

C. D. BACKUS.

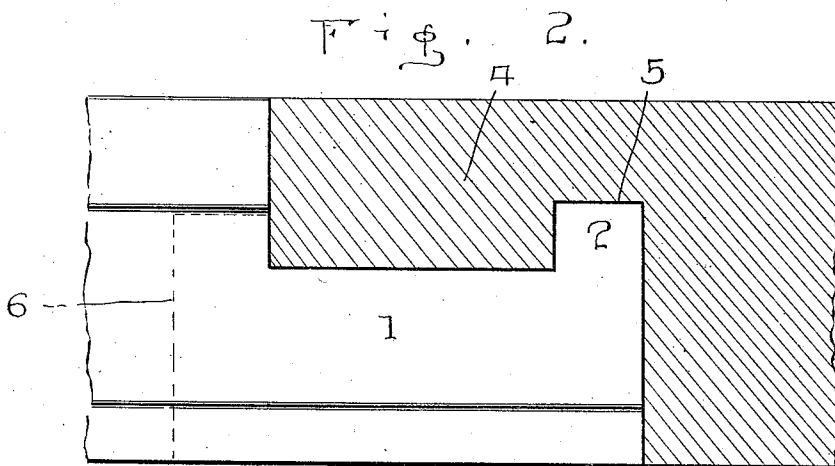
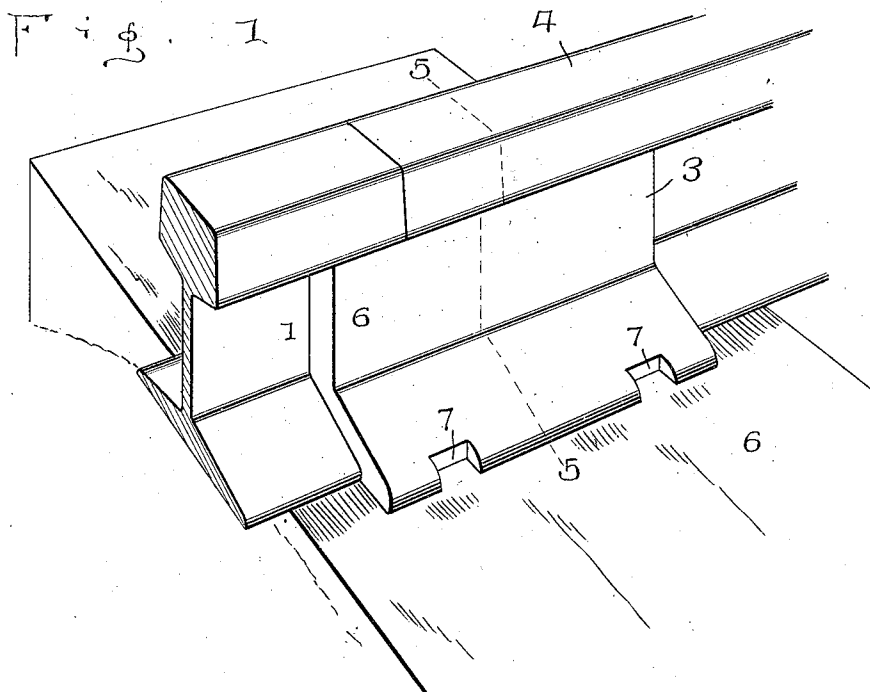
RAIL JOINT.

APPLICATION FILED APR. 7, 1908.

Patented Dec. 8, 1908.

2 SHEETS—SHEET 1.

906,364.



