A. T. EICKMEYER.

RAIL JOINT.

APPLICATION FILED JUNE 17, 1910.

995,850. Patented June 20, 1911.

Fig. 1.

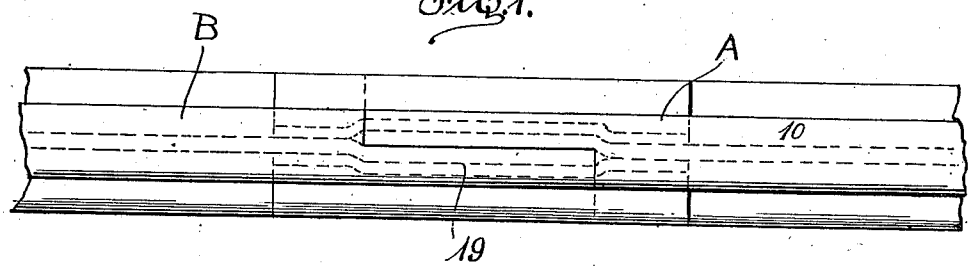


Fig. 2.

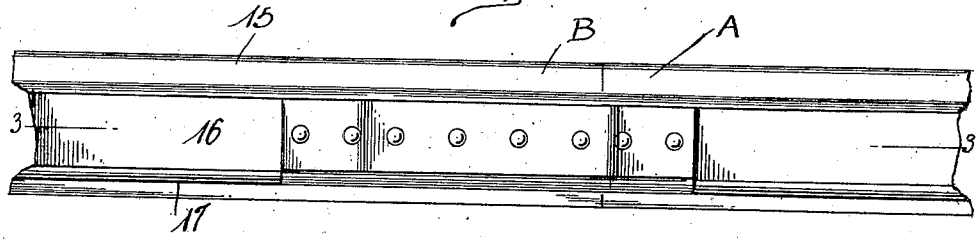


Fig. 3.

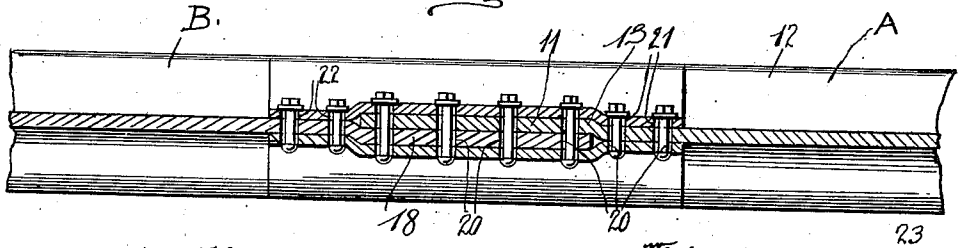


Fig. 4.

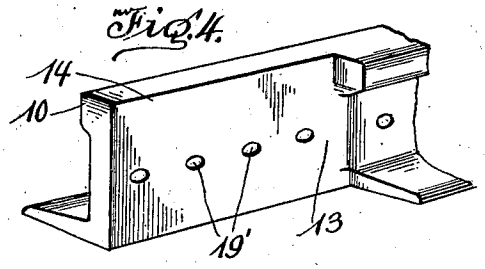
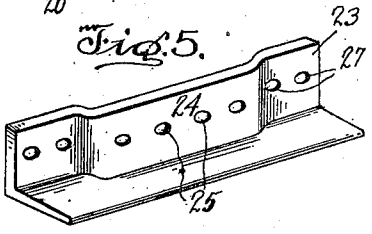


Fig. 5.



Witnesses

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RAIL-JOINT.

995,850. Specification of Letters Patent. Patented June 20, 1911.

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To all whom it may concern:

Be it known that I, ALBERT T. EICKMEYER, a citizen of the United States, residing at Potlatch, in the county of Latah, State of Idaho, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to rail joints.

The object of the invention is to provide a rail joint of extreme simplicity which will allow for the expansion and contraction of the rails caused by different conditions of temperature, and yet at the same time produce a joint of maximum rigidity and great strength.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claim.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views, and in which;

Figure 1 is a plan view of a rail joint constructed in accordance with the invention; Fig. 2, a side elevation of same; Fig. 3, a section on the line 3—3 of Fig. 2; Fig. 4, a detail perspective view of the end of one of the rails associated with the joint; and, Fig. 5, a detail perspective view of one of the splice plates.

Referring to the drawings, A and B indicate two adjacent rails of a track associated in the improved joint. The rail A which is formed of a ball 10, web 11 and base 12 has its web offset laterally and bodily as at 13, while the ends of the ball 10 and base 12 are maintained in longitudinal alinement with their respective inner portions. The ball 10 and base 12 are then cut away perpendicularly to form a lap 14 at the end of said rail: the longitudinal faces of said cut-away portions of the ball 10 and base 12 and one side of the offset portion 13 of the web being disposed in a vertical plane passing through the longitudinal axis of the rail A. The rail B which comprises the ball 15, web 16 and base 17 also has its web offset bodily and laterally as at 18, but in the opposite direction to that in which the web 11 is offset, while the ends of the ball 15 and base 17 are maintained in longitudinal alinement with their respective inner portions. Likewise the ball 15 and base 17 are cut away perpendicularly to form a lap 19 at the end of said rail; said cut-away portions which form said lap being disposed oppositely to those which form the lap 14. It will be here noted that the longitudinal faces of said cut-away portions of the ball 15 and base 17 and one side of the offset portion 18 are disposed in a vertical plane passing through the longitudinal axis of the rail B.

It will be apparent that when the rails A and B are disposed end to end the offset portions 13 and 18 will be positioned side to side, while the cut-away portions of their respective balls and bases will interlock or mate so as to form a continuous uninterrupted ball and base.

By offsetting the webs 11 and 16 the portions of the ball and base of each rail disposed within the joint are supported by the full strength of the webs of the respective rails and the strength of the joint greatly enhanced over joints of a similar type in which the webs of the respective rails are cut-away.

The offset portion 13 of the rail A is provided with oblong bolt receiving apertures 19′, while the offset portion 18 of the rail B is provided with corresponding bolt receiving apertures 20 in the same relative position as the oblong slots 19′ so that when the ends of the rails A and B are placed together the respective slots 19′ of the offset portion 13 will register with the respective slots 20 of the offset portion 18.

Just inward of the offset portion 13 the web 11 is provided with oblong bolt receiving slots 21, while the web 16 is provided with oblong bolt receiving slots 22 just inward of the offset portion 18. The rails A and B are held against longitudinal displacement by similar splice plates 23 which are each provided with an offset central portion 24 having oblong bolt receiving slots 25 therein, while the terminals of said plates are also provided with oblong bolt receiving slots 27. Passing through registering slots of the splice plates and the rails are bolts 29 which secure said rails against longitudinal disengagement. By passing the bolts through oblong slots in the various parts of the joint the latter is capable of expansion and con-

traction under varying temperatures without producing any undue strain on the bolts 29.

What is claimed is:

A rail joint, comprising a pair of rails having the adjacent ends of their webs offset bodily and laterally in opposite directions respectively and the respective balls and bases provided with oppositely disposed cut-away portions, splice plates disposed on each side of said rails and overlapping the same, each of which is provided with a central offset portion in which the offset portion of the adjacent rail web is received, and bolts passing through said splice plates and rails to secure the same together.

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

ALBERT T. EICKMEYER.

Witnesses:

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L. P. NELSON.