

C. W. WALKER.
STEEL TIE.

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985,081.

Patented Feb. 21, 1911.

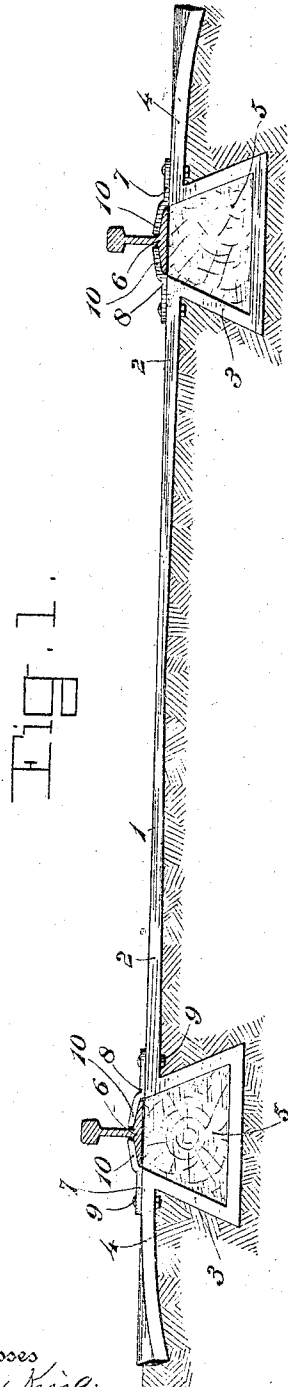


Fig. 1.

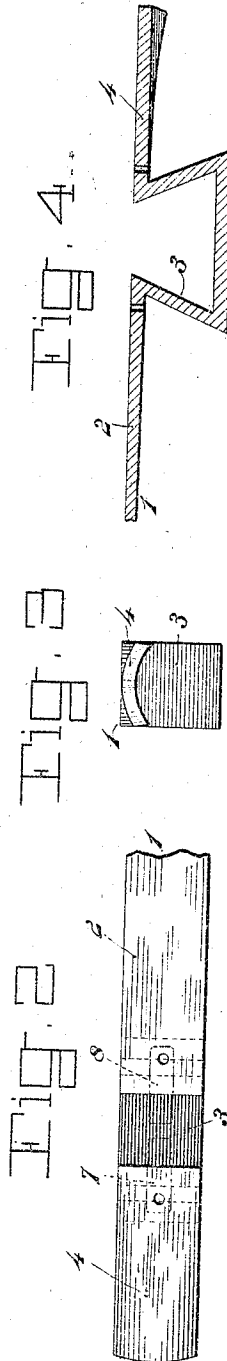


Fig. 2.

Fig. 3.

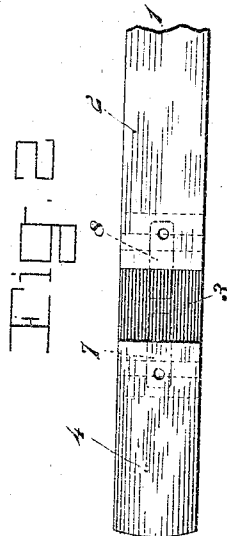


Fig. 4.

Witnesses

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STEEL TIE.

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To all whom it may concern:

Be it known that I, CLIO W. WALKER, a citizen of the United States, residing at Miami, in the Territory of Arizona, have invented new and useful Improvements in Steel Ties, of which the following is a specification.

This invention relates to improvements in metallic railway ties, and the object of the invention is to provide a metallic tie of the ordinary construction formed of a single piece of metal.

Another object of the invention is to provide a tie having its ends provided with pockets adapted for the reception of suitable cushions, formed of wood or the like, the tie being further provided with engaging lugs and the ends of the ties projecting beyond the cushions being rounded so that the same when embedded in the roadbed will prevent the lateral or longitudinal movement of the said tie.

A still further object of the device is to provide a tie constructed of a single strip of suitable metal increasing in thickness from its central portion to its ends so as to render the same of a desired elasticity.

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

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the improvement and in which drawings,

Figure 1 is a side elevation of a tie constructed in accordance with the present invention showing the rails positioned thereon. Fig. 2 is a top plan view of one of the ends of the tie. Fig. 3 is an elevation looking toward the end of the tie. Fig. 4 is a central longitudinal sectional view of one of the ends of the tie.

In the accompanying drawings the numeral 1 designates the tie proper. This tie is constructed of a single rectangular strip of suitable metal comprising what may be

termed a body or top portion 2 provided adjacent its ends with depending pockets 3 and having end extensions 4. The pockets 3 are of inverted dove-tail formation as clearly illustrated in the figures of the drawings, and the said pockets are adapted for the reception of suitable cushion members constructed of wood or the like. The base flange of the rail 6 is adapted to lie directly upon the cushion 5 between the adjacent ends of the dove-tail pockets and the rail is retained in position upon the said cushion through the medium of clips 7 and 8 which have their body portions provided with openings alining with openings in the tie, and the said openings are adapted for the reception of securing elements 9. The clips 7 and 8 are provided with overlying portions 10, adapted to engage the base flanges upon the opposite sides of the rail. The end portions 4 of the ties are of a substantially curved cross sectional contour as clearly illustrated in Figs. 3 and 4 of the drawings, the same being so constructed as to readily embed itself within the roadbed and to prevent the lateral movement of the tie when the same is in position. It will be noted that when the tie is positioned within the roadbed the earth or other ballast positioned between the rails bears directly upon the oppositely inclined walls of the dove-tail pockets 3 so as to securely retain the tie in proper position upon the bed. The body member 2 of the tie is thickened from its center toward the pockets 3 so as to render the central portion of the said tie of a lesser thickness than the remainder of the tie. By this construction the tie is rendered resilient so as to give a spring to the same when the rolling stock is passing over the rails 6 and thus preventing the bumping of the rails.

It will be apparent from the foregoing description that the improvement provides a substantial tie which may be made of a single strip of metal and that the securing of the rails thereto is accomplished without weakening the rails by the formation of bolt holes in the web or flange portions thereof.

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

A metallic tie comprising a plate having a body portion and being provided with dovetail pockets adjacent its ends, said pockets being adapted for the reception of cushion members, the portions of the tie projecting beyond the pockets being curved in cross section, and the body portion of the tie be-

ing tapered from its juncture with the pockets to its central portion, substantially as and for the purpose set forth. 10

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

CLIO WYTHE WALKER.

Witnesses:

W. A. E. WOODS,
CLIFFORD C. FARRIS.