

J. BERLIEN.
RAIL JOINT.

APPLICATION FILED JULY 24, 1911.

1,022,460.

Patented Apr. 9, 1912.

2 SHEETS—SHEET 1.

FIG. 1.

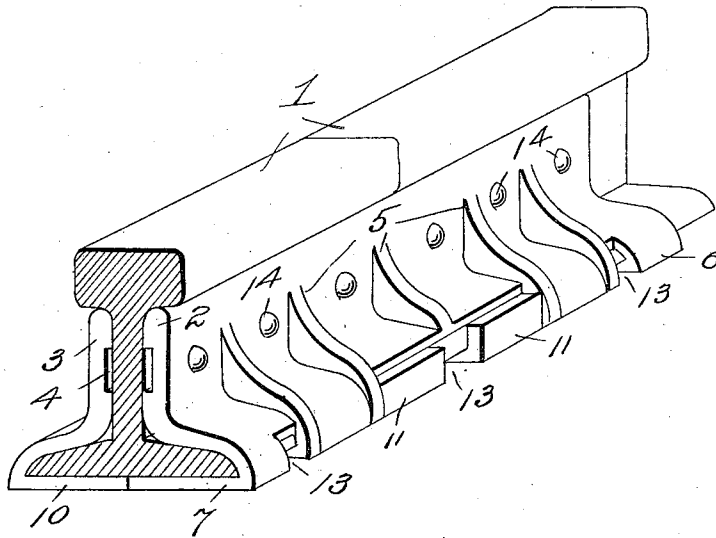
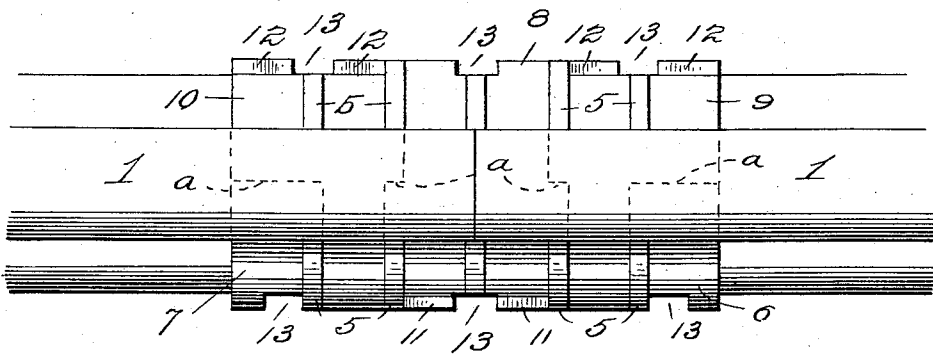


FIG. 2.



Inventor

John Berlien

Witnesses

E. C. Duffy

W. M. Harper

By

E. T. Berlien
Attorney

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2 SHEETS-SHEET 2.

FIG. 3.

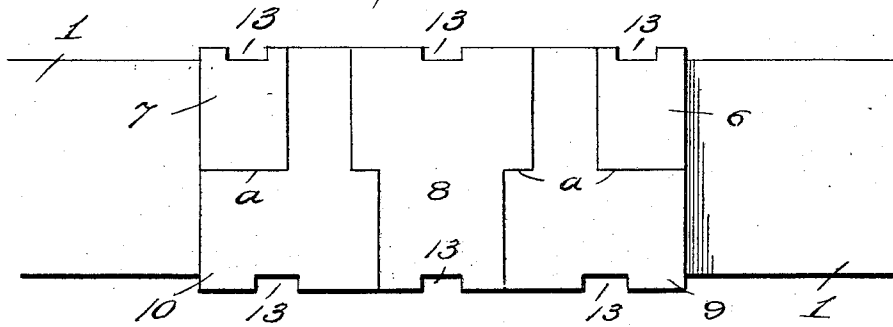


FIG. 4.

