No. 715,579. Patented Dec. 9, 1902.

G. HIRSCHELL.

RAIL JOINT.

(Application filed July 15, 1902.)

(No Model.)

Fig. 1.

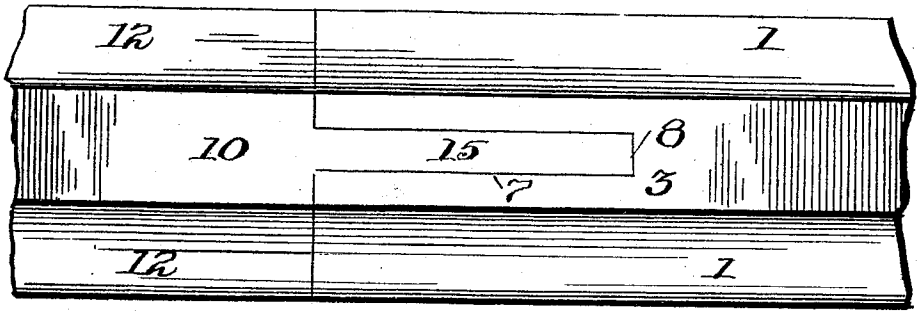


Fig. 2.

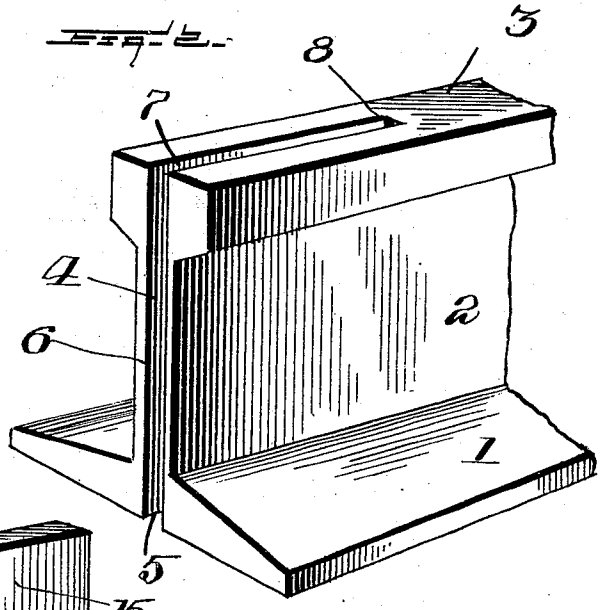
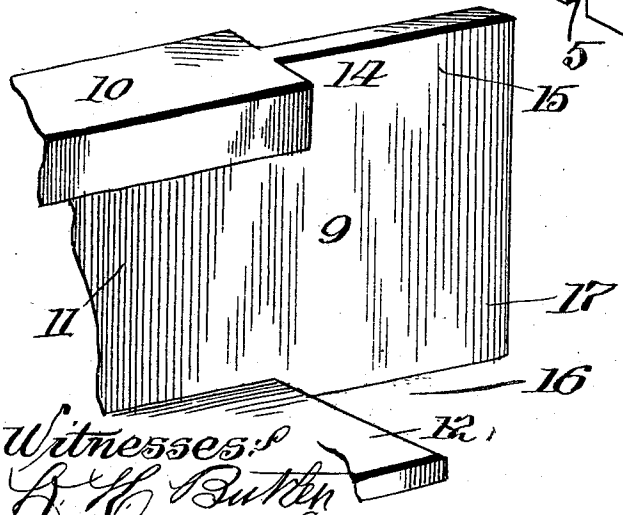


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE HIRSCHELL, OF PITTSBURG, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 715,579, dated December 9, 1902.

Application filed July 15, 1902. Serial No. 115,646. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HIRSCHELL, a citizen of the United States of America, residing at Pittsburg, 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 drawings.

This invention relates to certain new and useful improvements in rail-joints, and has for its object the provision of novel means whereby two rails are joined together without the use of fish-plates or nuts and bolts.

Another object of my invention is to provide a rail-joint which when placed in position upon the ties will present a rail-joint which will be extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, highly efficient in use, and one wherein the use of nuts and bolts, as heretofore stated, is entirely dispensed with.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a top plan view of my improved rail-joint, showing the rails in position as when joined together. Fig. 2 is a perspective view of one end of the rail. Fig. 3 is a perspective view of the end of the corresponding rail.

In the drawings the reference-numeral 1 indicates the base of the rail, and 2 the web of the rail, which carries the head 3.

The reference-numeral 4 indicates a slot which is cut in the center of the end of the rail, said slot extending through the base, web, and the head of the rail, as indicated at 5, 6, and 7, forming vertical parallel walls extending in the same plane throughout, the said slot extending a short distance into the rail, as indicated at 8. The web 2 is of sufficient thickness to permit of the slot being formed therein.

The reference-numeral 9 indicates the end of the corresponding rail, which carries the head 10 and web 11 and base 12. The head of the rail is cut away, as indicated at 14, said cut-away portion forming an extending flange, as indicated at 15, this flange being equal in length to the slot 4. The base of the rail 12 is cut away, as indicated at 16, forming the lower part of the flange 9, as indicated at 17. This protruding flange is of the same thickness as that of the rail-web and has its side faces extending in the same plane throughout.

The manner of joining my improved rails is as follows: The rail 1 having been secured upon the tie, the rail 9 is placed adjoining the same, the flange 15 is inserted in the slot 4, and the head 10 is in alinement and abutting against the head 3, thus presenting a joint, as shown in Fig. 1 of the drawings.

While I have shown the most practical form of my invention, yet it will be obvious that various changes may be made in the details of construction without departing from the general spirit of the invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a rail-joint the combination of the rails, a flange of equal thickness throughout its length formed integral with the end of one of the said rails, said flange being equal in width to the web of the said rail and having its upper and lower edges lying flush with the upper and lower faces of the base and tread of the rail respectively, said other rail having a slot in its end extending through the tread and base thereof to receive the said flange, substantially as described.

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

GEORGE HIRSCHELL.

Witnesses:

JOHN NOLAND,

E. E. POTTER.