

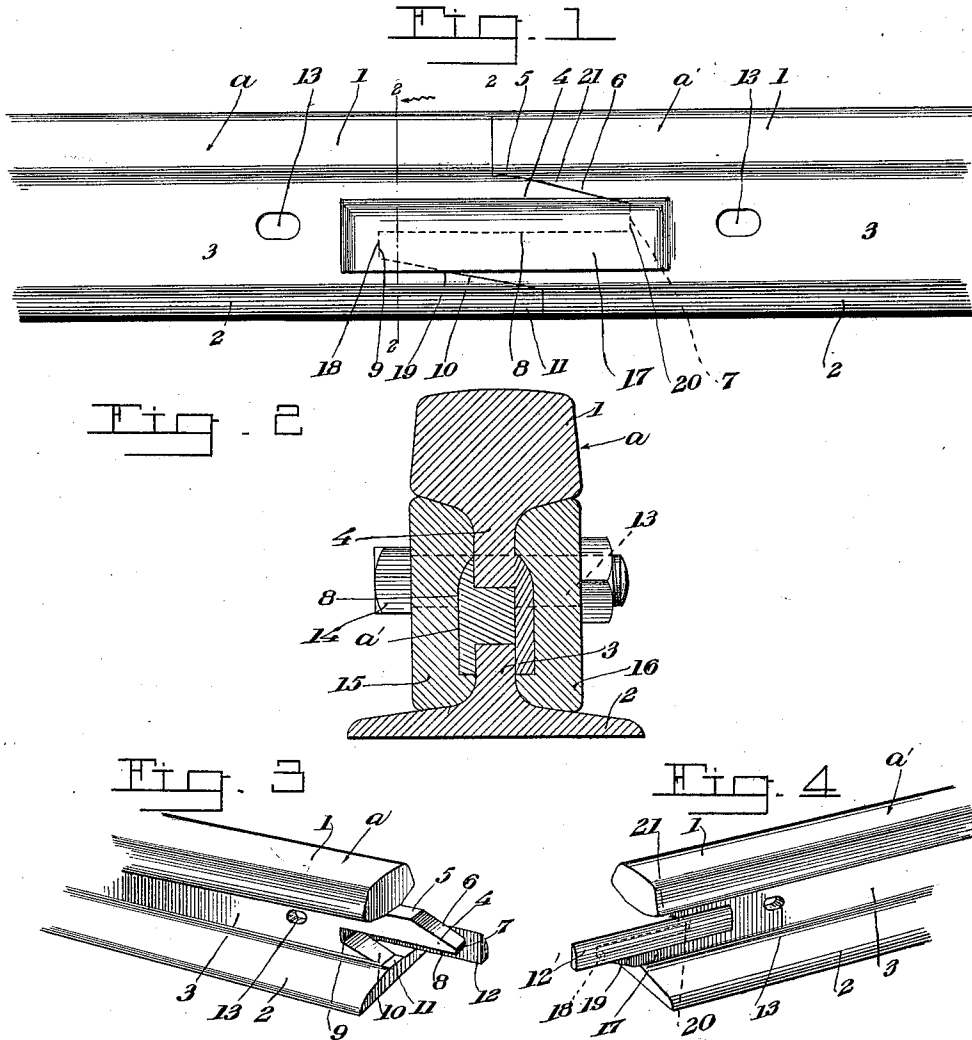
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RAIL JOINT.

APPLICATION FILED FEB. 21, 1911.

1,008,786.

Patented Nov. 14, 1911.



Witnesses

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RAIL-JOINT.

1,008,786.

Specification of Letters Patent.

Patented Nov. 14, 1911.

Application filed February 21, 1911. Serial No. 609,907.

To all whom it may concern:

Be it known that I, MASON CONNOLLY, a citizen of the United States, residing at Brooklandville, in the county of Baltimore and State of Maryland, have invented new and useful Improvements in Rail-Joints, of which the following is a specification.

This invention relates to improvements in rail joints, and the object of the invention is to provide a juncture for the meeting ends of a pair of rails which is extremely simple in construction, which effectively supports the rails and sustains the same against longitudinal, lateral or side movement and which provides what may be termed a substantially continuous rail.

With the above objects in view and others which will appear as the nature of the description progresses, the invention resides in the novel construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawing, Figure 1 is a side elevation of the meeting ends of a pair of rails constructed in accordance with the present invention, the fish plates being removed. Fig. 2 is a sectional view upon the line 2—2 of Fig. 1 with the fish plates in position. Fig. 3 is a detail perspective view of the end of one of the rails. Fig. 4 is a similar view of the end of the coacting rail.

