

L. A. AUTRY & B. REAGAN,
RAIL JOINT,
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1,241,901.

Patented Oct. 2, 1917
2 SHEETS—SHEET 2.

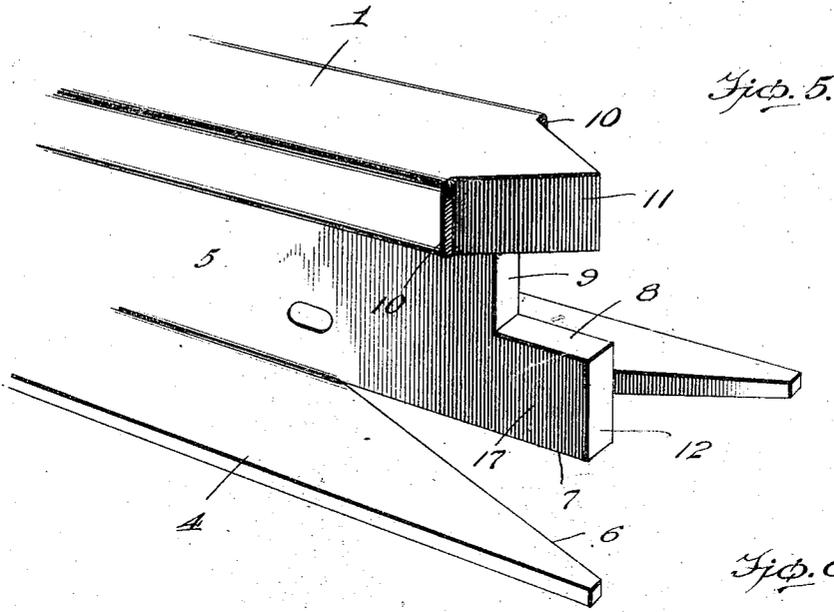


Fig. 5.

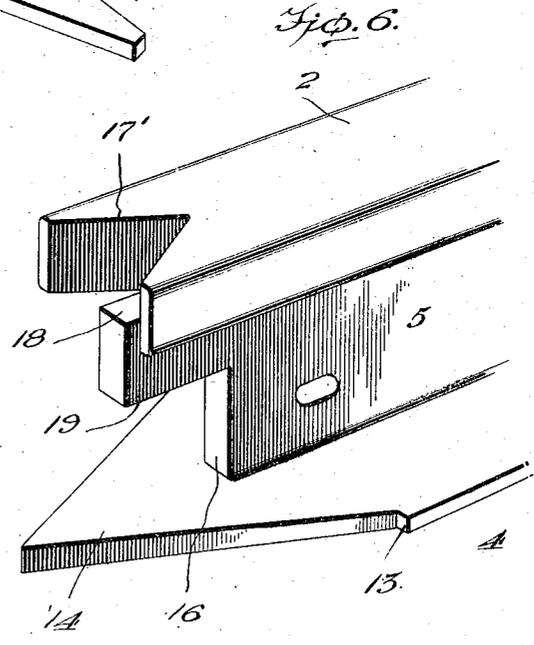
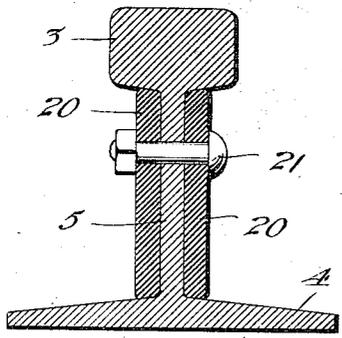


Fig. 6.

WITNESSES

Paul M. Hunt

INVENTORS

L. A. Autry
Barney Reagan

BY *Victor J. Evans*

ATTORNEY

UNITED STATES PATENT OFFICE.

LEMUAL ARLANDA AUTRY AND BARNEY REAGAN, OF FRANKLIN, TEXAS.

RAIL-JOINT.

1,241,901.

Specification of Letters Patent.

Patented Oct. 2, 1917.

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To all whom it may concern:

Be it known that we, LEMUAL ARLANDA AUTRY and BARNEY REAGAN, citizens of the United States, residing at Franklin, in the county of Robertson and State of Texas, have invented new and useful Improvements in Rail-Joints; of which the following is a specification.

The present invention relates to improvements in means for connecting the meeting ends of railway rails, and has for its primary object to construct the ends of two rails in such a manner as to provide an interlocking engagement between the said rails, when the rails are associated, whereby to prevent the sinking, creeping, or lateral movement of the rails and so retain the heads of the rails in proper alinement whereby the shocks and jars incident to the wheels of the rolling stock passing over the joint of ordinarily connected and constructed rails will be entirely overcome.

It is a further object of the invention to produce a scarf joint for rails which shall be of a comparatively simple construction and which shall afford a simple strong and effective connection between the rails.

