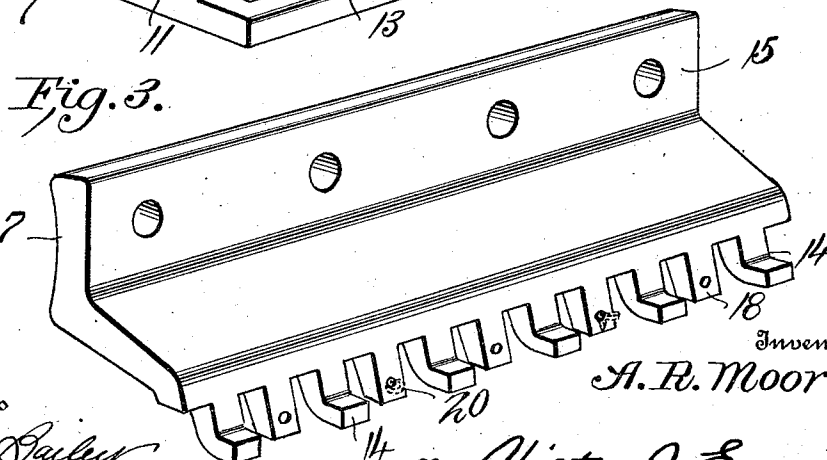
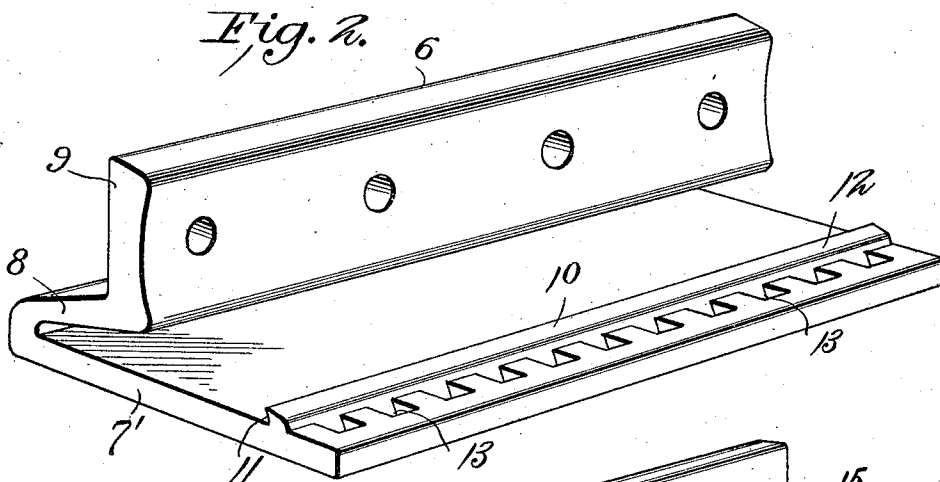
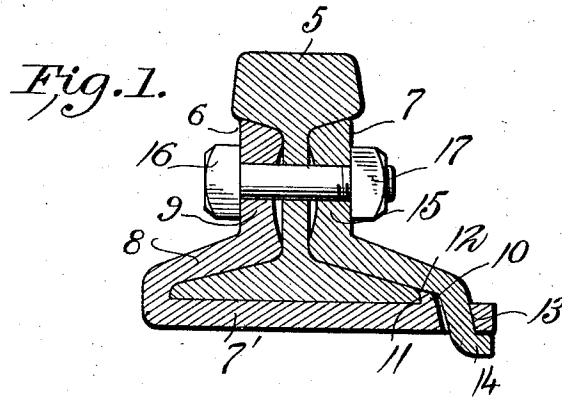


A. R. MOORE.
RAIL JOINT.
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1,066,306.

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ALBERT R. MOORE, OF PARKS, NEBRASKA.

RAIL-JOINT.

1,066,306.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT R. MOORE, a citizen of the United States, residing at Parks, in the county of Dundey and State of Nebraska, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

The present invention relates to improvements in rail chairs for rail joints, and resides in the construction, combination and arrangement of parts set forth in the following description and falling within the scope of the appended claims.

In the accompanying drawing there has been illustrated a satisfactory reduction of my improvement to practice, and in which drawing,

Figure 1 is a vertical transverse sectional view taken through my improvement showing the same secured to a rail, Fig. 2 is a detail perspective view of one of the members of the rail chair, and Fig. 3 is a similar view of the removable side or fish plate for the chair.