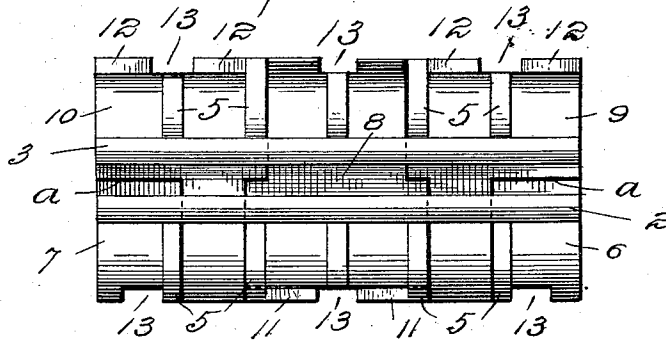
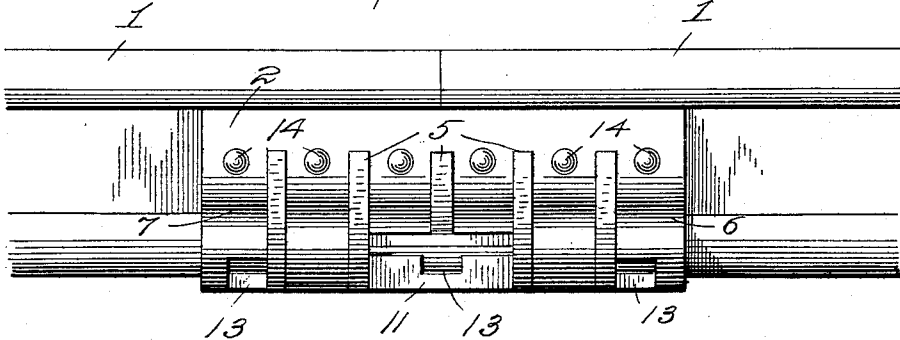


FIG. 5.



Inventor

John Berlien

Witnesses

E. Duffy

W. M. Harper

By

E. P. Bunker

Attorney

UNITED STATES PATENT OFFICE.

JOHN BERLIEN, OF ST. LOUIS, MISSOURI.

RAIL-JOINT.

1,022,460.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed July 24, 1911. Serial No. 640,135.

To all whom it may concern:

Be it known that I, JOHN BERLIEN, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail joints and one of the principal objects of the invention is to provide strong, durable and efficient means for holding the rail ends together to prevent spreading, sinking or creeping of the rails at the joints.

Another object of the invention is to provide a rail joint comprising two interlocking splice-plates which extend underneath the rail to form a chair for the rail, said splice plates having reinforcing ribs, and means whereby the plates will be firmly spiked to the tie.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which,

Figure 1 is a perspective view of a rail joint made in accordance with my invention; Fig. 2 is a top plan view of the same; Fig. 3 is a bottom plan view of the same; Fig. 4 is a top plan view of the splice plates removed from the rails and slightly separated; Fig. 5 is a side elevation of the rail joint secured to the sides of the meeting ends of a pair of rails.

Referring to the drawings, the numeral 1 designate the meeting ends of the railway rails; 2 is one of the splice plates, and 3 is the other splice plate. The plate 2 extends up at the sides of the webs of the rails and is recessed longitudinally as at 4. A series of integral reinforcing ribs 5 extend from the plate 2 down to the side edge of the plate and extending underneath the rail are the interlocking members 6, 7 and 8. The members 6 and 7 extend half-way across underneath the base flanges of the rails, and the member 8 extends underneath across through the center, as shown more particularly in Fig. 3. The plate 3 is substantially identical with the plate 2 excepting that the interlocking members 9 and 10 extending under the base flanges of the rails project entirely across and are interlocked by suit-

able shoulders *a* with the members 6, 7 and 8, as shown more clearly in Fig. 3. The terminal ends of the member 8 are bent upwardly as at 11 to bear against one side of the base flanges of the rails 1, while the members 6 and 7 are provided with up-turned flanges 12 to engage the opposite edges of the flanges of the rails. At the sides spike apertures 13 are provided, there being three upon each side of the rails. The plates 2 and 3 are secured to the webs of the rails by suitable bolts 14.

From the foregoing it will be obvious that a rail joint made in accordance with my invention and secured to the meeting ends of the rails will interlock underneath the base flanges of the rails and will prevent spreading, while the chair members will also prevent sinking or creeping of the rails.

I claim:—

1. A rail joint comprising oppositely disposed splice plates one of said plates having two interlocking members extending across underneath the base flange of the rail, the opposite plate having three interlocking members, two of which extend half way across underneath said base flange and engage shoulders formed in the members of the first mentioned plate, the third member extending across underneath said base flange, said member having shoulders which interlock with shoulders formed in the members of the first mentioned plate.

2. A rail joint comprising oppositely disposed splice plates provided with reinforcing ribs, one of said plates having two interlocking members extending partially across underneath the base flange of the rail to engage shoulders formed in the outer edges of the interlocking members of the other plate, and a third interlocking member extending across underneath said base flange to engage shoulders formed in the inner edges of the first mentioned interlocking members.

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

JOHN BERLIEN.

Witnesses:

FRANK ARTHUR SMITH,
G. R. HELWIG.