

E. HOWELL.
RAIL JOINT.
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1,050,025.

Patented Jan. 7, 1913.

Fig. 1.

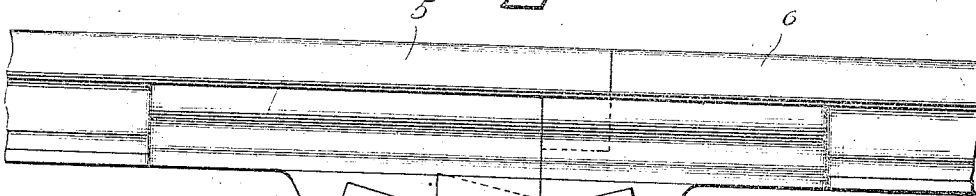


Fig. 2.

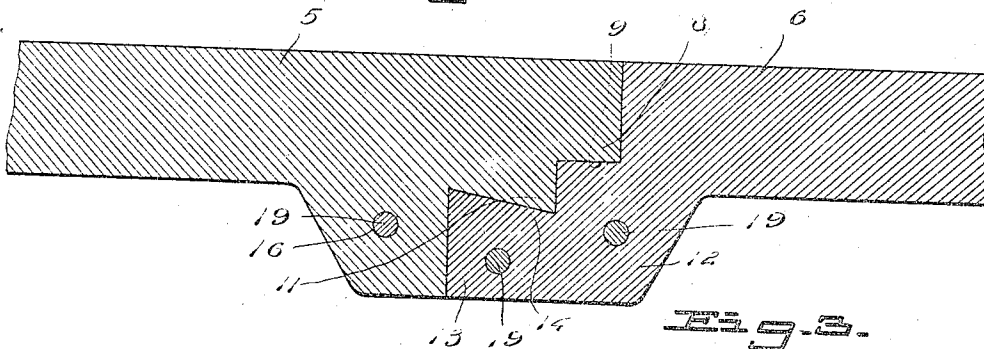
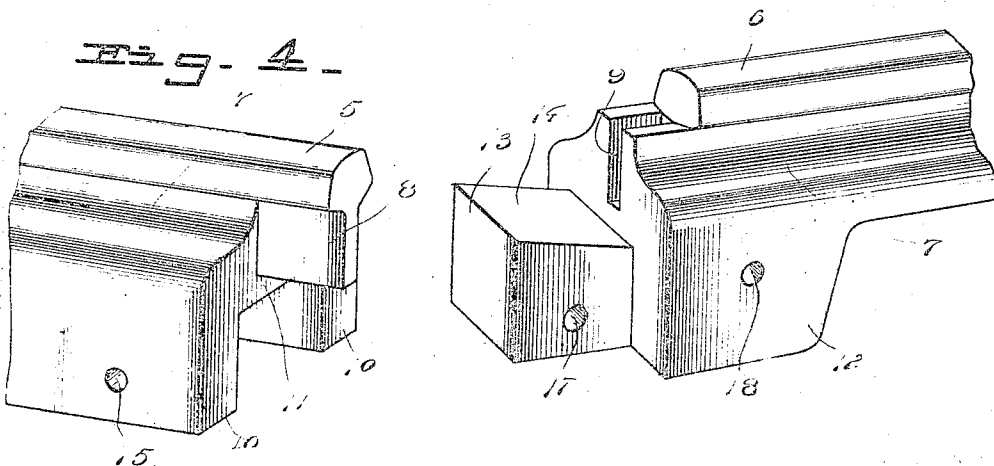


Fig. 3.

Fig. 4.



Witnesses

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RAIL-JOINT.

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To all whom it may concern:

Be it known that I, EUGENE HOWELL, a citizen of the United States, residing at Pawnee City, in the State of Nebraska, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

The general object of this invention is the provision of a joint for the meeting ends of two rails, said rails being constructed in a novel manner whereby the same are retained in flush interlocking engagement with each other so that any longitudinal or lateral displacement thereof will be effectually prevented.

