

C. E. DOTY.
RAIL CHAIR AND JOINT.
APPLICATION FILED DEC. 29, 1911.

1,021,580.

Patented Mar. 26, 1912.

FIG. 1

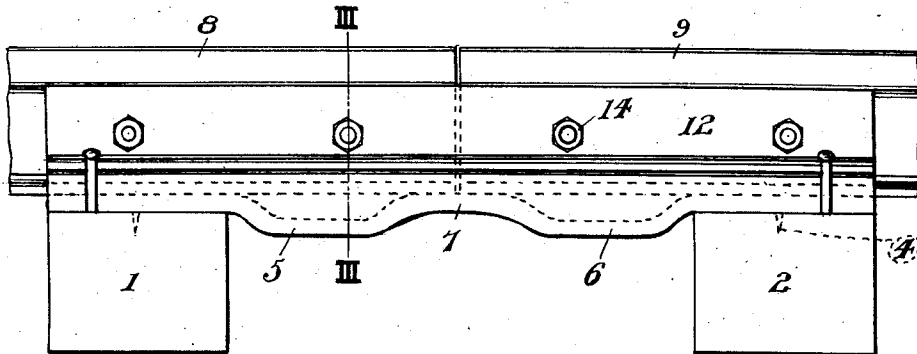


FIG. 2

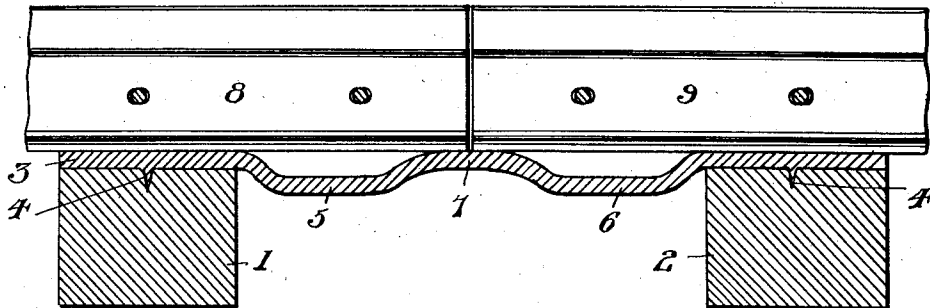
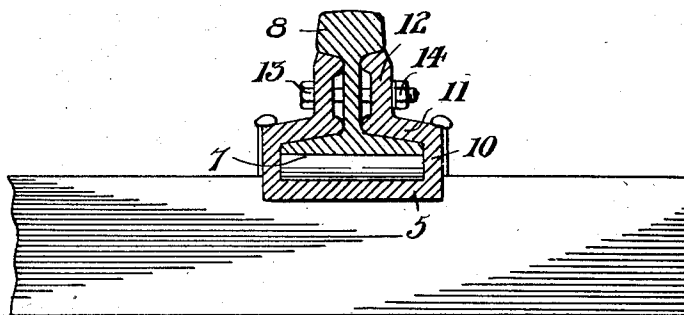


FIG. 3



WITNESSES

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RAIL CHAIR AND JOINT.

1,021,580.

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To all whom it may concern:

Be it known that I, CHARLES EDWARD DOTY, a citizen of the United States of America, residing at Waynesburg, in the county of Greene and State of Pennsylvania, have invented certain new and useful Improvements in Rail Chairs and Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a combined rail chair and joint, and has for its object to provide a device of such class in a manner as hereinafter set forth for not only constituting means for connecting the opposing ends of a pair of rails together, but further providing means for supporting the rails upon a pair of ties and allowing for the necessary contraction and expansion of the rails when occasion so requires.

A further object of the invention is to provide a combined rail chair and joint with means in a manner as hereinafter set forth to constitute a cushion for the opposing ends of the rails during the passage of rolling stock over said ends.

Further objects of the invention are to provide a combined rail chair and joint which is comparatively simple in its construction and arrangement, strong, durable, efficient and convenient in its use, affording a cushioning function to the rails, readily set up with respect to the rails and comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claim hereunto appended.

In describing the invention in detail, reference is had to the accompanying drawings, wherein like reference characters denote corresponding parts throughout the several views and in which:

Figure 1 is a side elevation of a pair of rails broken away showing the adaptation therewith of a combined rail chair and joint in accordance with this invention, Fig. 2 is a longitudinal sectional view through the chair and joint along one longitudinal edge

of the rail bases, and Fig. 3 is a cross section on line III—III, Fig. 1.

Referring to the drawings in detail, 1 and 2 denote a pair of ties upon which are mounted a combined rail chair and joint, the latter being formed of a unitary structure.

The combined rail chair and joint consists of a base plate 3 having depending prongs 4 at each end, which engage in the ties 1 and 2 to prevent longitudinal or lateral movement of the base plate. The base plate extends from the outer edge of one tie to the outer edge of the other and bridges the space formed between the ties. That portion of the base plate which bridges the space between the ties 1, 2 is depressed as at 5, 6, the part of the base plate between the depressed portions 5, 6 being in alinement with the ends of the plate which are mounted upon the ties 1, 2. The ends of the base plate 3, which are mounted upon the ties 1, 2 and the intermediate portion 7, are termed bearing portions and upon which are mounted the bases of the rails 8, 9. These latter oppose each other and the opposing ends thereof are seated directly upon the bearing 7. By constructing that part of the base plate which bridges the space between the ties 1, 2, and arranging it with respect to the ends of the rail in a manner as stated, it acts as a cushion for the ends of the rails during the passage of the rolling stock.

Formed integral with each longitudinal edge of the base plate 3 is a vertically disposed longitudinally extending member 10. The said members 10 are positioned against the longitudinal edges of the bases of the rails and project here above and are formed integral with inclined flanges 11 which project upward as fish plates 12, these latter being positioned against the webs of the rails and also abutting against the heads of the rails. The flanges 11 overlap the upper faces of the bases of the rails.

The webs of the rails as well as the fish plates 12 are provided with openings and through said openings extend the bolts 13 which carry nuts 14.

What I claim is:

A combined rail chair and joint comprising a base plate provided with prongs capable of engaging in a pair of ties, said base plate formed with a plurality of depressions, each of said depressions interposed between the central portion and one end of the plate,

said central portion being in alinement with the end portions of the plate and said end portions and central portions constituting bearings for supporting the bases of the rails, said depressed portion of said base plate affording a cushioning function for the ends of the rail, longitudinally extending members integral with the sides of the base plate and capable of abutting against the longitudinal edges of the rail bases, and fish plates capable of being positioned against the sides of the rails and provided with flanges integral with said longitudinal members and capable of being positioned upon the upper faces of the bases of the rails, the intermediate portion of said base plate adapted to support the opposing ends of a pair of rails. 15

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

CHARLES EDWARD DOTY.

Witnesses:

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C. W. PARKINSON.

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