

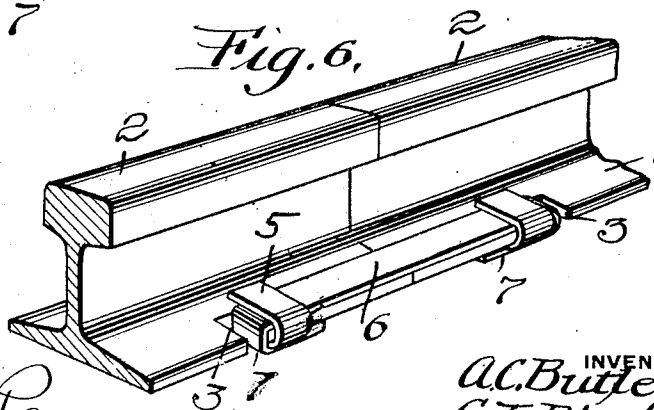
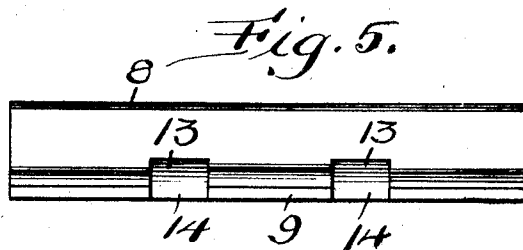
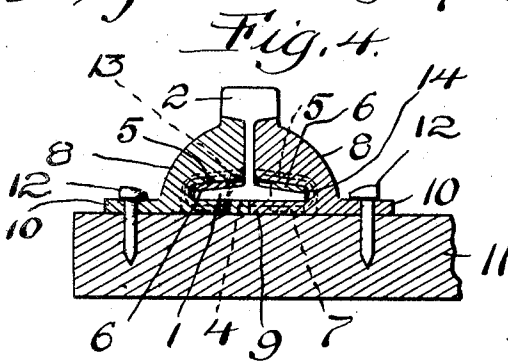
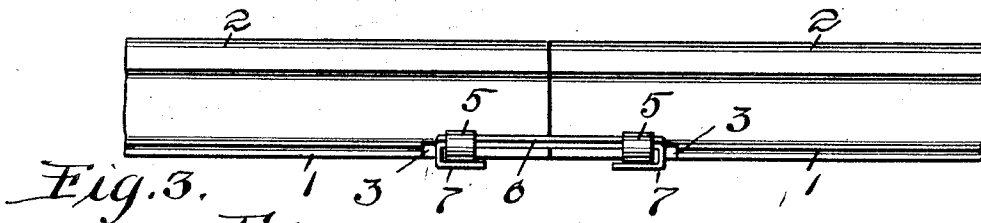
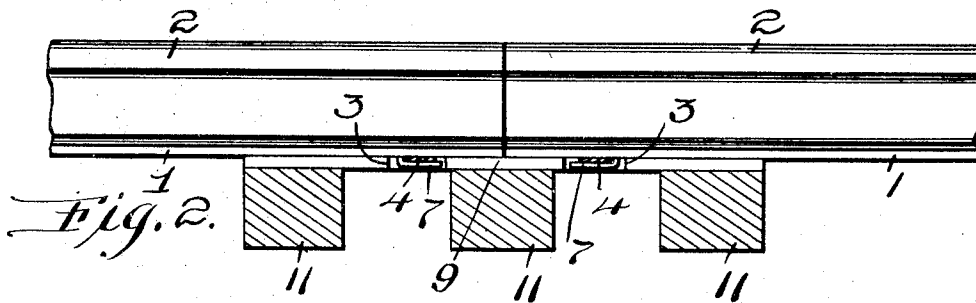
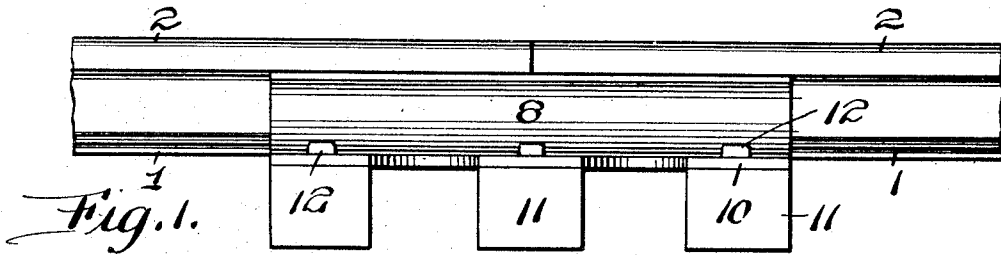
A. C. BUTLER & C. T. BLACKSTOCK.