In carrying out the objects of the invention generally stated above, it will be understood, of course, that the essential features thereof are susceptible of changes in details and structural arrangements, one preferred and practical embodiment being shown in the accompanying drawing, wherein:—

Figure 1 is a side elevation of the meeting ends of two rails constructed in accordance with the invention. Fig. 2 is a vertical longitudinal sectional view thereof. Fig. 3 is a fragmentary perspective view of one end of one of the meeting rails. Fig. 4 is a fragmentary perspective of the other end of one of the meeting rails.

Referring more particularly to the accompanying drawing in which like reference characters designate similar parts, 5 and 6 indicate the meeting ends of two rails which are constructed substantially in the ordinary well known manner. The ends of the rails 5 and 6 are substantially reinforced as indicated at 7, said rail 5 having its base and web portion cut away to provide a vertically arranged tongue 8 which is in alinement with the web portion of the rail and which is adapted to engage a suitable recess 9 formed in the end of the rail 6 when two rails are secured together. Depending from the longitudinal edges of the rail 5 are the oppositely disposed flanges 10 which are connected at their upper ends by a horizontal portion 11 which forms a portion of the base of the rail and which is beveled in an upwardly and inwardly inclined direction as is clearly illustrated in Fig. 2 of the drawing. The rail 6 has depending therefrom at its end an enlarged section 12 which terminates flush with the outer end of said rail. A block 13 substantially the width and depth of the space between the flanges

10 extends from the enlarged section 12 and said block has an inwardly and downwardly inclined top 14 which is adapted to engage the under inclined surface of the portion 11 of the rail 5 whereby the longitudinal displacement of said rails is prevented after the same have been secured together. The flanges 10 are provided with transverse registering openings 15 and 16, the openings 15 being adapted to register with a similar opening 17 formed in the block 13. When in registering relation these openings 15 and 17 together with the opening 18 formed in the section 12 are adapted to receive the fastening pins 19 which project beyond each side of the rails and have detachably mounted thereon the tie plates 20, said plates being retained in position by means of the cotter pins 21 which engage suitable openings formed in the extremities of said pins.

From the foregoing description taken in connection with the accompanying drawing, it will be seen that the invention contemplates providing a joint for the meeting ends of two rails which is simple in construction thus reducing the cost of manufacture of the same to a minimum and which is durable and effective in carrying out the purpose for which it is designed.

What is claimed is:—

1. The combination with the meeting ends of two rails, one of said rails being provided with oppositely disposed flanges depending from the longitudinal edges of the base thereof, the other rail having an enlarged section depending therefrom, of a block extending from said enlarged section and adapted to be engaged by said depending flanges, and locking pins engaging said flanges, said block and said enlarged section for retaining said rails in alinement with each other.

2. The combination with the meeting ends of two rails, one of said rails being provided with oppositely disposed flanges depending from the longitudinal edges of the base thereof, the other rail having an enlarged section depending therefrom, of a block extending from said enlarged section and adapted to be engaged by said depending flanges, locking pins engaging said flanges, said block and said enlarged section for retaining said rails in alinement with each other, and tie plates engaging said pins for preventing displacement thereof.

3. The combination with the meeting ends

of two rails, one of said rails being provided
with oppositely disposed flanges depending
from the longitudinal edges of the base
thereof, said flanges being connected at their
5 upper ends by a horizontal portion, said
portion being inclined upwardly and in-
wardly, the other rail having an enlarged
section depending therefrom, of a block ex-
tending from said enlarged section and hav-
0 ing its top inclined downwardly and in-

wardly to engage the inclined portion of
the other rail, and means engaging said
flanges, blocks, and enlarged section for re-
taining said rails in alining position.

In testimony whereof I affix my signature 15
in presence of two witnesses.

EUGENE HOWELL.

Witnesses:

HARRY C. JOHNSTON,
E. V. VAN HORNE.