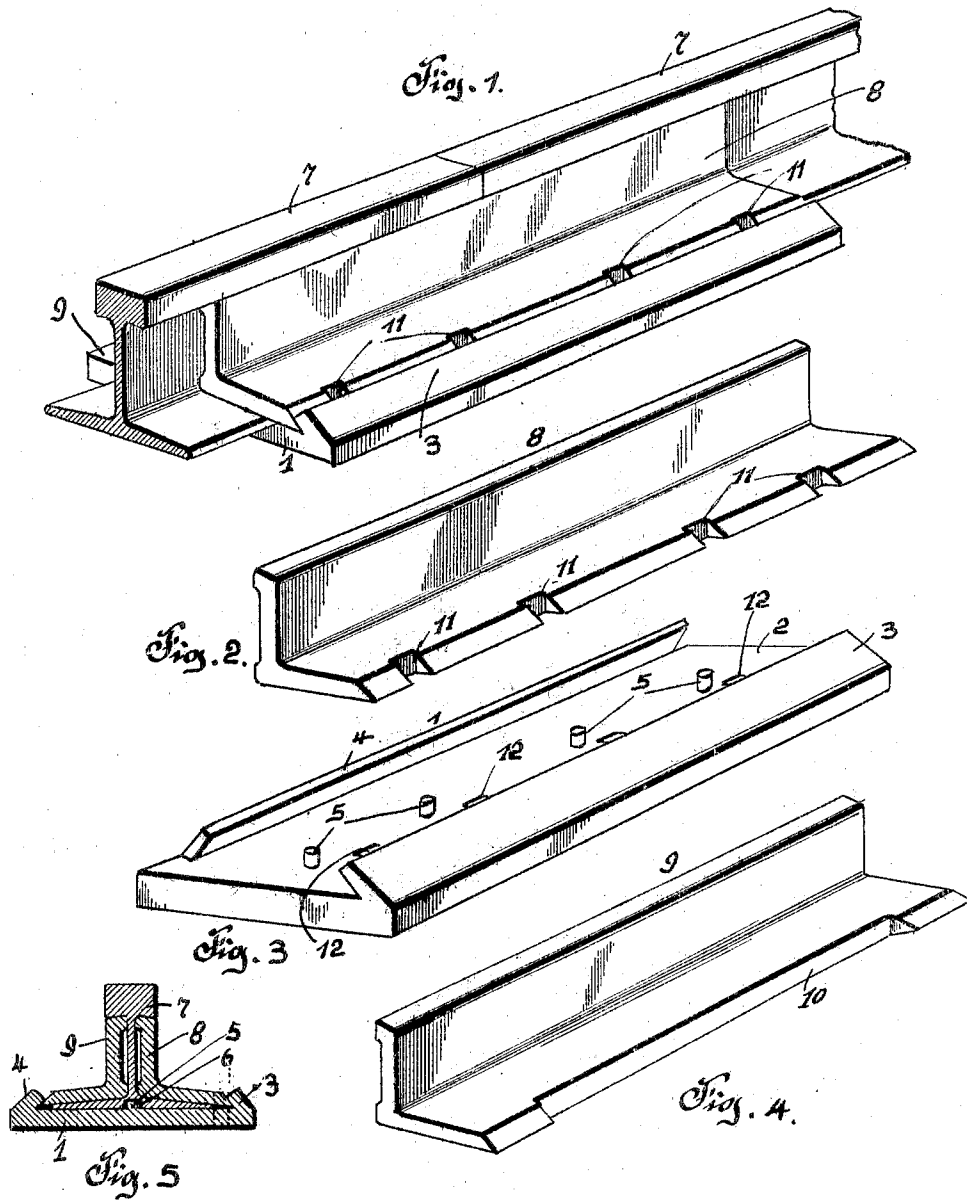


No. 812,039.

PATENTED FEB. 6, 1906.

D. HEWITT.
RAIL JOINT.

APPLICATION FILED OCT. 26, 1905.



Witnesses:
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UNITED STATES PATENT OFFICE.

DAVID HEWITT, OF HOMEWOOD, PENNSYLVANIA.

RAIL JOINT.

No. 812,039.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed October 26, 1905. Serial No. 284,482.