Referring now to the drawings in detail, 5 designates an ordinary railway rail and it is to be understood of course, that the chair is in the nature of a rail joint, but it has not been deemed necessary to illustrate more than one of the rails 5 in connection with the chair. The chair members comprise a pair of separable members designated by the numerals 6 and 7 respectively. The member 6 includes a flat horizontally straight base member 7' which has one of its sides upturned and provided with an integrally formed inwardly extending angular flange 8 which overlies the base 7' and which is adapted to engage with the base flange of the rail upon this side of the joint. The underlying flange 8 is provided with a vertical extension 9, the said vertical member being of a length to permit of its upper edge being received beneath the head or ball of the rail with which it is adapted to frictionally contact. The base 7' is provided adjacent its opposite longitudinal edge with a rib 10, the same having its inner face curved as at 11, to correspond with the curved edge of the base flange of the rail 5, with which it is adapted to engage. The upper face 12 of said rib is arranged at an angle corresponding with the angle of the upper face of said base flange, and the base 7' is provided with a plurality of angular openings 13, the inner walls provided there-

by being disposed in a plane with the outer inclined wall of the rib 10. The member 7 of the chair comprises the removable side thereof, the same being in the nature of an angle fish plate, but the outer longitudinal edge of said member is provided with a plurality of spaced angular depending fingers 14 which are adapted to be received within the spaced openings 13 of the base 7 of the chair member 6. The vertical member 15 and the side 9 of the section 6 of the chair are provided with registering openings which aline with the openings in the webs of the rails, the said registering openings being adapted for the reception of the usual securing bolts 16 which are provided with the retaining nuts 17.

If desired, and as illustrated in Fig. 3 of the drawings, several of the spaced fingers may be extended vertically, the said extending fingers being designated by the numerals 18, and these fingers may be provided with openings for the reception of cotter pins 20, illustrated by the dotted lines, the said cotter pins being inserted within the openings to engage with the underface of the base 7 of the chair after the fish plate 7 has been applied to the said chair.

As illustrated in the drawing, it has been found preferable to arrange certain of the fingers 14 at an angle, so that the said angular ends will engage with the base 7', as illustrated in Fig. 1 of the drawing. The angular fingers are disposed alternately with the fingers 18, in the illustration of the drawing, but such an arrangement of the fingers 14 and 17 is not essential in carrying out my invention. In arranging the rails upon the joint, the rails 5 are inserted longitudinally of the base of the chair, the edges of the base flanges of the rails abutting with the inner vertical walls of the flanged portions 8 upon one side of the chair and the opposite longitudinal edges of the base flanges of the rails contacting with the inner curved face of the rib 10, and the ends of the rails are located centrally of the joint chair. When the rails are thus arranged they will register with the bolt openings in the vertical extension 9 of the chair, the removable side 7 is applied, the said side being arranged at an angle to the face of the chair so that its fingers 14 will pass through the openings 13 in the base of the chair. The side of the chair is then swung against the sides of the rails, and the secur-

ing elements 20 are passed through the openings in certain of the fingers 18.

From the above description taken in connection with the accompanying drawing, the simplicity of the device as well as the advantages thereof, will, it is thought, be perfectly apparent to those skilled in the art to which such inventions appertain without further detailed description.

Having thus described the invention, what I claim is:

1. In a rail joint, a chair having a flat base upon which the base flanges of the rails rest, the chair having one of its longitudinal edges upset and inclined angularly to provide a pocket for the base flanges of the rails upon one of the sides of said rails, the chair adjacent its opposite longitudinal edge having an upset rib, the inner wall of which being curved to receive the curved outer longitudinal edges of the rails, the upper wall of said rib being disposed at an angle in line with the angular upper walls of the base flanges of the rails, the base of the chair being provided with a plurality of spaced openings, the inner and outer walls of which being angular, and the inner walls being arranged in a plane with the outer face of the rib, an angular fish plate having its outer longitudinal edge provided with spaced angularly disposed downturned fingers adapted to be received within the openings of the base of the chair, and means for securing the chair and fish plate to the webs of the rails.

2. In a rail joint, a chair, said chair embodying a member provided with a flat base flange having one of its longitudinal edges provided with an integrally formed inwardly inclined flange and an integrally formed vertical flange, both of which being adapted to engage with one of the faces of the rails, the chair being provided adjacent its opposite longitudinal edge with an upset longitudinally extending rib, which is

adapted to provide an abutment for the longitudinal edge of the base flanges of the rails upon this side of the joint, the chair base being provided with a plurality of spaced openings, an angular fish plate, said fish plate having its outer longitudinal edge provided with downturned fingers which are adapted to be received within the openings in the base of the chair, certain of said fingers extending below the base, said extending fingers being provided with openings, and locking elements adapted to be arranged within the openings and to underlie the base of the chair.

3. In a rail joint, a chair comprising a base member upon which the rails rest, the said chair including a vertical and angular member arranged upon one side of the base and adapted to fill the fishing space upon one side of the rails, the base being provided on its opposite longitudinal edge with a plurality of spaced openings and being further provided with an upset longitudinally extending rib which has its outer wall disposed in a plane with the inner walls of the openings, an angular fish plate having its angular portion arranged upon the base flanges of the rails and engaging with the upper face of the rib, the said angular member of the fish plate being provided with depending fingers which are adapted to pass through the openings in the base plate, certain of said fingers having their extremities arranged at an angle to underlie and engage with the base plate, certain other of said fingers being provided with openings for the reception of securing elements, and means for connecting the fish plate and chair to the webs of the rails.

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

ALBERT R. MOORE.

Witnesses:

J. W. MURPHY,
RUTH STYER.