In the drawings *a* and *a'* designate the rails. These rails have their body portions constructed in the ordinary manner, each comprising a head 1, base flange 2 and a connecting web 3. The rail *a* has its web 3 project a suitable distance beyond the end of the head 1 as designated by the numeral 4. The upper wall provided by the said projection 4 is continued in a horizontally straight plane with the under face of the head as designated by the numeral 5, and the said extension is beveled or inclined downwardly as at 6, the same terminating in a vertically straight portion 7. The web as well as the extension of the said rail are cut away adjacent the lower portions thereof. This cut away portion provides a horizontally straight wall 8, the same being arranged on a line with the lower edge of the vertically straight portion 7 of the extension. The wall 8 terminates a suitable distance beyond the end of the head of the rail and the rear wall of the cut away portion of the web is vertically straight as indicated by the numeral 9. The lower wall provided

by the said cut away portion is inclined toward the base of the rail as indicated by the numeral 10. This inclined wall 10 is projected a suitable distance beyond the end of the head 1 and terminates a suitable distance away from the end 11 of the base flange.

The numeral 12 designates what I term a reinforcing tongue. This tongue is integrally formed upon one side of the rail and partially closes the opening of the lower cut away portion of the web of the rail so as to provide what may be termed a pocket. The tongue 12 projects a suitable distance beyond the end 7 of the web extension 4 and the said tongue also projects above the lower portion of the inclined wall 6 of the said extension. The webs of the rails are provided with suitable elongated openings 13, the latter being adapted for the reception of securing elements 14 carried by a pair of fish plates 15 and 16. Each of these fish plates have their inner faces formed with longitudinally extending beads so that the inner faces of the said fish plates may snugly engage with the outer faces of the reinforcing tongues 12. The upper horizontally straight wall of the projection 17 is of a length equaling that of the lower wall 8 of the web extension 4 of the rail *a*. The outer extremity of the extension 17 is vertically straight as at 18, the latter adapted to contact the vertically straight wall 9, and the lower face of the said extension is beveled as at 19 and in same direction to that of the inclined portion 10 with which the said wall 19 is adapted to coact. The lower portion of the extension terminates a distance away from the end of the base flange. The upper horizontal wall of the extension 17 terminates in a vertically straight wall 20, and this wall is adapted to abut with the vertically straight wall 7 of the extension 4.

The numeral 21 designates the upper beveled wall of the web. This wall is of a length equaling that of the upper wall 5 of the extension 4. The tongue 12 is integrally connected with the web extensions 17, the latter closing a portion of the cut away portion of the web to provide a suitable pocket and the said reinforcing tongue partly covers the inclined wall 19.

From the above description, taken in connection with the accompanying drawings, the assemblage of the parts will, it is thought, be perfectly apparent to those

skilled in the art to which such inventions appertain and it will be noted that when the fish plates are positioned upon the rails, the lateral longitudinal or downward movement of the rails at their points of meeting is entirely obviated.

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

The combination with the meeting ends of a pair of rails, one of said rails having its web formed with an extension, the said extension having its upper wall horizontally straight for a distance beyond its head and from thence inclined downwardly and terminating in the vertically straight wall, the extension being provided with a cut away portion, the upper wall of said cut away portion being horizontally straight and terminating in the vertically straight wall, the lower wall provided by the cut away portion being inclined downwardly and terminating a distance away from the base flange of the rail, the second rail member being also provided with a web extension arranged adjacent the lower portion thereof, the lower wall of the said extension being horizontally straight and projecting a dis-

tance away from the end of the base flange of the rail, the projecting portion being inclined upwardly from its horizontal portion and terminating in a vertical wall, the said extension as well as the web being cut away to provide a horizontally straight wall upon both the projection and extension, said extension terminating in a vertically straight wall and the upper wall of the cut away portion being inclined toward and terminating a distance away from the head of the rail, both of the webs of the rails being provided upon opposite sides with reinforcing tongues, each of said tongues adapted to partially close the openings of each of the webs to provide pockets, and each of said tongues partially covering the inclined walls of the rail extensions and terminating a distance beyond the outer vertical walls of the said extensions, and fish plates for securing the rail ends.

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

MASON CONNOLLY.

Witnesses:

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