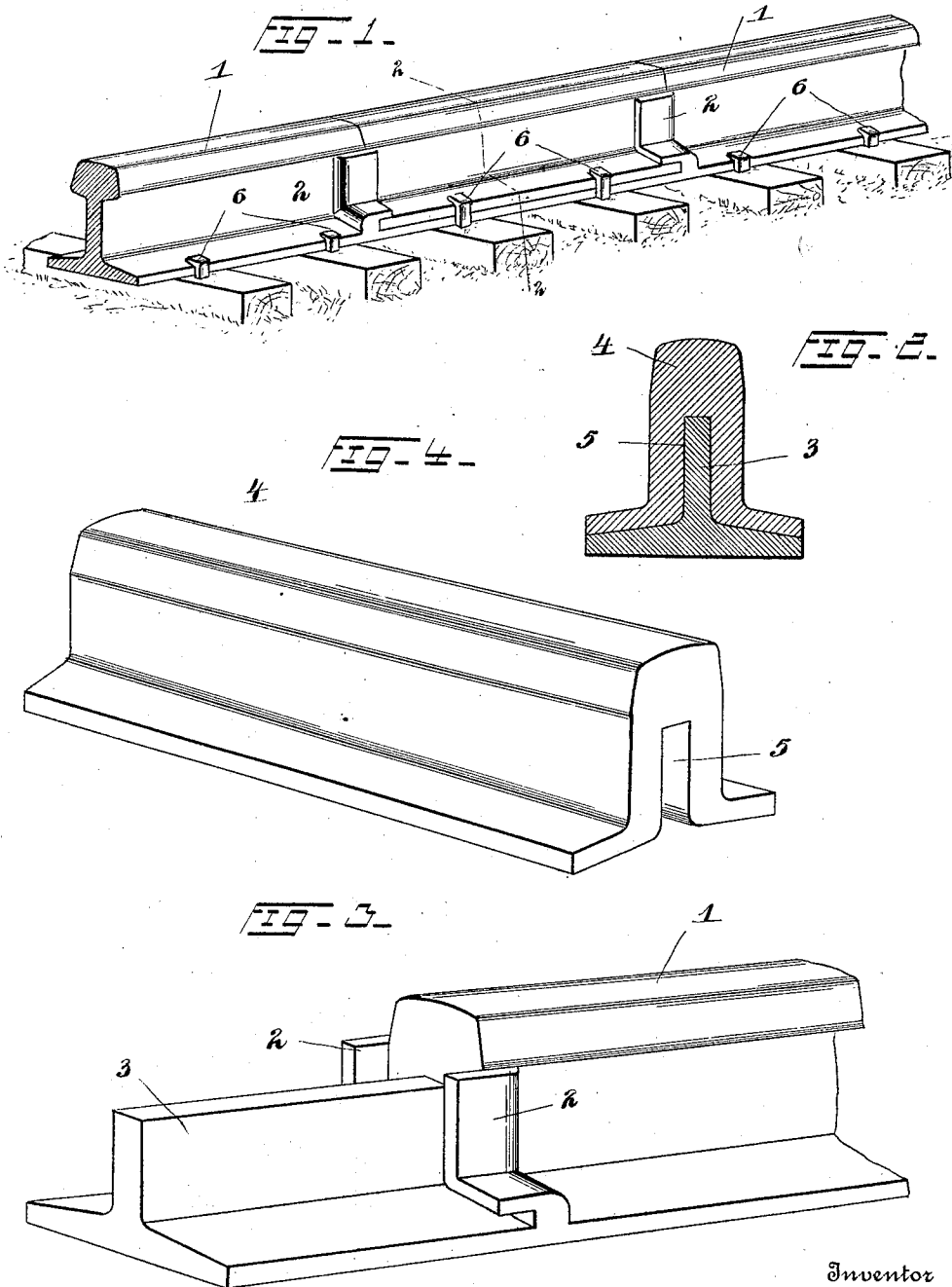


H. M. ZIRKLE.
RAIL SPLICE.
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1,050,590.

Patented Jan. 14, 1913.



Witnesses

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UNITED STATES PATENT OFFICE.

HARRY M. ZIRKLE, OF ST. PARIS, OHIO.

RAIL-SPLICE.

1,050,590.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HARRY M. ZIRKLE, a citizen of the United States, residing at St. Paris, in the county of Champaign and State of Ohio, have invented new and useful Improvements in Rail-Splices, of which the following is a specification.

The present invention relates to improvements in rail joints, the primary object being to provide a joint for rail ends wherein the employment of fish plates, bolts or analogous securing devices is dispensed with, and also wherein the ends will be effectively supported against lateral movement.

With the above recited objects in view, and others which will be apparent as the nature of the invention is more fully disclosed, the improvement resides in the construction, combination and arrangement of parts hereinafter described and claimed.

In the drawing, Figure 1 is a perspective view of rail ends connected in accordance with my improvement. Fig. 2 is a transverse sectional view taken approximately upon the line 2—2 of Fig. 1. Fig. 3 is a detail view of one of the rail ends. Fig. 4 is a similar view of the rail splice.

The rails, designated by the numerals 1—1 have their heads, as well as a portion of the upper edges of their webs removed for some distance from their ends. The webs, as well as the base flanges are preferably reinforced or enlarged at the terminals of their heads, the said enlargements being provided with flanges 2. The flanges or lips 2 conform to the cross sectional shape of the rails, the lower or inclined members of which overlie the extending base flanges of the rail ends, while their vertical portions have their inner faces parallel with the rail webs, and are disposed a suitable distance away from the opposite sides of the extending webs 3 of the rail ends. It will thus be noted that the extending portion of each of the rails and the flanges 2 provide pockets, the purpose of which will presently be set forth.

The numeral 4 designates the rail splice. This splice includes a head, base flanges and a connecting web. The web is enlarged, and is provided with a longitudinally extending

passage 5 which is of a size and shape to snugly receive therein the extending webs 3 of the rail ends. The under faces of the base flanges of the splice are inclined to conform with the shape of the upper faces of the flanged extensions of the rail ends. It is, of course, to be understood that the rail ends abut when the rails are positioned upon the ties of the road-bed, and secured thereon. However, when the splice is to be applied to the rail ends, the said ends are spaced a slight distance apart to permit of the said splice engaging the pockets of the rail ends, after which the rail ends are forced toward each other. The lips 2 providing the pockets are of sufficient length to provide for the contraction and expansion of the rail ends without permitting the splice being entirely removed therefrom, and when the members comprising the rail joint are assembled spikes 6 are employed, the said spikes having their heads engaging with the base flanges of the splice, and their bodies contacting with the longitudinal edges of the base flanges of both the splice and the rail ends. The spikes also are employed for securing the bodies of the rails upon the ties, in the well known manner.

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

In combination, a pair of rail ends, each provided with an extending web and base flanges, the said rails being provided with angular projections arranged upon their webs and base flanges and disposed at the terminals of the heads of the rails to provide pockets, a splice, said splice including a head, a web and base flange, the web being centrally provided with a longitudinally extending passage which is adapted to receive the extending webs of the rail ends, and the base flanges of the splice adapted to rest upon the base flanges of the rail end, and the opposite ends of the splice adapted to be received within the pockets of the rails.

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

HARRY M. ZIRKLE.

Witnesses:

THOMAS B. OWEN,
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