

No. 682,924.

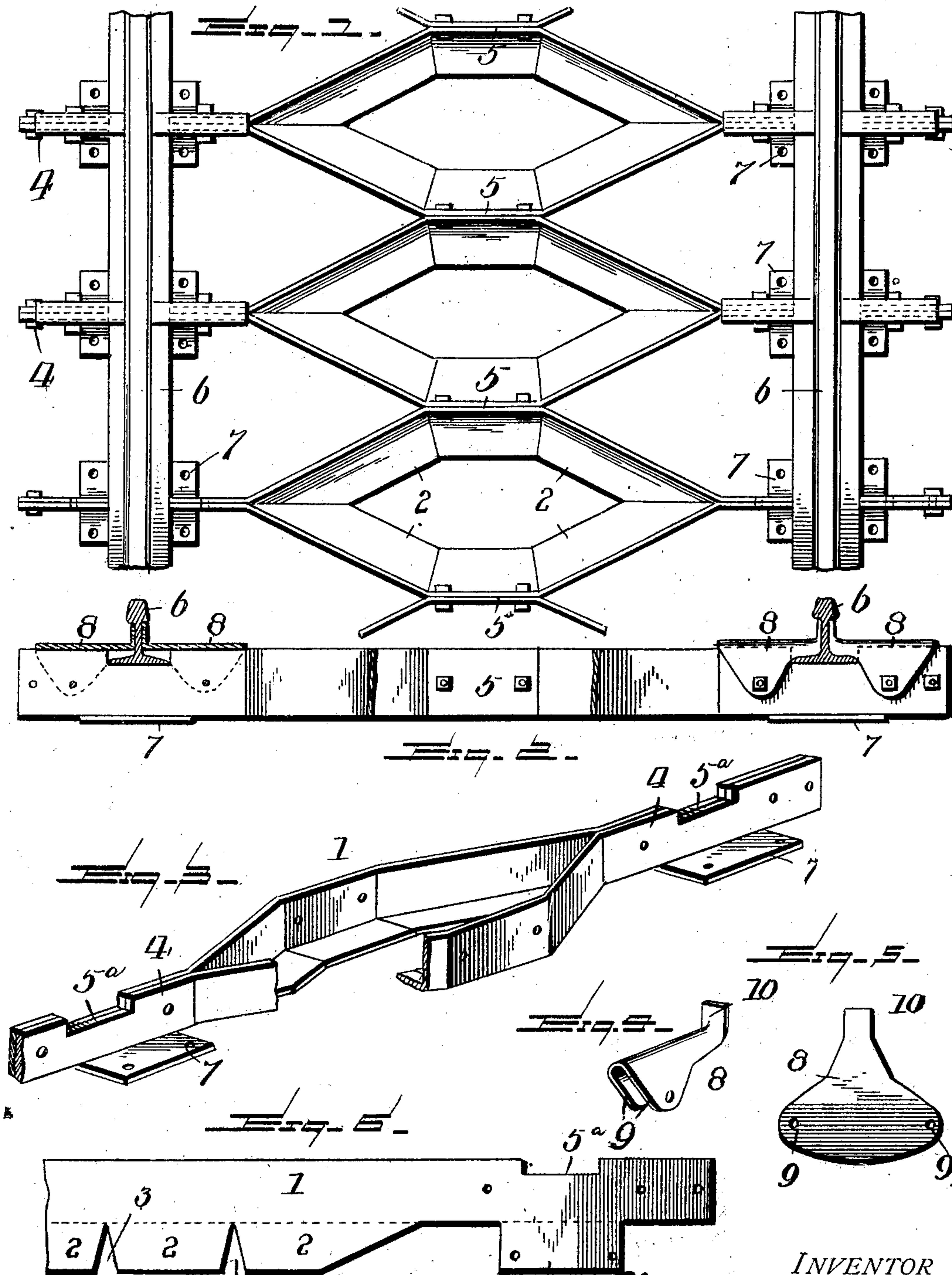
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P. W. FLANDERS.

RAIL TIE.

(Application filed May 20, 1901.)

(No Model.)



WITNESSES:
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RAIL-TIE.

SPECIFICATION forming part of Letters Patent No. 682,924, dated September 17, 1901.

Application filed May 20, 1901. Serial No. 61,111. (No model.)

To all whom it may concern:

Be it known that I, PHILIP W. FLANDERS, a citizen of the United States of America, residing at Elkhorn, in the county of Walworth and State of Wisconsin, have invented certain new and useful Improvements in Rail-Ties, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in rail-ties, and has for its object the provision of novel means whereby the dispensation of the wooden ties now in use is accomplished.

