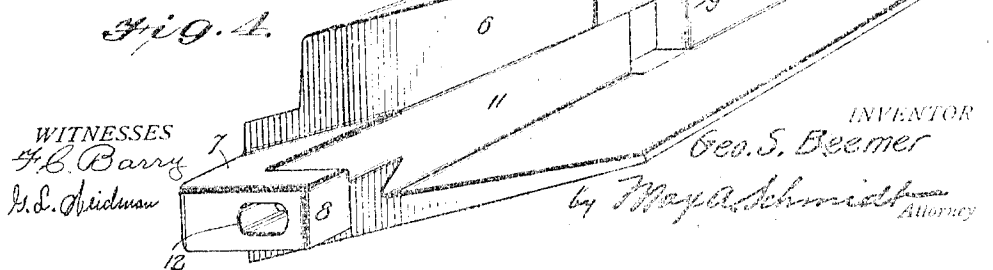
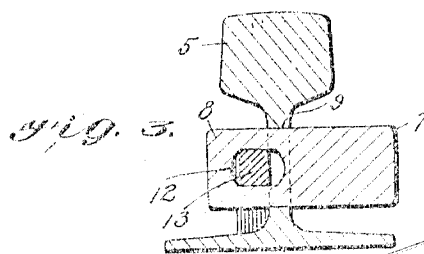
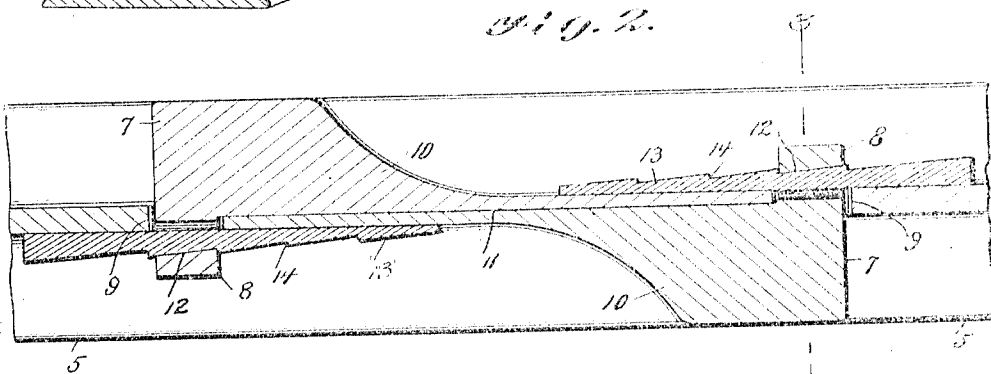
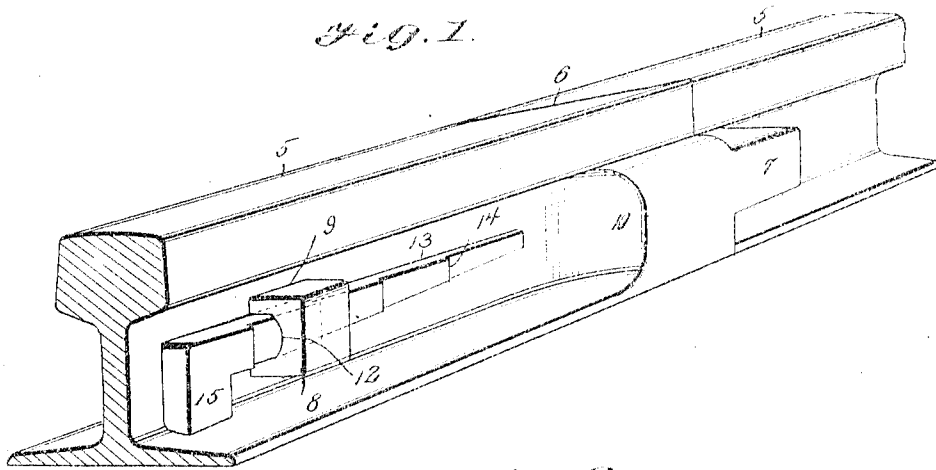


G. S. BEEMER.
RAIL JOINT.
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1,064,125.

Patented June 10, 1913.



WITNESSES
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GEORGE S. BEEMER, OF MEEKER, COLORADO.

RAIL-JOINT.