RAIL JOINT.

APPLICATION FILED NOV. 16, 1912.

1,059,027.

Patented Apr. 15, 1913.



WITNESSES

Samuel Payne
Charles H. Butler

INVENTORS

A.C. Butler and
C.T. Blackstock.

By C.T. Blackstock
Attorneys

UNITED STATES PATENT OFFICE.

ALLEN C. BUTLER AND CHARLES T. BLACKSTOCK, OF MILLVALE, PENNSYLVANIA.

RAIL-JOINT.

1,059,027.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed November 16, 1912. Serial No. 731,841.

To all whom it may concern:

Be it known that we, ALLEN C. BUTLER and CHARLES T. BLACKSTOCK, citizens of the United States of America, residing at Millvale, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail joints, and the objects of our invention are to provide positive and reliable means, as hereinafter set forth, for connecting the confronting or abutting ends of rails, and to obviate the necessity of using bolts and nuts as a fastener for rails.

Other objects of our invention are to provide novel splice bars that serve as a rail chair for supporting and bracing the confronting ends of rails, and to provide a chair for inclosing the fasteners of rails, whereby said fasteners are not exposed to the forces of nature or susceptible to injury by derailed rolling stock.

Further objects of our invention are to provide a rail joint consisting of comparatively few parts inexpensive to manufacture, easy to install and highly efficient as a connecting medium for rails of various types.

With the above and other objects in view the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein:—

Figure 1 is a side elevation of a rail joint in accordance with this invention, Fig. 2 is a longitudinal sectional view of the same, Fig. 3 is a side elevation of the rail joint with the splice bars thereof removed, Fig. 4 is a cross sectional view of the rail joint, Fig. 5 is an elevation of the inner side of a splice bar, and Fig. 6 is a perspective view of a fastener in connection with rails.

To put our invention into practice we provide the base flanges 1 of rails 2 with oppositely disposed notches 3 adjacent to the confronting or abutting ends of said rails. Arranged upon the bottom of said rails are transverse straps 4 having hook-shaped ends 5 extending upwardly through the notches 3. Extending under the hook-shaped ends 5 of

said transverse straps are longitudinal straps 6 arranged upon the base flanges 1 of the rails, said longitudinal straps retaining said transverse straps in position. The longitudinal straps have hook-shaped ends 7 that extend through the notches 3 and engage under the ends of the transverse straps, as best shown in Figs. 2 and 6. Bracing the sides of the rails 2 are splice bars 8 having lateral inwardly projecting flanges 9 extending under the rails and lateral outwardly projecting flanges 10 extending onto ties 11 or other supports upon which the splice bars are placed. The flanges 10 are spiked or otherwise secured, as at 12 to the ties 11 and the inner sides of the splice bars are provided with pockets 13 in communication with slots 14 formed in the flanges 9. The pockets 13 and the slots 14 provide clearance for the hook-shaped ends of the transverse and longitudinal straps. The straps are inclosed by the splice bars and said splice bars serve as a chair for the rails. Longitudinal and vertical displacement of said rails is practically impossible and by anchoring the splice bars upon a plurality of ties, said bars are firmly held and the rails properly braced.

One embodiment of our invention has been illustrated, but we would have it understood that the structural elements are susceptible of such changes as fall within the scope of the appended claims.

What we claim is:—

1. In a rail joint, the combination with rails having the base flanges thereof notched, of straps arranged transversely of said base flanges and having hook-shaped ends extending into the notches thereof, longitudinal straps extending under the hook-shaped ends of said transverse straps, said longitudinal straps having hook-shaped ends extending through the notches of the base flanges and under the hook-shaped ends of said transverse straps, and splice bars bracing said rails and inclosing said straps.

2. In a rail joint, the combination with rails having the base flanges thereof notched, of straps arranged transversely of said base flanges and having hook-shaped ends extending into the notches thereof, longitudinal straps extending under the hook-shaped ends of said transverse straps, said longitudinal straps having hook-shaped

ends extending through the notches of the base flanges and under the hook-shaped ends of said transverse straps, splice bars bracing said rails and inclosing said straps, said splice bars having pockets providing clearance for the ends of said straps, and lateral flanges carried by said splice bars and extending under said rails.

In testimony whereof we affix our signatures in the presence of two witnesses.

ALLEN C. BUTLER.

CHARLES T. BLACKSTOCK.

Witnesses:

MAX H. SROLOVITZ,

KATHERINE ERRETT.