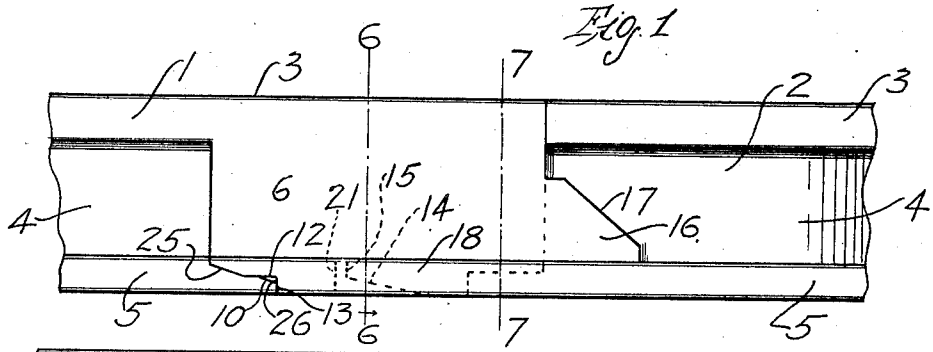
C. W. DRAKE.

RAIL JOINT.

APPLICATION FILED APR. 26, 1913.

1,067,322. Patented July 15, 1913.

Fig. 1



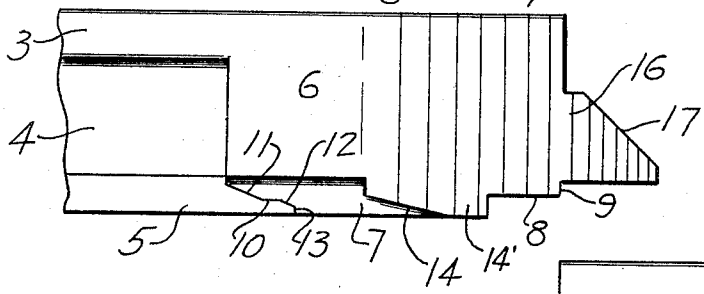


Fig. 2

Fig. 3

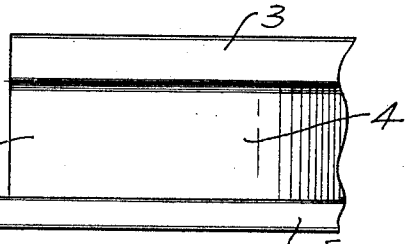
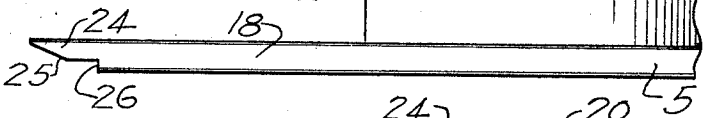
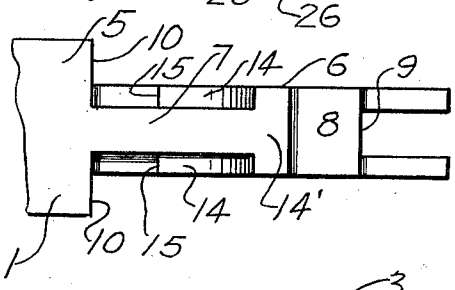


Fig. 4





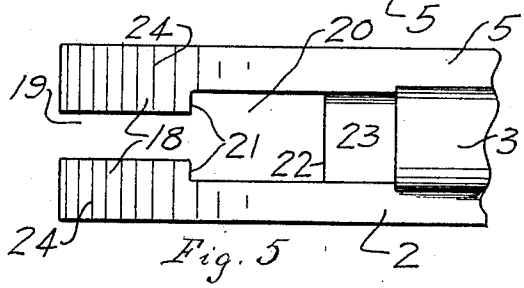


Fig. 5

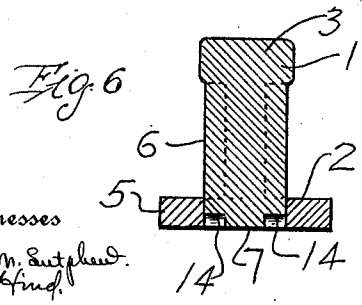


Fig. 6

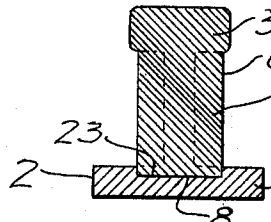


Fig. 7

Witnesses

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RAIL-JOINT.

1,067,322. Specification of Letters Patent. **Patented July 15, 1913.**

Application filed April 26, 1913. Serial No. 763,915.

To all whom it may concern:

Be it known that I, CHARLES W. DRAKE, a citizen of the United States, residing at Kester, in the county of Roane and State of West Virginia, 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, and an object thereof is the provision of a device of this character in which the meeting ends of a pair of rails are formed with interlocking means whereby separation of the rails is prevented.

A further object of this invention is the provision of a rail joint in which one of the rails is formed with a projecting base flange in which a slot is formed, the other rail having projections formed on its web for engagement in the slot of the extended base flange, whereby separation of the rails is prevented.

