

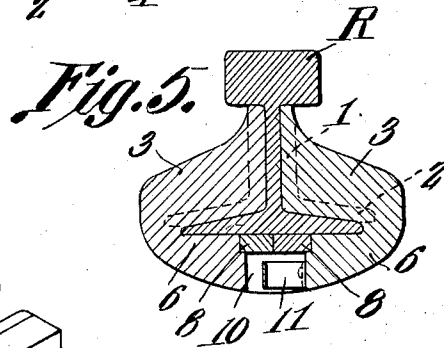
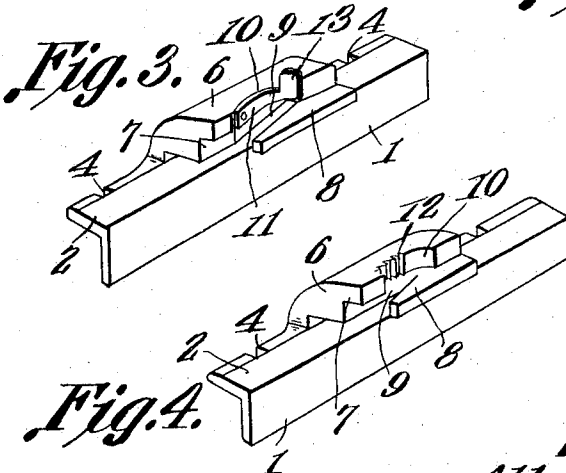
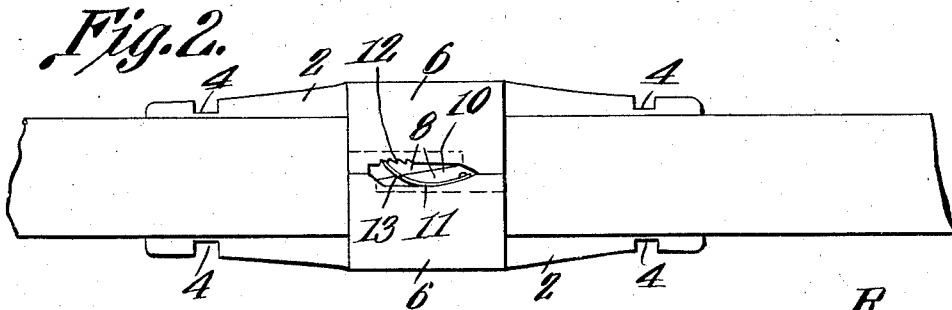
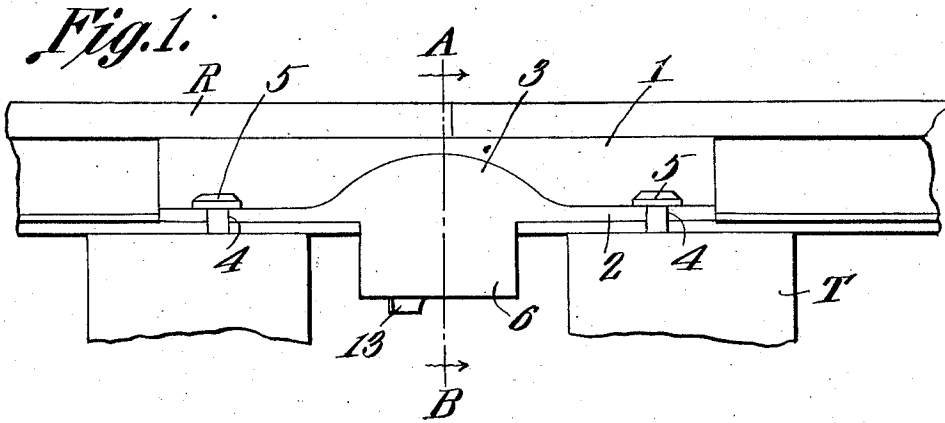
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RAIL JOINT.

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1,025,599.

Patented May 7, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

HARRY H. WALTON AND ALLAN H. YINGST, OF HARRISBURG, PENNSYLVANIA.

RAIL-JOINT.

1,025,599.

Specification of Letters Patent.

Patented May 7, 1912.

Application filed December 23, 1911. Serial No. 687,561.

To all whom it may concern:

Be it known that we, HARRY H. WALTON and ALLAN H. YINGST, citizens of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Rail-Joint, of which the following is a specification.

This invention relates to rail joints, its object being to provide fish plates which can be securely fastened to the rails without the necessity of utilizing keys, bolts or the like.

A further object is to provide a rail joint which can be used in connection with ordinary ties without the necessity of shifting the ties so as to bring them into position under the meeting ends of the rails.

