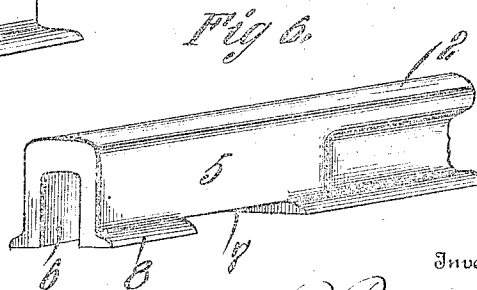
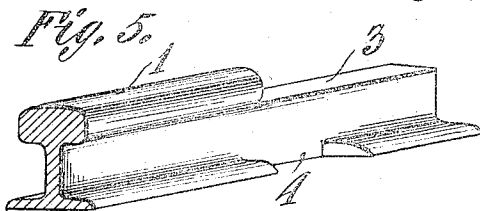
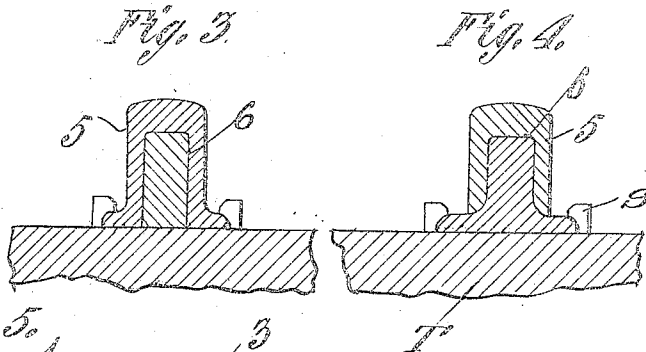
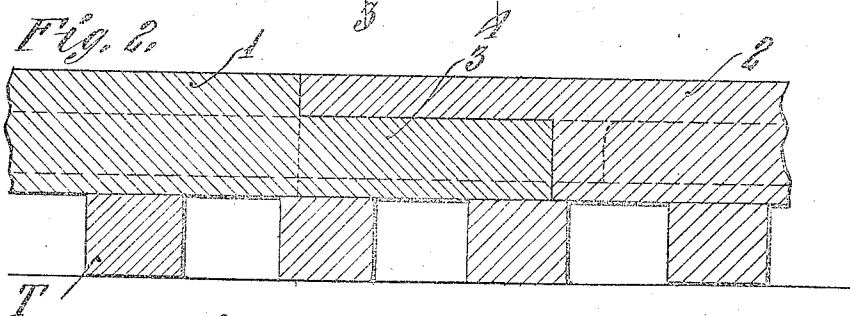
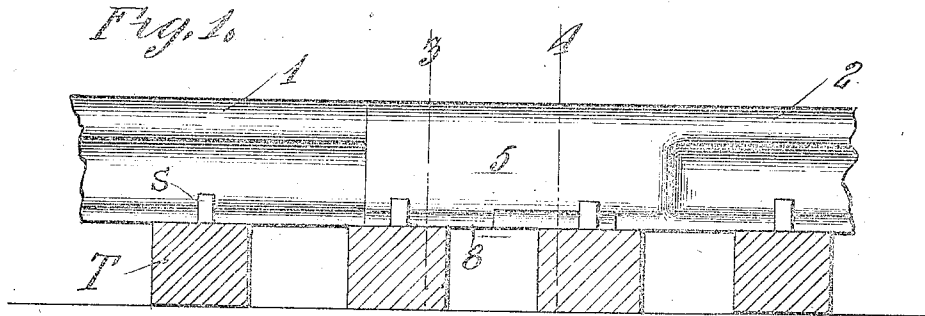


W. P. PERKINS.
RAIL JOINT.
APPLICATION FILED APR. 27, 1909.

942,662.

Patented Dec. 7, 1909.



Witnesses

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WALLACE P. PERKINS, OF WILLIS TEXAS.

RAIL-JOINT.

942,662.

Specification of Letters Patent.

Patented Dec. 7, 1909.

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To all whom it may concern:

Be it known that I, WALLACE P. PERKINS, a citizen of the United States, residing at Willis, in the county of Montgomery and State of Texas, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in rail joints of that class which do not need bolts or similar fastenings for retaining the rails in alinement.

