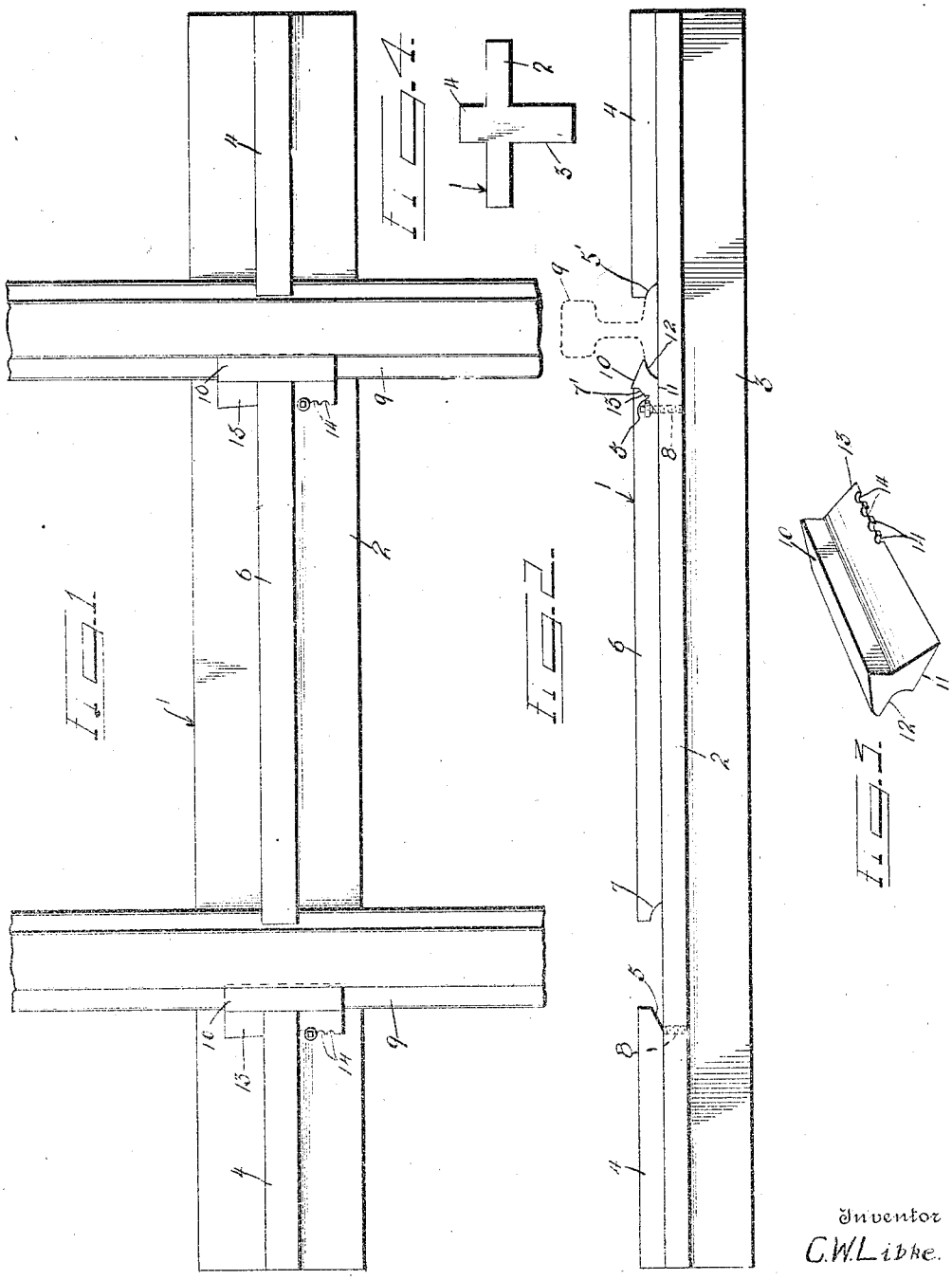
C. W. LIBKE.

