G. FABRIZI.

RAIL JOINT.

APPLICATION FILED FEB. 3, 1912.

1,029,054. Patented June 11, 1912.

Fig. 1.

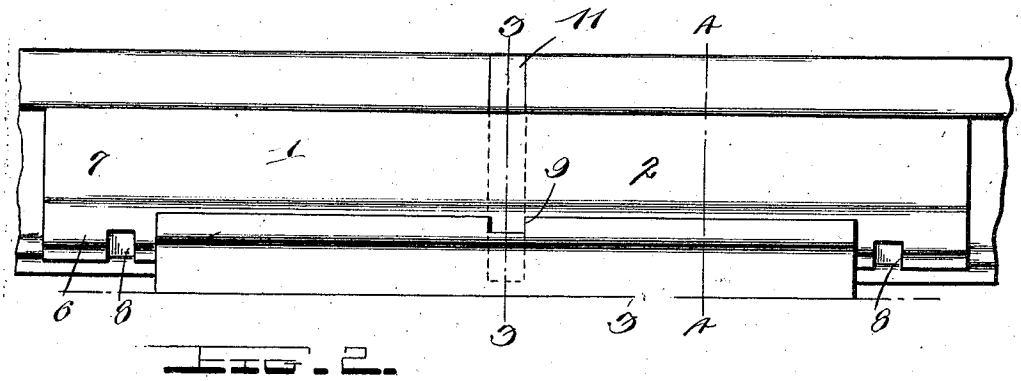


Fig. 2.

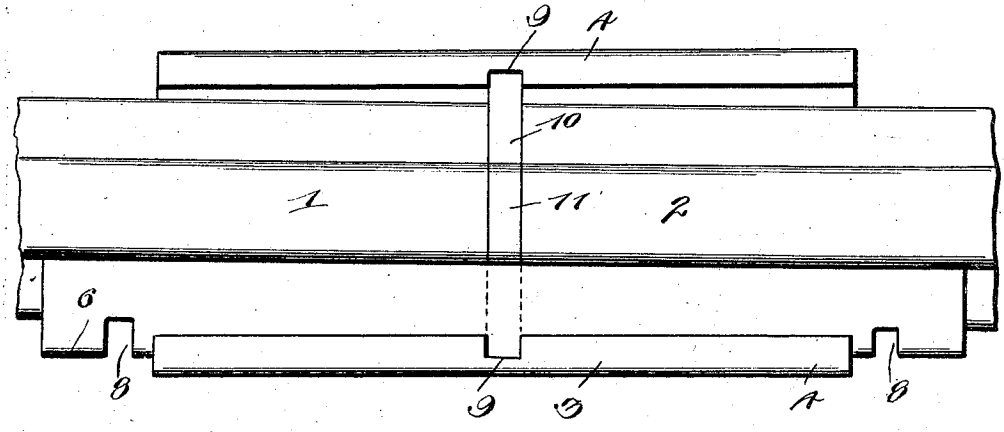


Fig. 3.

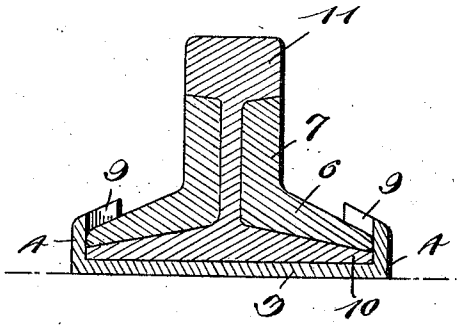
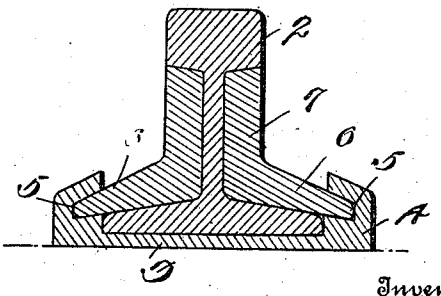


Fig. 4.



Inventor

G. Fabrizi,

Witnesses

Chas. L. Griesbauer.

A. B. Norton.

By Watson E. Coleman.

Attorney

UNITED STATES PATENT OFFICE.

GIUSEPPE FABRIZI, OF PITTSBURGH, PENNSYLVANIA.

RAIL-JOINT.

1,029,054. Specification of Letters Patent. Patented June 11, 1912.

Application filed February 3, 1912. Serial No. 675,249.

To all whom it may concern:

Be it known that I, GIUSEPPE FABRIZI, subject of the King of Italy, residing at Pittsburgh, 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 to the accompanying drawings.

This invention relates to new and useful improvements in rail joints and has for its object to provide a rail joint whereby the meeting ends of two rails are effectually connected together without the use of the customary bolts, the necessity for forming bolt holes in the ends of the rails being thus obviated and the cost of construction of the track being reduced to a minimum.

Another object of the invention is to provide a cushioning member formed the same shape as the rails and disposed between the meeting ends of the rails to take the wear off of the ends of the rails.

Another object of the invention is to provide a rail joint which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other objects in view, the invention consists in the novel features of construction, and the combination and arrangement of parts hereinafter more fully described, pointed out in the claims, and shown in the accompanying drawings, in which,

Figure 1 is a side elevation. Fig. 2 is a top plan view showing one of the fish plates removed. Fig. 3 is a sectional view on the line 3—3 of Fig. 1; and Fig. 4 is a sectional view on the line 4—4 of Fig. 1.

Referring more particularly to the drawings, the numerals 1 and 2 indicate the meeting ends of two rails. A chair 3 is provided to receive the meeting ends 1 and 2 and adapted to rest upon the cross ties and is rigidly secured to said ties, in any suitable manner. The chair 3 is provided with the side walls 4 having longitudinal grooves 5 formed in their inner faces adapted to receive the laterally extending base flanges 6 formed on the fish plates 7. These side walls 4 are made tapering toward one end, each wall tapering in the opposite direction from the other so that when the tapering flanges 6 of the fish plates 7 are placed in position, they will tend to bind against the rails and prevent any relative lateral movement of the same, said flanges and plates being held securely in place by means of spikes driven through the recesses 8 into the cross ties. Recesses 9 are formed in the side walls 4 to receive the flanges 10 formed on the cushioning member 11 which is arranged between the meeting ends of the rails 1 and 2. The flanges 10 of the member 11 extend beyond the flanges of the rails 1 and 2 into the recesses 9 so as to hold the member 11 against longitudinal movement. This member 11 can be made of a softer metal than the rails if so desired that there will be little or no wear on the ends of the rails, thus prolonging the life of the same. When these members 11 become worn, they can easily and quickly be replaced by removing the fish plates 7.

It will be seen from the above that I have provided a simple and efficient rail joint without the customary bolts and also provided means whereby the frictional wear of the ends of the rails is reduced to a minimum.

While I have shown and described the preferred form of my invention, it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

Having thus described this invention, what is claimed is:—

In combination with the meeting ends of two rails, of a chair adapted to receive the flanges of said rails, fish plates arranged parallel with said rails one upon each side thereof, having laterally extending base flanges formed thereon, and side walls formed on said chair, having longitudinal grooves formed in their inner faces to re-

ceive the flanges on said fish plates, a cushioning member arranged between the inner ends of said rails, said side walls having recesses formed therein, flanges formed on said cushioning member and disposed in said recesses to prevent longitudinal movement of said member.

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

GIUSEPPE FABRIZI.

Witnesses:
JOHN GALLAGHER,
J. T. CONROY.