With the foregoing objects in view, the invention resides in the construction, combination and operative arrangement of parts set forth in the following description and falling within the scope of the appended claim.

In the drawings,
Figure 1 is a side elevation of two rails constructed in accordance with the present invention, the rails being of mating engagement, and one of the fish plates being removed.

Fig. 2 is a sectional view approximately on the line 2—2 of Fig. 1, the connecting plates being secured to the rails.

Fig. 3 is a sectional view approximately on the line 3—3 of Fig. 1.

Fig. 4 is a top plan view.

Fig. 5 is a perspective view of one of the rail ends.

Fig. 6 is a similar view of the other rail end.

Referring now to the drawings in detail, the rails are indicated by the numerals 1 and 2, respectively. The body of the rails is of the ordinary construction, including the usual head 3, base 4, and connecting web 5, the webs being provided with the usual bolt openings.

The base 4, of the rail 1, is continued a suitable distance beyond the end of the said rail, and the said base, at a slight but suitable distance, inward of the end thereof, is cut angularly from opposite directions providing the base with the substantially V-shaped opening 6, the web being cut horizontally in a line with the upper face of the base, so that the said web is extended centrally over the opening 6, the under face of the extension of the web being horizontally straight, as indicated by the numeral 7. The web 5, of the said rail 1, is cut horizontally in a line approximately on the axial center of the said web and is likewise cut horizontally at the junction of the web with the head 3 of the said rail 1, and the said web at the terminals of the said referred to horizontal cuts is cut transversely providing the end of the web with a substantially rectangular depression or opening 8, the upper and lower walls of which being straight and the end wall 9 being arranged at a right angle to the plane of the said horizontal walls. The head 3 of the rail 1, at a suitable distance, inward of the wall or shoulder 9 is provided with vertically disposed shoulders 10, and the said head 3, at the terminals of the shoulders 10 is cut angularly in opposite directions from the said shoulders, providing the head 3 of the rail 1 with a substantially V-shaped projection 11. The projection 11 terminates approximately in a line with the terminal of the web 5 of the rail 1, which terminal is indicated, for distinction, by the numeral 12.

The rail 2 has its base 4, at a suitable distance inward of the rail proper provided with transverse shoulders 13, and the said base, from the said shoulders is cut angularly to the terminal of the said base, which, extends a suitable distance beyond the rail proper, providing the said base with a substantially V-shaped portion 14, which is of a size to be snugly received in the V-shaped depression 6 in the base 4 of the rail 1, and the shoulders 13 are designed to contact with the straight ends 15 of the base of the rail 1, outwardly of the angular walls providing the V-shaped depression 6. The web 5 of the rail 2 is cut horizontally to a line with the axial center of the said web as well as being cut horizontally in a line with the upper surface of the base 4 and is then cut transversely providing the same with a

substantially rectangular pocket 16, which is of a size to snugly receive the projecting portion 17 of the web of the rail 1, the end of the said portion 17 contacting with the end wall provided by the cut away portion or opening 16 of the web of the rail 2. The head 3 of the rail 2, at a suitable distance inward of its ends, is cut angularly from opposite directions providing the same with a V-shaped opening 17', the web of the said rail 2 being cut horizontally so that the same provides a straight ledge 18 which projects centrally of the opening 17' in the head of the said rail 2, and this ledge, together with the referred to cut away portion 16 forms the end of the web 5 of the rail 2 with a substantially rectangular extension 19 of the size to be snugly received in the cut away portion or notch 8 in the end of the web 5 of the rail 1.

The fish plates or connecting bars are indicated by the numerals 20, the same being provided with openings which aline with the openings in the webs of the rails, and the numerals 21 designate the connecting elements which pass through the said openings and secure the plates to the rails.

Having thus described the invention, what we claim is:

In a device of the class described, two rails each having projecting base portions, the base of one of the rails inward of the

end thereof being formed with a V-shaped opening arranged below the base of the said rail, the other rail having its base provided with shoulders and being cut angularly from the said shoulders to the end thereof forming the same with a V-shaped element designed to be received in the referred to V-shaped opening of the first mentioned rail, said first mentioned rail having its web, at the upper portion thereof, notched longitudinally, the second mentioned rail having its web, at the lower portion thereof notched longitudinally, and the projecting portions of the webs of the respective rails designed to be received in the notches thereof, said first mentioned rail having its head adjacent the end thereof provided with transverse shoulders and with a V-shaped extension projecting from said shoulders, the second mentioned rail having its head, inward of the end thereof formed with a V-shaped depression designed to receive the V-shaped portion upon the end of the first mentioned rail, and means comprising angle bars and securing elements therefor for connecting the rail ends.

In testimony whereof we affix our signatures.

LEMUAL ARLANDA AUTRY.
BARNEY REAGAN.

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