Inventor

C. D. Backus

Witnesses

Thos. W. Riley  
W. P. Lawson

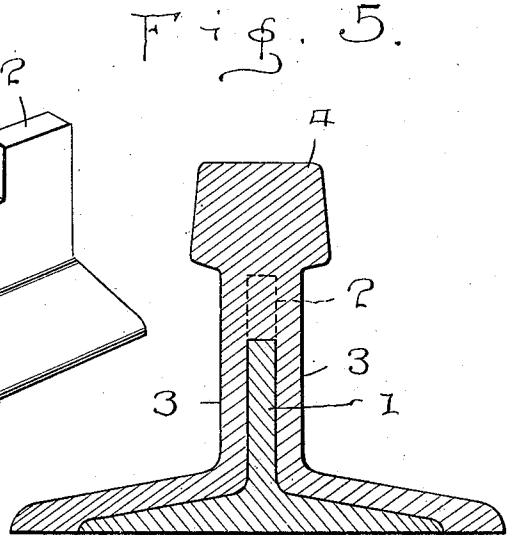
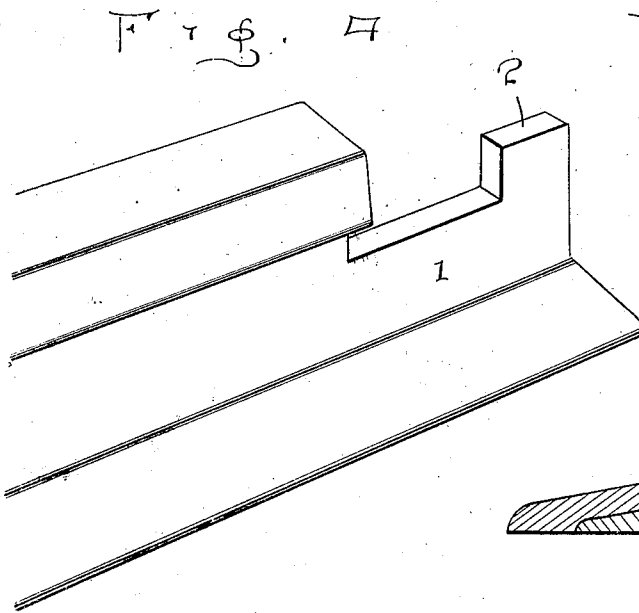
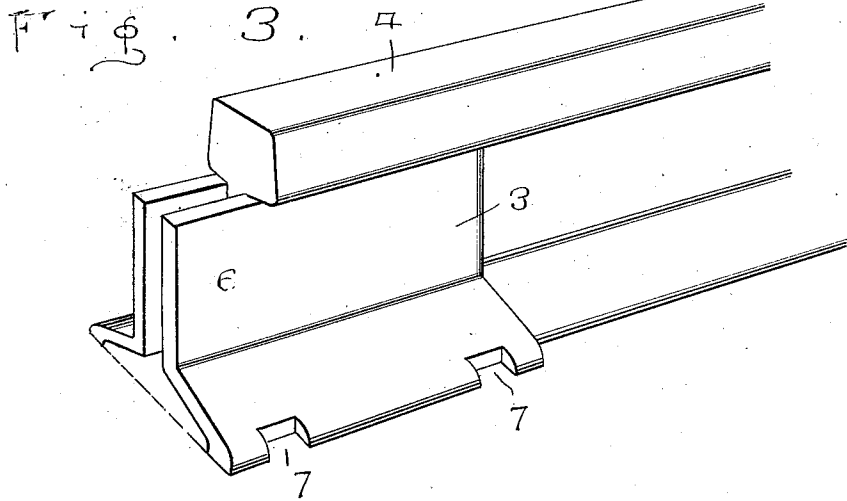
By

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# UNITED STATES PATENT OFFICE.

CORNELIUS D. BACKUS, OF BELVA, WEST VIRGINIA.

## RAIL-JOINT.

No. 906,364.

Specification of Letters Patent.

Patented Dec. 8, 1908.

Application filed April 7, 1908. Serial No. 425,603.

### *To all whom it may concern:*

Be it known that I, CORNELIUS D. BACKUS, a citizen of the United States, residing at Belva, in the county of Nicholas and State of West Virginia, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in rail joints and it is primarily the object of the invention to provide a novel device of this character, which will obviate the use of auxiliary fish plates.

It is also an object of the invention to provide a novel device of this character, wherein the pounding of the rails is reduced to a minimum.

It is also an object of the invention to provide a novel device of this character, which will be simple in construction, efficient and advantageous in practice and comparatively inexpensive to manufacture.

With the above and other objects in view, the invention consists in the details of construction and in the novel arrangement and combination of parts to be hereinafter referred to.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification, wherein like characters of reference denote corresponding parts in the several views, and in which,

Figure 1 is a view in perspective illustrating the invention. Fig. 2 is a view in elevation and partly in section of the invention. Fig. 3 is a view in perspective of one end of a rail. Fig. 4 is a view in perspective of an opposed end of a rail, and, Fig. 5 is a sectional view taken on line 5—5, Fig. 1.

In the drawings 1 denotes the end portion of a rail having the head and a portion of the web cut therefrom, the outer end of the web portion being provided with an upstanding tongue or projection 2 terminating on a line

flush with the under surface of the head. The portion 1 is adapted to extend between fish plates 3 formed integral with an end portion of the rail 4, said fish plates overlapping, as at 6, the portion of the adjacent rail beyond the portion 1 thereof.

The projection 2 extends within a recess formed in the under surface of the head of the rail 4, which connects the upper edges of the plates 3 a greater portion of their length. By this arrangement, it will be seen that any longitudinal movement of the rails, one with relation to the other, is effectively prevented, and that by having the end portion 6 of the fish plate overlapping the adjacent rail, any lateral movement of the rails, one with relation to the other, is prevented.

In effecting a rail joint in accordance with the present invention, it is essential that the meeting ends of the rails should rest on a cross tie 6. The integral plates 3 project beyond the bases or flanges of the rails and are provided with notches 7 for the passage of retaining spikes ordinarily employed.

### What I claim is:

In combination, a rail having a portion of its web cut away, said cut-away portion terminating in an up-standing lug, the upper edge of the lug being approximately flush with the under surface of the head and a second rail having fish plates formed integral with the sides thereof overlapping the web of the first-named rail and the base thereof, the web of said second rail being provided with a recess in which fits the projection of the first-named rail, the bases of the fish plates being provided with notches in the edges thereof, said notches being of less depth than the distance from the edges of the bases of the fish plates to the edges of the rail.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CORNELIUS D. BACKUS.

Witnesses:

M. J. DARLINGTON,  
D. BROWN.