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1,576,845

R. PARISI

RAIL JOINT

Filed April 30, 1925

Fig. 1.

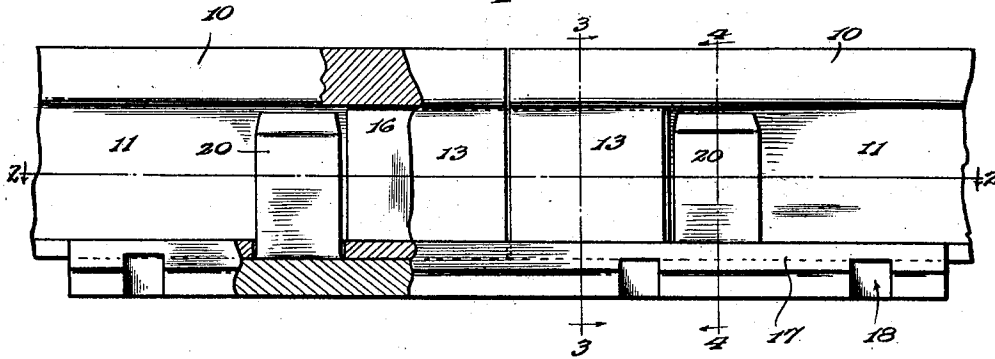


Fig. 2.

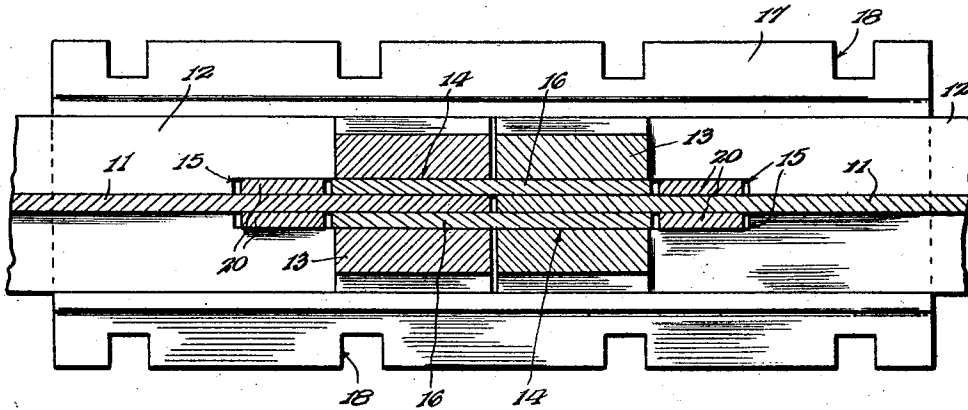


Fig. 3.

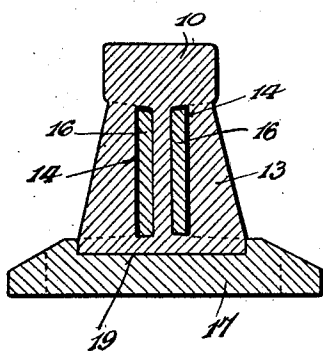
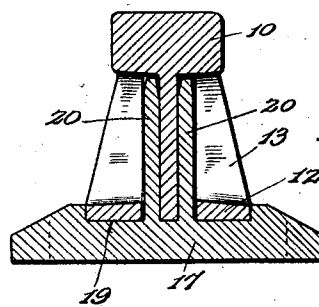


Fig. 4.



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RAIL JOINT.

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To all whom it may concern:

Be it known that I, RINO PARISI, a citizen of the United States, residing at Rimer, in the county of Armstrong and State of Pennsylvania, have invented certain new and useful Improvements in Rail Joints, of which the following is a specification.

This invention relates to an improved rail joint and seeks, among other objects, to provide a rigid and secure joint eliminating the usual securing bolts for the rail ends.

A further object of the invention is to provide a joint embodying fish plates for bracing the rail ends and wherein the anchoring means employed for the ends of the rails will serve to limit the fish plates against displacement.

And the invention seeks, as a still further object, to provide a joint wherein expansion and contraction of the rail ends will be freely accommodated.

Other and incidental objects will appear hereinafter.

In the accompanying drawings:

Figure 1 is a side elevation of my improved rail joint, parts being broken away and illustrated in section.

Figure 2 is a horizontal sectional view on the line 2—2 of Figure 1, looking in the direction indicated by the arrows, and particularly showing the fish plates.

Figure 3 is a transverse sectional view on the line 3—3 of Figure 1, looking in the direction indicated by the arrows.

Figure 4 is a transverse sectional view on the line 4—4 of Figure 1, and particularly showing the anchoring posts for the rail ends.

Referring now more particularly to the drawings, I have shown the meeting ends of rails at 10. These rails are provided with the usual webs 11 and base flanges 12 while at their extremities the rail ends are thickened to provide heads 13. Formed in said heads at opposite sides of the rail webs are slots 14 and formed in the base flanges of the rails at the rear ends of the heads are pairs of openings 15 disposed immediately adjacent the rail webs at opposite sides thereof. The slots 14 of the heads are disposed to aline with each other and freely received in said slots to lie against opposite sides of the rail webs 11 are fish plates 16 floating in said slots and preferably of a length substantially equal to the combined length of the heads.

Seating the rail ends is a base plate 17 of a length to span adjacent track ties resting at its ends thereon, and formed in said base plate are notches 18 to accommodate spikes securing the base plate to said ties. As brought out in Figures 3 and 4 of the drawings, the base plate is provided at its upper side with a longitudinally extending channel 19 to snugly receive the base flanges 12 of the rail ends and rising from the bottom wall of said channel are spaced pairs of upstanding parallel posts 20 which are freely received through the pairs of slots 15 in said base flanges. As brought out in Figure 2, the posts are flat and are spaced apart to snugly receive the rail webs 11 therebetween.

As will now be seen in view of the foregoing, the rail ends are anchored to the base plate 17 by the posts 20 and, through the medium of said posts and the base plate, are thus rigidly connected. However, as shown in Figure 2, the slots 15 are elongated to permit endwise movement of the rail ends relative to said posts so that said rail ends may freely shift in the channel 19 of the base plate 17 for accommodating expansion and contraction of the rails. The side walls of the channel 19 of the base plate will, of course, coact with the base flanges of the rail ends for limiting the rail ends against transverse movement while the posts 20 will coact with the webs 11 for bracing the rail ends at opposite sides thereof. Furthermore, as will be observed, the rail ends are locked against relative transverse movement by the fish plates 16 and these fish plates will also coact with the heads 13 and rail webs 11 for bracing the rail ends against horizontal thrust. A rigid and secure joint is thus provided and attention is particularly directed to the fact that the posts 20 are disposed to closely confront the outer ends of the slots 14 of the heads and thus serve to limit the fish plates against accidental displacement.

Having thus described the invention, what I claim is:

1. A rail joint including meeting rail ends provided with heads having slots therein and also provided with base flanges having openings therein, a base plate seating the rail ends and provided with posts extending through said openings for connecting the rail ends with each other, and fish plates freely accommodated in said slots and locking said rail ends against relative transverse

movement, said posts being disposed to limit the fish plates against displacement.

2. A rail joint including meeting rail ends, having heads provided with slots, fish plates
5 freely accommodated in said slots and locking the rail ends against relative transverse movement, and a base plate seating the rail ends and provided with posts engaging the

rail ends and confronting the ends of the fish plates to confine said plates against displacement whereby said plates can be removed
10 only after the base plate is disengaged from the rail ends.

In testimony whereof I affix my signature.

RINO PARISI. [L. s.]