E. SAVOY.

RAIL JOINT.

APPLICATION FILED JUNE 28, 1911.

1,021,632. **Patented Mar. 26, 1912.**

FIG. 1

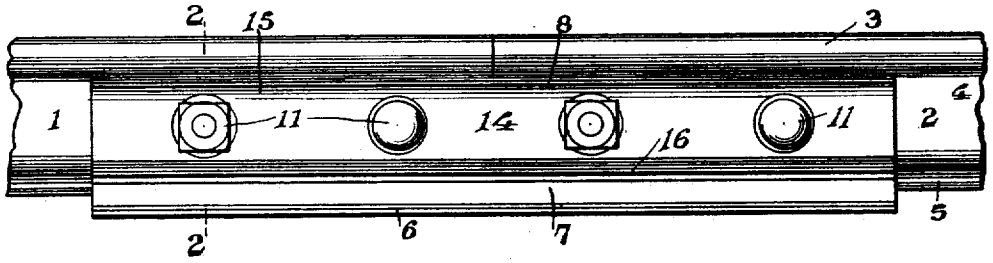


FIG. 2

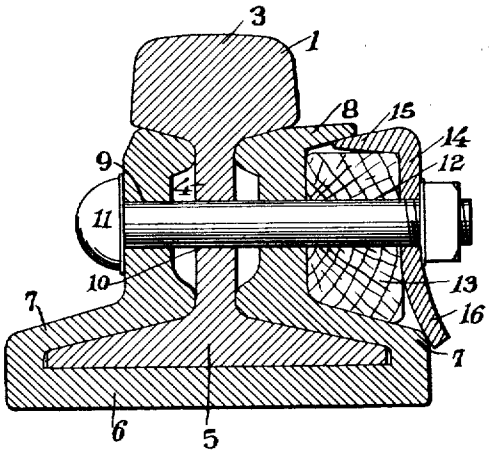
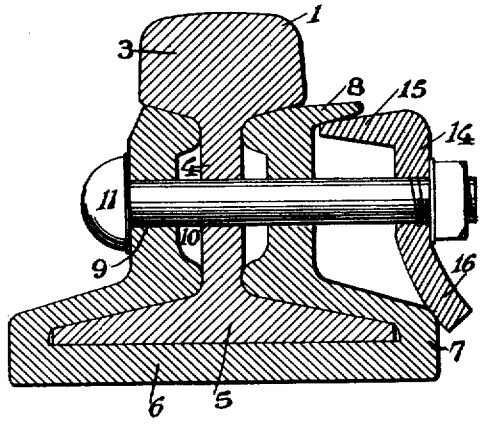


FIG. 3



Witnesses

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RAIL-JOINT.

1,021,632. Specification of Letters Patent. Patented Mar. 26, 1912.

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To all whom it may concern:

Be it known that I, EDWARD SAVOY, a citizen of the United States, residing at Chapel Hill, in the county of Washington and State of Texas, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to rail joints and one of the principal objects of the invention is the provision of a single piece joint chair adapted to encompass or embrace the base and the web of the rail or rails to be connected and which also embodies an elastic filler member which is clamped to the fish plate so as to deaden the sound caused by the wheels of the rolling stock passing over the joint between the rails.

A further object of the invention is the provision of a clamping plate adapted to hold the elastic filler upon the filler block and to come against the joint chair so as to force its head or upper edge against the upper lateral flange and form an abutment therefor which gives slightly when weight is applied to the rail and springs back to normal position when the weight is relieved therefrom.

Further objects of the invention will appear as the following specific description is read in connection with the accompanying drawing, which forms a part of this application, and in which:—

Figure 1 is a side elevation. Fig. 2 is a transverse sectional view on the line 2—2 of Fig. 1. Fig. 3 is a similar section with the filler block removed.

Referring more particularly to the drawing, 1 and 2 represent the separate rails to be connected. Each of these rails comprises a head 3, web 4 and base 5. The joint chair which unites the meeting ends of the rails is formed of a single piece of any suitable metal and consists of a base 6, base flange portions 7 which extend upwardly over the base flange 5 of the rails, and web portions which lie parallel with and against the webs 4 of the rails. The upper edge of one of the web portions 7 is bent outwardly in the form of a flange 8 which lies beneath the head and in contact therewith. Both of the web portions are provided with apertures, preferably in the form of short slots 9 which are coincident with holes 10 extending through the rails, so as to receive the clamping bolts 11.

Mounted upon the fish plate, beneath the flange 8 and having bolt holes 12 is an elastic filler plate 13 which is clamped in position against the fish plate by a clamping plate 14 whose upper edge is inwardly turned in the form of a flange 15 to engage beneath the flange 8. The lower portion of the clamping plate is outwardly flared to form a curved surface 16 which bears upon the inwardly inclined base portion 7 of the joint chair so that, when the clamping plate is drawn into engagement with the elastic filler, the curved surface will ride up over the base portion and force the flange 15 into engagement with the flange 8.

The slight depression of the rails at the joint causes the flange 8 to bear upon the flange 15 which forces the clamping plate downwardly and causes its curved surface to slide over the inclined surface of the base portion 7, thus tightening up upon the bolts. When the weight is relieved the clamping plate slides back into position by its inherent resiliency and again forces its flange 15 into tight engagement with the flange 8.

The elastic filler member may be dispensed with, as shown in Fig. 3, but it is preferable to include the same in the structure as it deadens the sound caused by the wheels traveling over the joints and, at the same time, forms a washer against which the clamping plate is adapted to abut. The filler plate is preferably formed of wood which has elasticity sufficient to permit the movement heretofore described and at the same time sufficient rigidity to withstand the compression to which it is subjected by the bolts. When the filler plate is omitted the clamping plate should be made somewhat heavier so as to prevent breaking.

Having thus described the invention, what I claim as new is—

1. In a rail joint, a rail embracing joint chair having a rail head engaging member thereon, a clamping plate, means to draw the clamping plate toward the joint chair, and means on the clamp plate which coacts with the joint chair to force the clamping plate into engagement with the head engaging member.

2. In a rail joint, a rail embracing joint chair having a rail head engaging member thereon, a filler block, a clamping plate, means to draw the clamping plate into engagement with the filler block, and means on

the clamping plate which coacts with the joint chair to force the clamping plate into engagement with the head engaging member.

3. In a rail joint, a rail embracing joint chair having a rail head engaging member, a clamping plate having a curved surface thereon and a flange, and means to force the clamping plate over a portion of the joint chair, whereby the flange is caused to engage the head engaging member.

4. In a rail joint, a rail embracing joint chair, an elastic filler, a clamping plate having a curved surface and a flange, said joint chair having a rail head engaging flange, and means to force the clamping plate over a portion of the joint chair, whereby the same is drawn into engagement with the head engaging flange and with the elastic filler.

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

EDWARD SAVOY.

Witnesses:
JAKE WINFIELD,
HENRY SCHAER, Jr.