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SPLICE BAR.

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SPLICE-BAR.

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To all whom it may concern:

Be it known that I, STEPHEN G. DAVIS, a citizen of the United States, residing at Georgetown, in the county of Vermilion and State of Illinois, have invented a new and useful Splice-Bar, of which the following is a specification.

This invention relates to splice bars for holding together and supporting the meeting end portions of railway rails and its object is to provide a device of this character designed to bear upon and engage a plurality of ties so as to prevent said ties from moving toward or away from each other.

A further object is to provide a splice bar of this character arranged to project under and support the rails at their meeting ends and to engage and support the tread portions of the rails.

A further object is to provide a bar having improved means for attaching the rails to it.

A still further object is to provide a splice bar having combined reinforcing and holding devices upon the lower face thereof, the said devices constituting spacing means for holding the ties apart.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim.

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

In said drawings:—Figure 1 is a side elevation of the meeting end portions of two rails and showing a splice bar connected thereto, the said bar being mounted on ties extending under the rails. Fig. 2 is a section on line A—B Fig. 1. Fig. 3 is a perspective view of one of the splice bars.

Referring to the figures by characters of reference 1 designates the elongated base portion of one of the splice bars there being an angular upstanding longitudinally extending rail engaging member 2 formed upon this base portion and overhanging the same. This rail engaging portion is so shaped as to fit snugly upon the upper face of one of the base flanges of a rail, said base flange bearing on the base portion 1. A longitudinally extending flange 3 is formed along the free longitudinal edge of the rail engaging portion 2 and is so shaped as to fit snugly against the web and the lower face of the head of a rail and has a

series of openings 4 therein for the reception of securing bolts 5. A spacing rib 6 is formed longitudinally upon the lower portion of the plate 1 and lugs 7 extend downwardly from the end portions of said base, these lugs being spaced from the ends of the ribs distances equal to the thickness of the ties A on which the splice bar is to be mounted. Either or both of the upstanding flanges 3 may be provided in its inner face adjacent the center thereof with a longitudinal groove 8 for the purpose hereinafter set forth.

In using the device herein described the two base portions 1 are inserted under opposite portions of the bases of the meeting rails B and the overhanging portions 2 will thus bear downwardly on the upper faces of the base flanges while the flange 3 will fit snugly against the webs and the heads of the rails. The bolts 5 can then be inserted through the registering openings within the flanges 3 and the rail webs. The bolts utilized for this purpose are preferably provided with longitudinal grooves 9 in which a wire 10 is seated, the ends of this wire being foldable into a slot 11 in the head of the bolt and over the nut 12 engaging the opposite end of said bolt. Said wire thus constitutes efficient means for preventing the nut from becoming disengaged from the bolt. After the parts have been properly connected the base portions 1 can be placed on the supporting tie A, the ribs 6 resting between the ties while the lugs 7 hang beyond said ties. The ribs and lugs will thus cooperate to prevent the ties from either working toward or away from each other. Moreover the ribs 6 serve to reinforce the intermediate portions of the splice bars and the meeting ends of the rails C are thus prevented from sagging.

When the splice bars are used in connection with the tracks of street railway systems or the like where bonded rails are employed, the grooves 8 are utilized so as to receive the bonding wires.

It is to be understood of course that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claim.

What is claimed is:—

The combination with rails having abutting ends, of splice bars each consisting of

a base portion extending under the meeting portions of the rails, an integral overhanging portion contacting with the upper faces of the adjoining base flanges of the rails, a
5 flange upon said overhanging portion and contacting with the web and head of each rail, depending longitudinally extending ribs for preventing the ties on which the base portions are mounted from moving
10 toward each other, depending projections upon the end portions of the bases for preventing said ties from moving apart, and means extending transversely through the flanges and web for holding them together,

said means comprising longitudinally slot- 15
ted bolts, nuts upon said bolts, and a bendable wire seated within the slot in each bolt and extending radially within the head of the bolt and across the outer face of the nut. 20

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

STEPHEN G. DAVIS.

Witnesses:

B. C. RICHIE,
H. J. ELLIOTT.