

F. P. MEYER.
RAIL JOINT.

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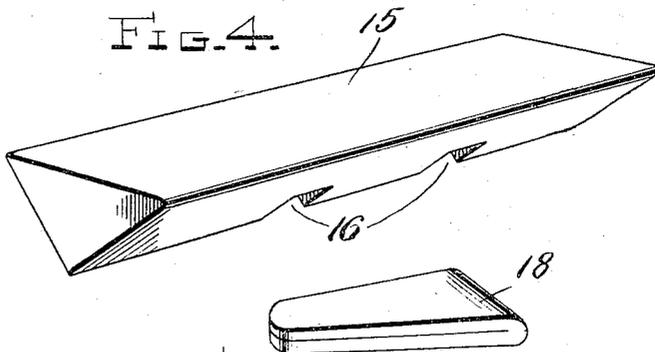
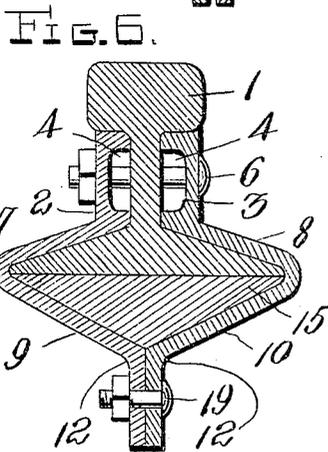
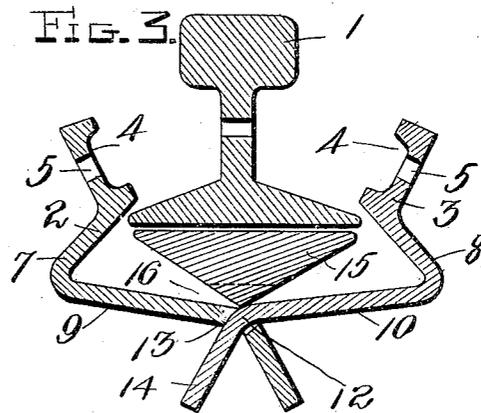
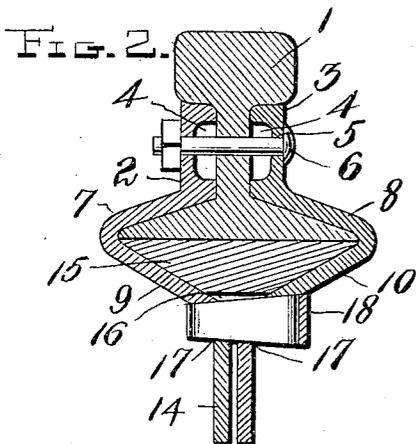
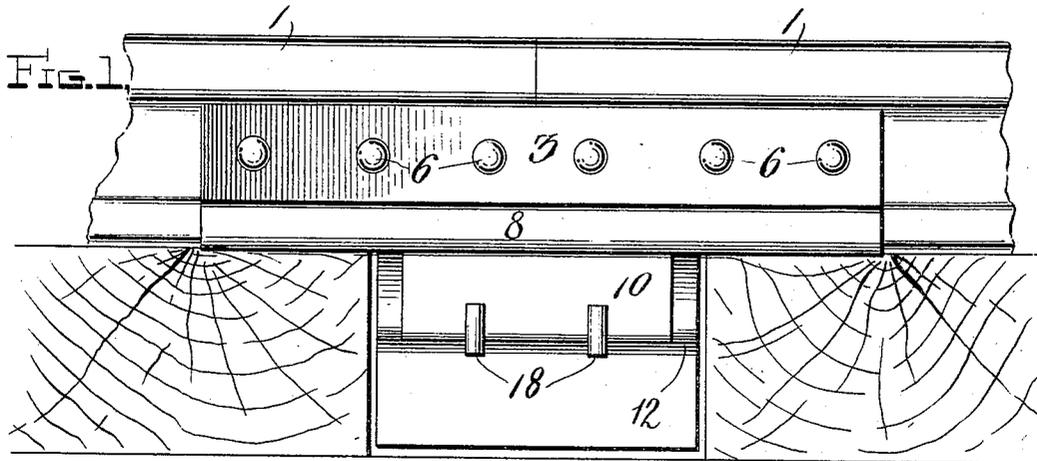


FIG. 5.

