fully set forth and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in perspective. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is an enlarged transverse sectional view taken through a rail seat and retaining plate. Fig. 4 is an enlarged view of the latter, in perspective.

In carrying out my invention I form the tie 1 of reinforced concrete, the reinforcing wires or rods being indicated at 2. The tie in cross section is approximately rectangular, and the edges are beveled to prevent chipping.

3, 3 designate the rail retaining and tie reinforcing plates. As shown in Fig. 4 each retainer consists of a flat plate having depending parallel extensions 4 which are preferably formed integral with the longitudinal edges of the plate. These extensions extend down into the body of the tie to a point near the bottom thereof, and parallel to its longitudinal sides, and their lower ends are inwardly curved to form hooks 5 which are always in close proximity to or beneath two of the reinforcing rods or wires 2. Thus the hooked ends of the extensions of the rail plates form anchors for the latter and serve to securely retain the plates

in position. At the same time these extensions of the retaining plate being inclosed in the tie, some distance from the sides thereof, at the time the tie is molded add greatly to the strength thereof at the points at which the rails are seated.

The rails are secured to the retaining plates by bending up the ends 6 thereof so that they will extend over the base of a rail. This may be done by means of an ordinary crow bar and spike maul. After the rails are alined and the ends of the retaining plates hammered into position such ends are brazed to the rail, thus securely retaining the latter in place.

The advantages of my invention will be readily appreciated. It will be seen that I have provided extremely simple means for securing railroad rails to concrete ties, and that the means so employed serves also to reinforce the ties at the points where strength is most needed. Should it be desired to move a rail the ends of the retaining plates may be cut therefrom and bent back with a chisel and bar. This does not destroy the tie as the same or another rail may be secured thereto by rehammering and brazing the ends of the retaining plates.

I claim as my invention:

A railway tie formed of reinforced concrete, and rail retaining plates, each plate being provided with depending portions embedded within the tie parallel with the longitudinal sides thereof, the lower ends of said parallel portions being hooked and located beneath reinforcing members of the tie, said plates having at their ends, transversely of the tie, upwardly bent portions for engaging and holding the base of a rail.

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

HENRY C. KREPPS.

Witnesses:

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