With these and other objects in view, my invention consists in certain novel constructions, combinations and arrangements of parts, to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which—

Figure 1 is a side elevation showing the rails connected; Fig. 2 is a side elevation of one of the rails; Fig. 3 is a side elevation of the other rail; Fig. 4 is a bottom plan view of one of the rails; Fig. 5 is a top plan view of the other rail; Fig. 6 is a section on the line 6—6 of Fig. 1; and Fig. 7 is a section on the line 7—7 of Fig. 1.

Referring more particularly to the drawings, the numerals 1 and 2 designate a pair of rails, the meeting ends of which are formed with interlocking means to prevent separation of the rails. The rails comprise treads 3, webs 4 and base flanges 5, the web 4 of the rail 1 being enlarged as at 6, at one end to substantially the same width as the treads 3 thereof. The enlarged portion 6 of the web is cut away at its lower edge on opposite sides at the inner end thereof, to form a central longitudinal rib 7. The lower face of the enlarged portion 6 is cut away at its forward extremity to form a recess 8, thereby providing a shoulder 9. The base flanges 5 of the rail 1 are formed with reduced extensions 10 which extend longitudinally of the rib and terminate intermediate of its ends. The spaces between the cut away portions of the enlargement 6 and the upper faces of the extensions 10 form channels 11, and the outer extremities of the extensions are beveled as at 12, the free extremities of the extensions forming shoulders 13. The lower face of the enlarged portion 6 of the web is beveled inwardly on its opposite sides as at 14, the beveled portions 14 being disposed on the opposite sides of the rib 7, and the ends of the beveled portions forming shoulders 15. It will be seen that the portion of the web between the shoulders 15 and 9 forms a downwardly extending rectangular projection 14′. The forward extremity of the enlarged portion 6 of the web is provided with spaced projections 16, the upper edges of which are beveled as at 17, the spaced projections being adapted to engage the opposite faces of the web 4 of the rail 2.

The base flanges 5 of the rail 2 project beyond the web thereof, as at 18, the projecting portions of the base flanges being formed with a central longitudinal slot 19 which terminates at its inner end in an enlarged portion 20, the enlarged portion of the slot forming shoulders 21 at its outer end and a shoulder 22 at its inner end. The end of the web of the rail 2 is cut away to form a seat 23 in which the outer extremity of the enlarged portion 6 of the web of the rail 1 is adapted to rest, and the outer ends of the projecting portions of the base flanges are cut away on their under faces to form extensions 24, the under faces of which are beveled as at 25, the reduced portions forming shoulders 26.

When it is desired to connect the rails, the meeting ends thereof are raised off the ground so that the beveled portions 25 of the rail 2 engage the beveled portions 12 of the base flanges 5 of the rail 1, so that the beveled portions 17 of the extensions 16 of the rail 1 engage under the tread of the rail 2 on opposite sides of the web 4 thereof. Upon movement of the rails toward each other, the end of the rail 1 is moved downwardly by reason of the engagement of the beveled portion 17 thereof with the under face of the tread of the rail 2, so that the projection 14′ engages in the enlarged portion 20 of the slot 19, thereby locking the rails together. It will be seen that the projection 14′ is of slightly less length than the enlarged portion 20 of the slot, to allow expansion and contraction of the rails, the ex-

pansion and contraction being limited by reason of the engagement of the shoulder 9 with the shoulder 22 and the engagement of the shoulder 15 with the shoulders 21.

What I claim is:

1. A rail joint comprising the meeting ends of a pair of rails, one of said rails having its base flanges projecting beyond the tread and web thereof, the other rail having its tread and web projecting beyond the base flanges thereof, said projecting web having a pair of spaced extensions beveled on their upper edges adapted to engage on the opposite sides of the web of the first mentioned rail, as and for the purpose described.

2. A rail joint comprising the meeting ends of a pair of rails, one of said rails having its base flanges projecting beyond the web and tread thereof, extensions formed on the projecting portions of said base flanges, said extensions being beveled on their under faces, the other rail having its web and tread projecting beyond the base flanges thereof, the extremities of the base flanges of the second mentioned rail being formed with reduced extensions beveled on their upper faces, the extensions of the base flanges of the rails being adapted to overlap, as and for the purpose described.

3. A rail joint comprising the meeting ends of a pair of rails, one of said rails having its base flanges projecting beyond the tread and web thereof, the projecting portions of said base flanges being formed with a longitudinal slot, the other rail having its tread and web projecting beyond the base flanges thereon, means depending from the projecting portion of said web for engagement in said slot, said projecting web having a pair of spaced extensions adapted to engage on the opposite sides of the web of the first mentioned rail, as and for the purpose described.

4. A rail joint comprising the meeting ends of a pair of rails, one of said rails having its base flanges projecting beyond the web and tread thereof, the projecting portions of said base flanges having a longitudinal slot formed therein, beveled extensions formed on the projecting portions of said base flanges, the other rail having its web and tread projecting beyond the base flanges thereof, means formed on the projecting portion of said tread for engagement in said slot, the extremities of the base flanges of the second mentioned rail being formed with reduced beveled extensions, the extensions of the rails being adapted to overlap, as and for the purpose described.

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

CHARLES W. DRAKE.

Witnesses:
H. C. GEARY,
M. E. MORLEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."