A further object of my invention is to permit of the stamping of the two sections of the ties from a piece of sheet metal.

With these and other objects in view my invention further consists in the novel details of construction and combination of parts to be fully described in the following specification and clearly set forth in the claims.

Briefly described, my invention consists of two sections, both of which are stamped from sheet metal and united by bolts and nuts, rivets, or other securing means. These sections are of a substantially diamond shape when united and are provided at their two opposite pointed ends with integral extensions which are notched to receive the rail. Bases are connected to these extensions and serve to steady the same. A saddle is provided, which is adapted to engage the web of the rail, and the integral extension of the pointed ends holding the rail securely to the ties.

Referring to the accompanying drawings, in which like characters of reference indicate similar parts throughout the several views, Figure 1 is a top plan view of my improved rail-tie, showing the same in position securing two rails. Fig. 2 is a central horizontal view thereof. Fig. 3 is a perspective view of one of my ties. Fig. 4 is a perspective view of the saddle for securing the rails to the ties. Fig. 5 is a top plan view thereof, showing the saddle when stamped from metal and before being bent in the position as shown in Fig. 4; and Fig. 6 is a top plan view of one of the sections of the ties, showing the same as stamped from the sheet metal partly broken away.

I provide a substantially diamond-shaped tie which is composed of two sections. These

sections are each stamped from a piece of sheet metal, as will be seen in Fig. 6.

The reference-numeral 1 indicates that portion of the tie which is to be bent into the shape as shown in Fig. 3, and 2 indicates the flanges, which are adapted to be bent at right angles to the portion 1.

3 indicates the notches which are cut in the piece of sheet metal when the same is stamped in order to allow of the bending of the metal to the diamond-shaped form.

7 is the base of the outwardly-extending ends 4, and said base is made integral with the same. 5^a represents the notches cut in the said ends and adapted to receive the bases of the rails securely therein.

The two sections are adapted to be united, as shown at 5, to one another by means of bolts and nuts, rivets, or other means.

The reference-numeral 6 indicates the rails, which are secured in the recesses 5^a by means of a saddle 8. The said saddle is stamped from a piece of sheet metal, as shown in Fig. 5, and is then bent to the shape illustrated in Fig. 4, wherein it will be noted that the sides of the said piece of metal are bent downwardly parallel to one another and are apertured to receive the bolt which fastens the said sides to the ends 4 of the ties. This saddle is provided with an integral upwardly-extending lug 10, which is adapted to engage the underneath face of the tread and the web of the rail, thereby preventing the said rail from having any movement. The said flanges of the ties are adapted to lie flush with the bed of the road and have ballast firmly packed within the said diamond-shaped openings. The bases are likewise adapted to rest upon the bed of the road to brace the tie.

It will be noted that my improved device can be stamped from a piece of sheet metal as well as the saddle, which will materially decrease the cost of manufacture.

The many advantages acquired by the use of my device it is thought will be readily understood from the foregoing.

It will be understood that I do not limit myself to the particular construction and combination of parts as described and shown, as it is obvious that many changes may be made in the details of construction without departing from the spirit of my invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, a substantially diamond-shaped rail-tie formed of two sections, means for uniting the sections, extensions carried by the said tie, and means secured to the said extensions for fastening the rails thereto, substantially as described.

2. In a device of the character described, a substantially diamond-shaped tie, flanges made integral therewith, extensions made integral with the said tie, base-plates carried by the said extensions, the said extensions having recesses formed therein for the reception of the rails, and means for securing the said rails to the said extensions.

3. In a device of the character described, a substantially diamond-shaped tie formed of two united sections, flanges made integral with the said tie at right angles thereto, extensions made integral with the said ties, base-plates made integral with the said extensions, and a saddle secured to the said extensions and engaging the rail carried thereby, substantially as described.

4. In a device of the character described, a

diamond-shaped tie having flanges, extensions made integral with the said tie, base-plates carried by the said extensions, the said extensions having recesses formed therein for the rail to be secured in, and a saddle secured to the said extensions for securing the rail thereto, the saddle comprising downwardly-extending sides made integral therewith, and a lug at right angles thereto for engagement with the web of the rail, substantially as described.

5. As an article of manufacture, a rail-tie composed of two sections secured together, the said sections being stamped from a piece of sheet metal, and formed into a substantially diamond-shaped form, provided with extensions, and a saddle stamped from a piece of sheet metal and adapted to be used in combination with the said tie, substantially as described.

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

PHILIP W. FLANDERS.

Witnesses:

EDNA L. VAUGHN,
JAY F. LYON.