The object of the invention is to improve and simplify the construction of devices of this character and it consists of the novel construction, combination and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawings Figure 1 is a vertical longitudinal section through a track showing the improved rail joint in side elevation; Fig. 2 is a longitudinal section through the joint; Figs. 3 and 4 are vertical cross sections taken, respectively, on the planes indicated by the lines 3—3 and 4—4 in Fig. 1; and Figs. 5 and 6 are detail perspective views of the meeting ends of the two track rails.

In the drawings 1 and 2 denote two track rail sections which have their adjacent or abutting ends united by the improved joint and which are secured to wooden cross ties T by the usual spikes S. The track rails 1, 2 are of the usual form having vertical web portions with enlarged heads or balls at their upper edges and oppositely projecting base flanges at their lower edges. The rail section 1 has at its end a portion of its head removed so that the remaining base portion forms a tenon or tongue 3. Said rail 1 also has its base flanges recessed or cut away to provide recesses 4 arranged at a suitable distance from said end of the rail, as clearly shown in Fig. 5. The other rail section 2 has the web of its adjacent end enlarged or thickened, as shown at 5, so that it is substantially the same width as the head of said rail, and in this enlarged part 5 is formed a vertical channel or mortise 6 to receive the tenon 3. The rail 2 also has its base flanges recessed at opposite points suitably distant from said end, as shown at 7. The bottom of the mortise 6 is open so that the rail 2 may be readily placed over the tenon 3 of the rail 1 and so that the remaining portions 8

of the base flanges at the end of the rail 2 will enter the recesses 4 in the base flanges of the rail 1 and so that the remaining portions of the base flanges at the end of the rail 1 will enter the recesses 7 in the base flanges of the rail 2, as shown in Fig. 1 of the drawings. When the two rails are thus engaged, it will be seen that they will be effectively interlocked so that one cannot shift longitudinally or transversely with respect to the other. They are prevented from moving vertically by spiking their base flanges to cross ties placed beneath the joint, as shown in Figs. 1, 3 and 4 of the drawings.

From the foregoing it will be seen that the invention provides an exceedingly simple joint of this character which will effectively hold the rails in longitudinal alinement without the use of bolts and nuts, fish-plates and the like and the parts of which may be readily connected and disconnected and also readily secured to the ordinary wooden cross ties.

When laying the improved track rails, I preferably provide every other rail with the mortised ends 6 and the other rails with the tenon ends 3. By so doing I can reverse the rails after they are worn upon their inner sides.

Having thus described the invention what is claimed is:

1. In a rail joint, the combination of a rail having at one end a tenon formed by removing a portion of the head from the web of the rail, said rail also having, adjacent said end, portions of its base flanges removed to provide recesses and a second rail having its web at one end enlarged and mortised to receive the tenon on the other rail, the second rail having portions of its base flanges, at a distance from said end, removed to provide recesses, whereby the remaining portions of said base flanges may enter the recesses in the base flanges of the first mentioned rail, and the remaining portions of the base flanges of the first mentioned rail may enter said recesses in the base flanges of the second mentioned rail to provide an interlocking connection between said rails.

2. In a rail joint, the combination with cross ties, of a rail having at one end a tenon formed by removing a portion of the head from the web of the rail, said rail also having, adjacent said end, portions of its base flanges removed to provide recesses, a

second rail having its web at one end enlarged and mortised to receive the tenon on the other rail, the second rail having portions of its base flanges, at a distance from
5 said end, removed to provide recesses, whereby the remaining portions of said base flanges may enter the recesses in the base flanges of the first mentioned rail, and the
10 remaining portions of the base flanges of the first mentioned rail may enter said recesses in the base flanges of the second mentioned rail to provide an interlocking connection between said rails, and spikes
driven into said ties and having their heads

engaged with the base flanges of the rails, 15 certain of said ties being disposed beneath the recessed base flanges of the rails and certain of the spikes being engaged with the remaining portions of said base flanges at the ends of the rails, substantially as described.

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

WALLACE P. PERKINS.

Witnesses:

A. H. INGLET,

Mrs. C. A. THAMASO.