

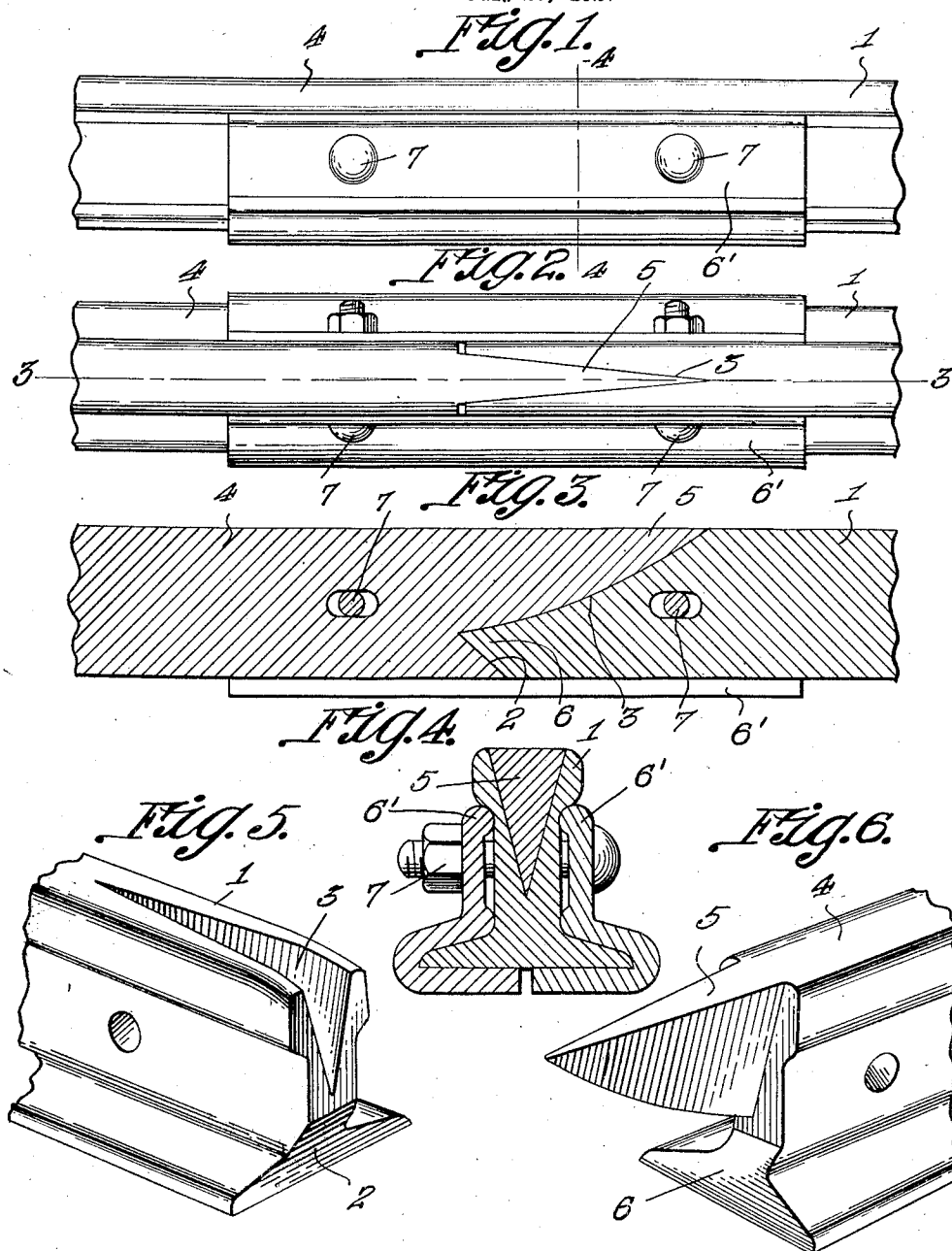
May 1, 1928.

1,668,407

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RAIL JOINT

Filed July 29, 1927



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WITNESS:

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JOE L. JACKICH, OF BEND, OREGON.

RAIL JOINT.

Application filed July 29, 1927. Serial No. 209,337.

This invention relates to a rail joint, the general object of the invention being to provide a firm joint between rails and one which will be practically noiseless as the wheels of a train pass over the same.

Another object of the invention is to provide a tongue on one rail for engaging a recess on the other rail, with a beveled projection on the lower part of one rail engaging a beveled undercut formed in the end of the other rail, so that movement of the two rails relative to each other is prevented.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a side view of the improved joint.

Figure 2 is a plan view.

Figure 3 is a section on line 3—3 of Figure 2.

Figure 4 is a section on line 4—4 of Figure 1.

Figure 5 is a perspective view of the recessed rail.

Figure 6 is view of a portion of the rail carrying a tongue.

In these views, 1 indicates a rail which is provided with a beveled undercut 2 at its end which passes through the lower portion of the web of the rail and through the base and the said rail is also provided with a V-shaped recess 3 which passes through the top of the rail and extends into the web, said recess having its bottom curved from the end of the rail upwardly to the top thereof, and the said recess also has its walls converging so that the recess is of wedge shape in plan view. The rail 4 is provided with a tongue 5 which is shaped to snugly fit in the recess 3 and the lower part of the said rail 4 has a beveled projection 6 at its lower part for fitting in the undercut 2, as clearly shown in Figure 3.

The usual fish plates 6' are fastened to the rails by the bolts 7.

The rail 1 has the tread part of its end

curving downwardly, as shown in Figure 5, while the end of the tongue 5 of rail 4 also curves downwardly, as shown in Figure 6, so that the wheels of a train will not engage these ends.

From the foregoing, it will be seen that the rail ends are firmly connected together by the tongue 5 fitting in the recess 3 and by the projection 6 fitting in the undercut or recess 2. Thus the rail ends must move together under the weight of the train or car and therefore noise will be practically eliminated when a train passes over the joint. This makes the invention very useful on street cars passing through cities and towns.

By making the tongue and the recess which receives it of wedge-shape in cross section, with the lower edge of the tongue and the bottom of the recess curving upwardly from the end of the rail, it will be apparent that the slight movements of the tongue within the recess, due to the expansion and contraction of the rail, will not be sufficient to break the continuity of the tread and this formation of the parts will facilitate the entrance of the tongue in the recess and provides a wedging action to take up both vertical and horizontal play.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:—

1. A rail joint comprising a pair of rails, one rail having a recess at one end and in its top portion, with its lower part undercut and the other rail having a tongue for snugly fitting in the recess, with a projection at its base for fitting in the undercut, said recess being of V-shape in cross section and also in plan with its bottom curving from the end of the rail upwardly to the apex of the V at the top of the rail, the tongue being similarly formed, the small end of the tongue curving downwardly and the end of the rail carrying the recess having its tread part curving downwardly to prevent the wheels of a train striking said parts.

2. A rail joint comprising a pair of rails, one rail having a recess at one end and in

its top portion, with its lower part undercut and the other rail having a tongue for snugly fitting in the recess, with a projection at its base for fitting in the undercut, said
5 recess being of V-shape in cross section and also in plan with its bottom curving from the end of the rail upwardly to the apex of the V at the top of the rail, the tongue being similarly formed and the undercut
10 being beveled through the lower portion of the web and the base, with the projection on the other rail being similarly formed, the small end of the tongue curving downwardly and the end of the rail carrying the recess having its tread part curving downwardly 15 to prevent the wheels of a train striking said parts.

In testimony whereof I affix my signature.

JOE L. JACKICH.