To all whom it may concern:

Be it known that I, DAVID HEWITT, a subject of the King of Great Britain, residing at Homewood, 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 the invention has for its object the provision of novel means for firmly holding the confronting ends of two rail-sections together.

Another object of this invention is to provide a rail-joint which will dispense with the use of nuts and bolts, thereby permitting of the joints being easily and quickly formed.

Briefly described, my improved rail-joint consists of a chair upon which the confronting ends of two sections of rails are adapted to rest. The chair is provided with upwardly-extending pins adapted to engage the recesses formed in the bottom of the rail, and in connectoin with the chair I employ two fish-bars adapted to embrace the web portions of the rails and support the heads thereof. The fish-bars are mounted in the chair, whereby the rails cannot become laterally displaced, and in connection with the fish-bars and the chair I employ spikes for firmly retaining the fish-bars and the chair upon ties or sleepers.

The above construction will be hereinafter more fully described and then specifically pointed out in the claims, and referring to the drawings accompanying this application like numerals of reference designate corresponding parts throughout the several views, in which—

Figure 1 is a perspective view of my improved rail-joint. Fig. 2 is a perspective view of one of the fish-bars. Fig. 3 is a similar view of the chair. Fig. 4 is a perspective view of another fish-bar. Fig. 5 is a cross-sectional view of my improved rail-joint.

To put my invention into practice, I employ a chair 1, consisting of a rectangular plate 2, having an inclined flanged edge 3. The opposite edge of the plate is provided with an angularly-disposed flange 4, said flange being approximately the same length as the plate 2. The top of the plate or chair is provided with upwardly-extending stud-pins 5, said pins being adapted to engage in recesses 6, formed centrally of the bottom of

the rails 7 7, which are seated upon the chair 1. The recesses 6 are slightly larger than the pins 5 to permit of the expansion and contraction of said rails.

In connection with the chair 1 I employ two fish-bars 8 and 9, these bars being angular in cross-section and adapted to embrace the base-flanges, web, and head of each rail. The fish-bar 9 has its one edge cut away, as at 10, to receive the angularly-disposed flange 4 of the chair 1, and when said fish-bar engages the flange 4 the fish-bar will be prevented from becoming longitudinally displaced. The fish-bar 8 has its edge provided with a plurality of notches 11, and when the fish-bar 8 is placed in position upon the chair spikes (not shown) are driven in the notches and through the opening 12, formed in the plate 2 adjacent to the flange 3. The spikes are adapted to engage in the tie or sleeper which supports the chair and the confronting ends of the rails 7 7.

By referring to Fig. 5 of the drawings it will be observed that when a rail is placed upon the chair and the fish-bars 8 and 9 placed in position, with the fish-bar 8 locked in engagement with the chair, it will be impossible for the fish-bar 9 to become separated from the chair, the inclined flange 4 retaining it upon the base-flanges of the rails, while the fish-bar 8 acts as a wedge to hold the fish-bar 9 between the flange 4 and the rails.

I preferably construct the chair and fish-bars of strong and durable metal, as steel.

Such changes in the construction of the rail-joint as are permissible by the appended claims may be resorted to without departing from the spirit and scope of the invention.

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

1. In a rail-joint, the combination with rails having a single row of recesses formed centrally of in the bottom of the base-flanges, of a chair having openings formed therein, a single row of centrally-disposed pins carried by said chair and adapted to extend into the recesses of said rails, said chair having a flanged edge, an angularly-disposed flange carried by the opposite edge of said chair, fish-bars engaged by said chair and adapted to support rails mounted upon said chair, one of said fish-bars having its edge cut away to receive the flange on one side of the base-plate, the other of said fish-bars having notches in its edge registering with the openings in

the chair and means to secure one of said bars in engagement with said chair, substantially as described.

2. In a rail-joint, the combination with
5 rails having recesses formed therein, of a chair, pins carried by said chair and adapted to engage in said recesses, flanges carried by the edges of said chair, fish-bars engaging said flanges and supporting the confronting
10 ends of said sections of rails upon said chair, one of said fish-bars having its edge-cut away

to receive the flange at one edge of said chair, the other of said fish-bars having notches in its edge and means to lock said fish-bars in engagement with said chair, substantially as described.

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

DAVID HEWITT

Witnesses:

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