

M. McHALE.
JOINT CHAIR.
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1,064,844.

Patented June 17, 1913.

Fig. 1.

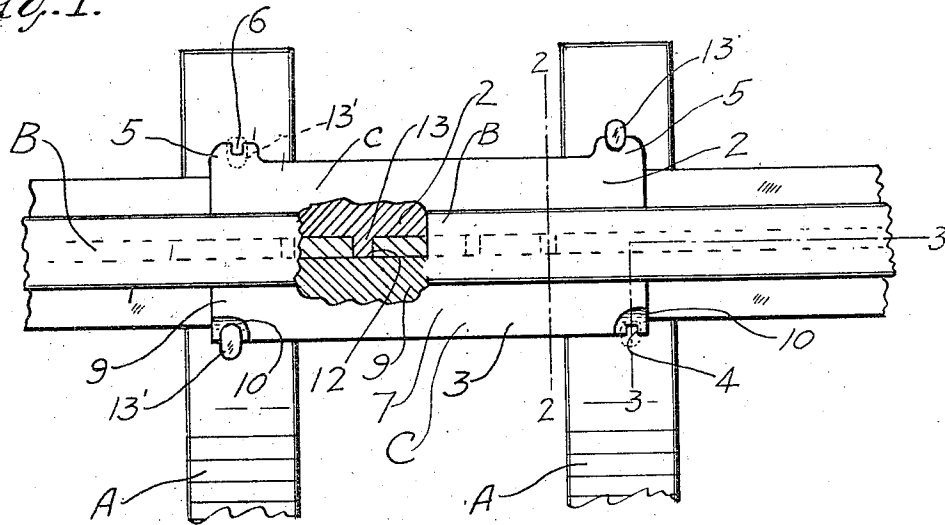


Fig. 2.

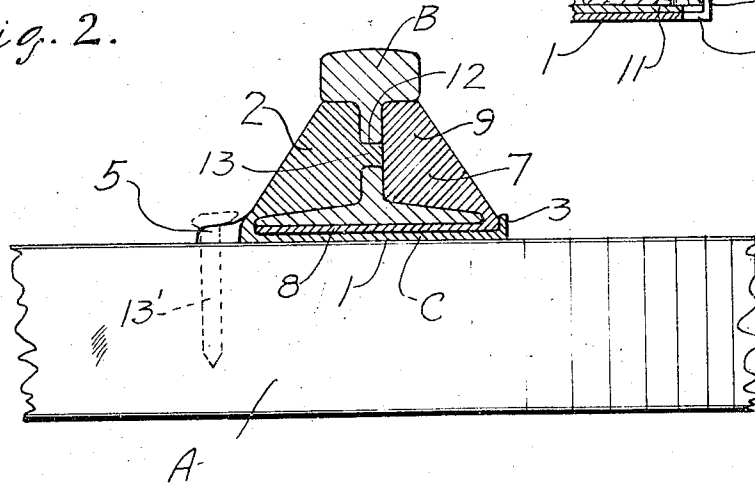
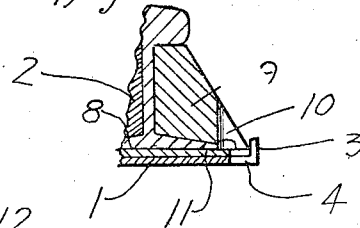


Fig. 3.



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MICHAEL McHALE, OF COLUMBUS, KANSAS.

JOINT-CHAIR.

1,064,844.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MICHAEL McHALE, citizen of the United States, residing at Columbus, in the county of Cherokee and State of Kansas, have invented certain new and useful Improvements in Joint-Chairs, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in rail joint chairs, and an object thereof is the provision of a device of this character which is adapted to engage the meeting ends of a pair of rails and prevent relative lateral or longitudinal movement thereof.

A further object of this invention is the provision of a rail joint chair which is adapted to connect the meeting ends of a pair of rails without the use of bolts and nuts.

A still further object of this invention is the provision of a joint chair comprising a base plate having an integral fish plate formed on one longitudinal edge thereof, and a clamping member also comprising a base plate and a fish plate, the base plate of the clamping member being slidably disposed between the base plate of the other member and the bases of the rails, the edges of the base plates being provided with registering notches for the reception of spikes or other fastening devices which are adapted to be driven into the ties.

With these and other objects in view, my invention consists in certain novel constructions, combinations and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which—

Figure 1 is a top plan view of my invention partly in section; Fig. 2 is a section on the line 2—2 of Fig. 1; and Fig. 3 is a section on the line 3—3 of Fig. 1.