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Witnesses
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UNITED STATES PATENT OFFICE.

FRANK P. MEYER, OF POTTSVILLE, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 791,925, dated June 6, 1905.

Application filed March 23, 1905. Serial No. 251,644.

To all whom it may concern:

Be it known that I, FRANK P. MEYER, a citizen of the United States, residing at Pottsville, in the county of Schuylkill and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints; and I do 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 improvements in rail-joints.

The object of the invention is to provide a joint for the ends of railway-rails whereby they will be firmly connected and braced, thereby preventing the sagging and the consequent undue wearing of the same as well as the jolting of the trains in passing over the uneven ends of the rails.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of the meeting ends of two rails, showing the application of the invention thereto. Fig. 2 is a vertical cross-sectional view of the same. Fig. 3 is a similar view showing the manner of applying the fish-plates to the rail. Fig. 4 is a detail perspective view of the brace-bar to engage the under side of the rail. Fig. 5 is a similar view of the locking-key, and Fig. 6 is a vertical cross-sectional view showing a different manner of securing the plate.

Referring more particularly to the drawings, 1 1 denote the meeting ends of two sections of rails. 2 and 3 denote fish-plates arranged on each side of said meeting ends, said plates preferably being channeled on their inner sides, as shown at 4, and shaped to fit the sides of the rails. The plates 2 and 3 are provided with bolt-holes 5, which are adapted to aline with the usual bolt-holes in the rail and to receive bolts 6, by which said plates are secured to the ends of the rails.

On the lower edges of the plates 2 and 3 are formed inclined rail-flange-engaging portions

7 and 8, which are bent inwardly and downwardly at the ends of the rail-flanges and cut away to form longitudinally-disposed bracing-flanges 9 and 10, which project beneath the rail ends and between the ties, as shown. The flanges 9 and 10 are bent downwardly, as shown at 12. In the bend of the flange 9 is formed an elongated slot 13, while the downwardly-bent portions of the flanges 10 are reduced to form a tongue 14, which is adapted to be inserted through the slot 13, thereby hingedly connecting the plates together.

In the space between the flanges 9 and 10 and the bottom of the rail is arranged a triangularly-shaped bracing-bar 15, in the lower corner of which are formed two notches or recesses 16. In the flanges 9 and 10, adjacent to the notches 16, are formed alined apertures 17, through which are adapted to be inserted split locking-keys 18, which after being driven through said apertures have their ends bent back or upset, thereby securing the keys in place and locking the flanges 9 and 10 together. When the keys 18 are inserted through the apertures 17, the same are also engaged with the notches 16 in the bracing-bar 15, thereby holding said bar against longitudinal movement.

In place of the locking-keys 18 the interlocking portions of the flanges 9 and 10 may be provided with alined bolt-holes, through which may be inserted bolts 19 to hold said flanges together, this construction being shown in Fig. 6 of the drawings.

In applying the plates to the rails the interlocking portions of the former are first engaged, after which the plates are swung open and engaged with the sides of the rail ends, as shown in Fig. 3. The plates are then closed into engagement with the rails and bolted thereto, after which the bracing-bar is inserted and the locking keys or bolts applied to the flanges of the plates.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. A rail-joint of the character described, comprising a pair of apertured plates adapted to be bolted to the sides of the rails, inwardly and downwardly bent apertured flanges formed on said plates, one of which is provided with a longitudinally-disposed slot, a reduced tongue formed on the other flange to engage said slot, split keys adapted to be inserted through the apertures in said flanges and opened to lock said plates together, and means whereby said flanges and the rail ends are braced, substantially as described.

2. A rail-joint of the character described comprising a pair of apertured plates adapted to be bolted to the sides of the rails, inwardly and downwardly bent apertured

flanges formed on said plates one of which is provided with a longitudinally-disposed slot, a reduced tongue formed on the other flange to engage said slot, split keys adapted to be inserted through the apertures in said flanges and opened to lock said plates together, and a notched bracing-bar arranged between said flanges immediately below and in engagement with the under side of the rail ends, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK P. MEYER.

Witnesses:

E. F. CLOUSE,
W. M. DEWALD.