RAILWAY TIE.

APPLICATION FILED MAY 8, 1911.

1,001,763. Patented Aug. 29, 1911.



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CHRISTIAN W. LIBKE, OF DRAKE, NORTH DAKOTA.

RAILWAY-TIE.

1,001,763. Specification of Letters Patent. Patented Aug. 29, 1911.

Application filed May 8, 1911. Serial No. 625,690.

To all whom it may concern:

Be it known that I, CHRISTIAN W. LIBKE, a citizen of the United States, residing at Drake, in the county of McHenry, State of North Dakota, have invented certain new and useful Improvements in Railway-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in railway ties and particularly to one formed entirely from metal and to which the rails may be quickly and conveniently fastened.

A further object of the invention is to so construct a device of this character that the same may be manufactured cheaply and one which when employed may be conveniently laid, and by its peculiar formation will be held in its proper position by the ballast of the road.

In the drawing:—Figure 1 is a top plan view of a tie, showing sections of rails fastened thereto. Fig. 2 is a side view of one of the ties, the rails being removed. Fig. 3 is a detailed perspective view of one of the wedges used for securing the rails to the tie. Fig. 4 is an end view of the tie.

Referring to the drawing, the numeral 1 designates the tie, said tie being formed from suitable metal and being provided with a base 2 and a central longitudinal web 3, said web being formed integral at the central portion of the base 2 and extending throughout its length. The upper face of the base 2 and in the center thereof are integrally formed end flanges 4, each of said flanges having their inner ends formed with a beveled edge 5 and notch 5′, respectively. Arranged between the flanges 4, and in alinement therewith is formed an integral central flange 6 one end of which is formed with a notch 7, and its other end with a beveled edge 7′ which when in conjunction with the beveled edge 5 and notch 5′ of the end flanges 4 form seats for the rails.

A screw threaded bolt opening 8 is arranged adjacent the inner end of each flange 4 and extends vertically through the base 1 the purpose of which will be hereinafter described.

The flanged bases of the usual rails 9 are placed within the seats formed by the end flanges and central flange 6 and the wedges 10 are inserted so as to have their inner face engage the outer flange of each rail base and their outer face to engage the beveled edge 5 of one of the end flanges 4 and the beveled edge 7′ of the central flange 6 to securely clamp the rails to the tie.

The wedges 10 are each provided with a flat base 11 and a grooved inner face 12 to engage the base flange of each rail. The outer faces 13 of the wedges are beveled so as to conform to the inner beveled edge 5 of one of the end flanges 4, and the beveled edge 7′ of the central flange 6, whereby the rails are tightly clamped and prevented from moving upwardly and from their seats.

The wedges 10 are each provided at the lower edge of each beveled face 13 with a series of alined semi-circular notches 14, so that when the wedges have been driven in position one of the notches 14 will register with the bolt opening 8, and when a bolt is threaded into the opening 8 the wedges will be positively held against accidental displacement.

From the foregoing it will be seen that I have produced a tie and rail fastener which is simple in construction, durable, and may be manufactured cheaply and one from which the rails may be easily and quickly removed to be replaced by perfect ones.

What is claimed, is:—

A rail tie comprising a base, a longitudinal web formed integral with the bottom of said base, end flanges formed integral with the upper side of the base, one of said flanges having its inner edge formed with a notch, the other end flange having its inner edge beveled, a central flange having a notch formed in one end and having its opposite end edge beveled, bolt openings arranged adjacent the ends of each end flange, wedges for securing the rails to the tie, said wedges having their inner faces grooved to

engage the flanged edge of the rail base, and its outer faces beveled to engage the beveled inner edge of one of the end flanges, and the beveled edge of the central flange, a series of notches formed in the edges of the beveled faces of the wedges any one of said notches being adapted to register with the bolt opening, whereby when a bolt is seated in the notch and bolt opening said wedges are positively held against accidental movement.

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

CHRISTIAN W. LIBKE.

Witnesses:
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