Referring more particularly to the drawing, the letter A represents the ties of the track, B the meeting ends of a pair of rails and C my improved joint chair. The joint chair comprises a base plate 1, which is of a length suitable to span a pair of the ties A, the base plate being formed on one longitudinal edge with an inclined fish plate 2 which is adapted to overlap one of the base flanges of the rails and rest against the webs thereof. The opposite longitudinal edge of

the base plate 1 is formed with an upstanding flange 3 which terminates short of the ends of the base plate, the base plate being formed between the extremities of the flange and the ends of the plate with notches 4. The longitudinal edge of the base plate 1 upon which the fish plate is formed is also provided with a pair of laterally projecting lugs 5 having notches 6 each of the lugs being adapted to rest upon one of the ties. The clamping member 7 comprises a base plate 8 and an inclined fish plate 9, the base plate 8 being adapted to slidably rest upon the base plate 1 between the flange 3 and the lower extremity of the fish plate 2. The flange 9 is cut away at its lower edge near its ends, as at 10, and the base plate 8 is provided with notches 11 below the cut away portions of the flange, the notches 11 being adapted to register with the notches 4 of the base plate 1. The webs of the ends of the rail B are provided with openings 12 through which the laterally extending pins 13 formed on the inner face of the fish plate 2 are adapted to enter, to prevent relative longitudinal creeping of the rails. Spikes 13' or other suitable fastening devices are adapted to be passed through the notches 6 and registering notches 4 and 11 to secure the joint chair to the ties and thereby prevent longitudinal or lateral movement of the rails with relation to the ties.

To secure the joint chair in position, the base plate 1 is arranged upon the track to span a pair of ties, and the rails are then placed upon the base plate so that the pins 13 engage in the openings 12 in the rails. The clamping member 7 is then engaged with the rail at one side of the base plate 1 so that the fish plate 9 engages the web of the rail, and the clamping member is then moved longitudinally so that the base plate 8 thereof is engaged between the base plate 1 and the bottom faces of the rails, until the notches 11 in the base plate 8 register with the notches 4 in the base plate 1 whereupon the spikes 13' are engaged in the notches and forced into the ties to maintain the several parts in their respective positions. It will be seen that longitudinal or lateral movement of the joint chair is prevented by the engagement of the spikes 13' in the ties, and movement of the rails in any direction is also prevented by the engagement of the

pins 13 in the openings 12 in the rails. The upstanding flange 3 on the base plate 1 serves as a guide for the clamping member 7, and also prevents lateral spreading of the sections of the joint chair.

From the above description taken in connection with the accompanying drawing, it will be seen that I have provided a joint chair which will securely hold the meeting ends of a pair of rails, and which also comprises a minimum number of parts, so that it may be cheaply manufactured.

Having thus fully described my invention what I desire to claim and secure by Letters Patent is:

1. In combination with the meeting ends of a pair of rails, a joint chair comprising a base plate having a fish plate thereon for engagement with the base flanges on one side of the rails, said base plate also having an upstanding flange formed on one longitudinal edge, said flange terminating short of the ends of the base plate, said base plate being formed with notches between the extremities of said flange and the ends of the base plate, a clamping member comprising a base plate adapted for slidable engagement between the first mentioned base plate and the bases of said rails, said clamping member being formed with a fish plate adapted for engagement with the base flanges on the opposite side of the rails, the base plate of said clamping member being also provided with notches for registration with the

notches in the first mentioned base plate, as and for the purpose described.

2. In combination with the meeting ends of a pair of rails, a joint chair comprising a base plate having a fish plate on one longitudinal edge for engagement with the base flanges on one side of the rails, said base plate also having an upstanding flange formed on its opposite longitudinal edge, said flange terminating short of the ends of the base plate, the base plate being formed with notches between the extremities of the flange and the ends of the base plate, a clamping member comprising a base plate adapted for slidable engagement between the first mentioned base plate and the bases of said rails, said clamping plate being formed on one longitudinal edge with a fish plate adapted for engagement with the base flanges on the opposite side of said rails, the lower edge of the second mentioned fish plate being cut away at its opposite ends, said second mentioned base plate being formed with notches below the cut away portions of said fish plate for registration with the notches in the first mentioned base plate, as and for the purpose described.

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

MICHAEL McHALE.

Witnesses:

JAMES A. ORR,
MINNIE B. MURRAY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."