1,064,125.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed April 7, 1913. Serial No. 759,445.

To all whom it may concern:

Be it known that I, GEORGE S. BEEMER, a citizen of the United States, residing at Meeker, in the county of Rio Blanco and State of Colorado, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to that class of rail joints known as scarf joints, and its object is to provide a novel and improved fastening whereby a strong and durable joint is produced.

The invention also has for its object to provide a joint which is smooth, so that the car wheels may pass over the same without being jolted.

A further object is to provide a joint which is simple and inexpensive, and which enables the rails to be easily and quickly laid or taken up.

In order that the invention may be better understood, reference is had to the accompanying drawing in which—

Figure 1 is a perspective view of the joint. Fig. 2 is a longitudinal section taken through the web portion of the rails. Fig. 3 is a vertical section on the line 3—3 of Fig. 2. Fig. 4 is a perspective view of one end of one of the rails.

Referring specifically to the drawing, the abutting ends of the rails 5 are cut diagonally, or beveled, as indicated at 6, to form a scarf joint. From the web portion of each rail, at the extremity thereof, extends an integral tongue 7, the outer end of which latter has an inward lateral bend 8 which passes through a transverse aperture 9 in the web of the adjacent rail and projects from the opposite side thereof. Thus, the two rails are hooked together and prevented from separating endwise. Lateral separation is prevented by a means to be presently described.

The apertures 9 are longer than the width of the bends 8 so that the rails may expand or contract. The parts 8 fit snugly between the top and bottom of the apertures, whereby relative vertical movement of the rails is prevented, and the rails are held so that their heads are flush at the top. A smooth joint is thus produced, over which the car wheels pass without jolts or bumps.

In order to provide enough material at the beveled extremities of the rails for the tongues 7, the webs are thickened at this

point, as indicated at 10. The tongues 7 project forward from the beveled ends of the rails, the outer side of the tongues being flush with the corresponding sides of the thickened parts 10 of the webs, and the inner sides being flush with the corresponding sides of the webs, the latter being halved forwardly from the apertures 9, as indicated at 11, so that the inner sides of the hooks may fit against the corresponding sides of the webs, as shown in Fig. 2.

The following means are provided for preventing lateral separation of the rails 5: In the projecting ends of the parts 8 are transverse apertures 12 extending horizontally or in the direction of the length of the rails. Into each of these apertures is driven a key 13 which is tapered in the direction of its length so that it may be firmly seated. The key has notches 14 on one side adapted to engage the edge of the aperture and thus lock the key against getting loose and slipping out. The key also has a head or enlargement 15 so proportioned that when the key is driven home, said head or enlargement engages the base flange of the rail, thus providing an additional safeguard against the key getting loose. The head holds the key so that it always points straight ahead. The keys fit the webs of the rails and when driven they draw the parts 8 and thus securely clamp the rail ends together.

By the structure herein described the rails can be easily and quickly joined or disconnected, and a strong and durable joint is had. The joint is also smooth and the car wheels pass over the same without jolts or bumps.

I claim:

1. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends having apertured webs, hooks extending from the rail ends, said hooks passing through the apertures and projecting therefrom, the projecting portion of each hook having a transverse aperture, and tapered keys driven through said transverse apertures against the webs of the rails, said keys having notched portions engaging the edge of the apertures.

2. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends having apertured webs, hooks extending from the rail ends, said hooks passing through the aper-

ures and projecting therefrom, the projecting portion of each hook having a transverse aperture, and tapered keys driven through said transverse apertures against the webs of the rails, said keys having heads engaging the base flanges of the rails.

3. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends having apertured webs, hooks extending from the rail ends, said hooks passing through the apertures and projecting therefrom, the projecting portion of each hook having a transverse aperture, and tapered keys driven through said transverse apertures against the webs of the rails, said keys having notched portions engaging the edge of the apertures, and a head engaging the base flanges of the rails.

4. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends having apertured webs, tongues extending from the rail ends, and terminating in lateral portions passing through the apertures and projecting therefrom, the projecting lateral portions having transverse apertures, tapered keys driven through the apertures against the webs of the rails, the rail webs at the ends of the rail being halved and the inner sides of the aforesaid tongues fitting against the said halved portions of the webs.

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

GEORGE S. BEEMER.

Witnesses:

CLAUDE J. WILSON,
R. HARTKE.