Another object is to provide means whereby, when the members of the joint are assembled with the rails, they can be adjusted so as to bind firmly upon opposed faces of the rails, means being employed for holding the parts of the joint in the positions to which they are moved.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a side elevation of a rail joint constructed in accordance with the present invention. Fig. 2 is a bottom plan view thereof. Fig. 3 is a perspective view of one of the members of the joint inverted. Fig. 4 is a perspective view of the other member inverted. Fig. 5 is a section on line A—B Fig. 1.

Referring to the figures by characters of reference 1 designates a fish plate having a base flange 2, there being an enlargement or thickened portion 3 upon the flange and fish plate at an intermediate point whereby the structure is reinforced between its ends. Notches 4 may be formed in the end portions of the flange 2 for the reception of spikes 5 or other fastening means.

A base extension 6 extends downwardly from the outer edge of each flange 1 and thence inwardly under the flange, the dis-

tance between the upper face of the extension 6 and the lower face of the base flange 2 being substantially equal to the thickness of one of the base flanges of a rail R. The free longitudinal edge of each extension 6 is rabbeted, as indicated at 7 and a tongue 8 extends beyond said rabbeted portion and is spaced, at one side, from the extension 6 by an obliquely disposed slot 9. As both of the members of the rail joint are of the same construction it will be apparent that when they are placed oppositely to each other, the rabbeted portions thereof will lap and each tongue 8 will project into the slot 9 of the opposed extension 6. Obviously, therefore, when one member of the joint is shifted longitudinally relative to the other member, the tongues 8 upon entering the slots 9, will draw the two members toward each other and cause the fish plates 1 to clamp tightly on the opposed sides of the webs of rails R. The meeting edges of the extensions 6 are cut away centrally, as indicated at 10, so as to form an opening for the reception of a locking spring 11 secured at one end to one wall of the opening and having its other end positioned to engage any one of a series of teeth 12 formed on the opposed wall of the opening. A finger piece 13 may be extended downwardly from the tooth engaging end of the spring.

Obviously, during the relative adjustment of the two fish plates, spring 11 will slip over the teeth 12 and prevent return movement of the fish plates after they have once been clamped upon the rails. With the parts thus assembled on the rails, the enlargements 6 can be positioned between the ties T and the notched end portions of the base flanges 2 can be fastened to the ties by means of the spikes or other fastenings 5. When it is desired to disconnect the fish plates from the rails, the finger piece 13 is shifted laterally so as to disengage spring 11 from teeth 12. The said fish plates can then be shifted in opposite directions so as to become disengaged from the rails.

What is claimed is:—

1. A rail joint including opposed fish plates, interengaging portions each formed in one piece with one fish plate and shiftable longitudinally under the rails for binding the fish plates upon the rails, cooperating means housed between the fish plates and below the joined rails for holding said fish plates against independent longitudinal

movement to release the rails, said cooperating means including a toothed element and a detent for engaging said element, and a depending finger piece upon the detent and projecting below the fish plates.

2. A rail joint including opposed fish plates, base flanges thereon, each fish plate having an enlargement adjacent the center thereof and upon its flange, an extension projecting downwardly from the enlarged portion of the flange and projecting inwardly under the flange, said extension constituting a support for the end of a rail inserted between the fish plates, tongues upon the extensions, said tongues being movable together and cooperating to draw the fish plates together during the longitudinal movement of one of said plates relative to the other plate, teeth upon one of the extensions, a detent upon the other extension and normally engaging the teeth to hold the fish plate against movement in the opposite direction, and a depending finger piece upon the detent and projecting below the extensions.

3. A rail joint including opposed fish plates, base flanges thereon, each fish plate

having an enlargement adjacent the center thereof and upon its flange, an extension projecting downwardly from the enlarged portion of the flange and projecting inwardly under the flange, said extension constituting a support for the end of a rail inserted between the fish plates, tongues upon the extensions, said tongues being movable together and cooperating to draw the fish plates together during the longitudinal movement of one of said plates relative to the other plate, teeth upon one of the extensions, a detent upon the other extension and normally engaging the teeth to hold the fish plate against movement in the opposite direction, and a depending finger piece upon the detent and projecting below the extensions, the meeting portions of the extensions being rabbeted and adapted to lap.

In testimony that we claim the foregoing as our own, and have hereto affixed our signatures in the presence of two witnesses.

HARRY H. WALTON.
ALLAN H. YINGST.

Witnesses:

EDWIN C. OSMAN,
JOHN G. HAUCK.

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