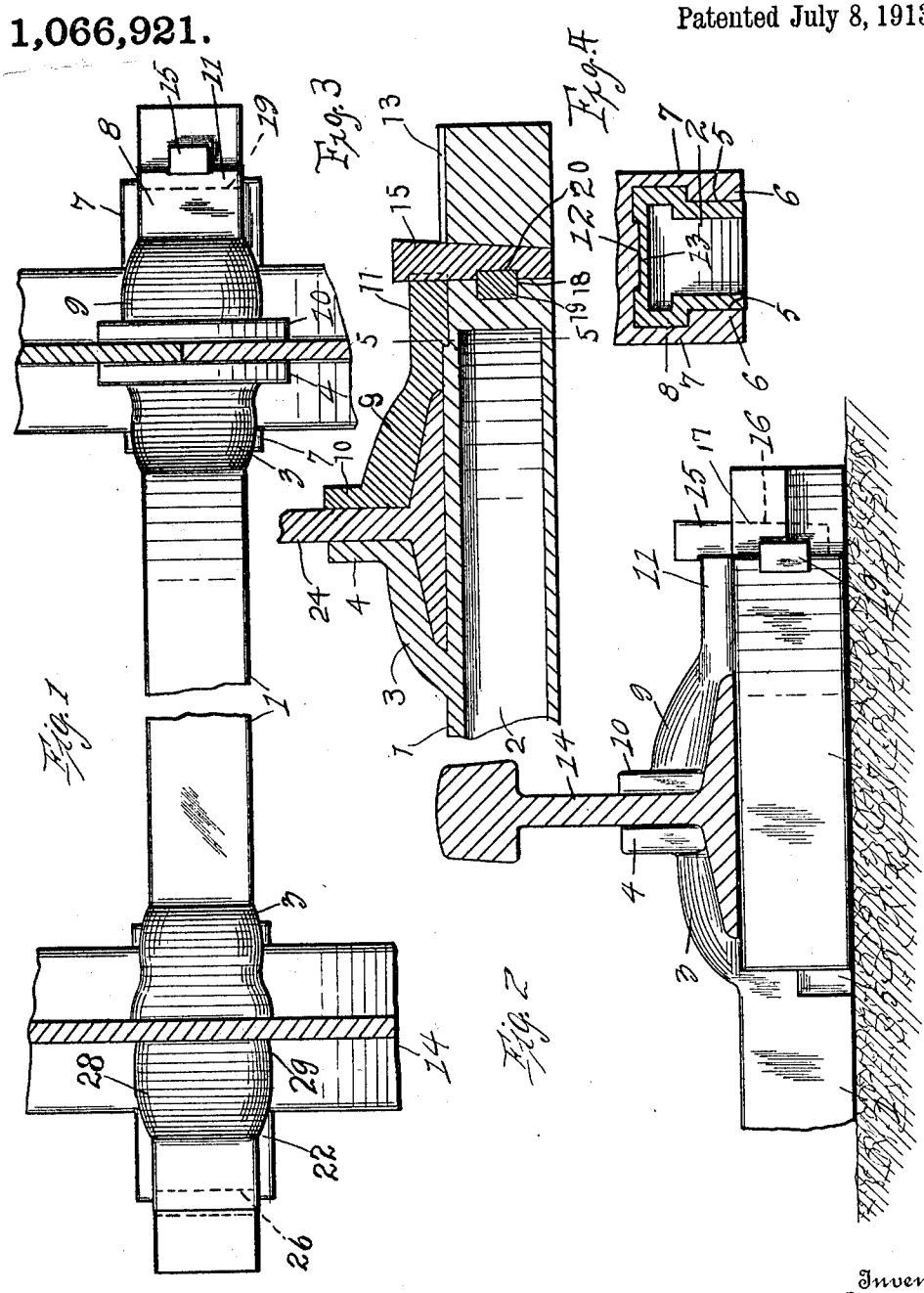
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METALLIC TIE AND FASTENER.

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METALLIC TIE AND FASTENER.

1,066,921. Specification of Letters Patent. Patented July 8, 1913.

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To all whom it may concern:

Be it known that I, CHARLES E. KLOGUS, a citizen of the United States, residing at Canonsburg, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Ties and Fasteners, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in combined tie and rail fastenings, the object of the invention being the production of a simple and inexpensive device especially adapted for the purpose intended to provide locking means adapted to coöperate with the tie in providing a secure and substantial fastening for the track rails.

Another object of the invention is to provide combined tie and rail fastenings which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other objects in view, the invention consists in the novel features of construction and the combination and arrangement of parts to be hereinafter more fully described, pointed out in the claim and shown in the accompanying drawings, in which—

Figure 1 is a top plan view of a tie and rail fastener constructed in accordance with my invention. Fig. 2 is a side elevation of one end of the tie. Fig. 3 is a longitudinal sectional view of one end of the tie. Fig. 4 is a sectional view taken on the line 5—5 of Fig. 3.

Referring more particularly to the drawings, 1 indicates the body of the tie, the central portion of which is preferably hollow as shown at 2 so as to make the tie substantially light in weight for handling and also to produce a tie which will be extremely effective in its operation and may be manufactured at a low cost. Formed integral with the tie adjacent each end are the brace members 3, said brace members being curved upwardly and having their ends facing the ends of the tie. Formed integral with the ends of the brace members and projecting upwardly therefrom are the vertically disposed flanges 4 which are adapted to abut against the web of the rail to support the same in an upright position. Each end of the tie is provided upon the lower edge thereof with the longitudinal recesses 5 which are adapted to receive the ribs 6 formed upon the parallel bars 7 of the clamping member 8, said clamping member being adjustably mounted upon the end of the tie so that the same may be readily clamped into engagement with the rail or quickly removed from the end of the tie to permit the removal of the rail.

The clamping member 8 comprises a curved body 9 having a vertically disposed flange 10 formed upon the inner end thereof and adapted to be formed like the flanges 4 upon the brace members 3. The rear end of the body member 9 is disposed at a substantially horizontal position as shown at 11 and is provided upon its under side thereof with a rib 12 which is slidably mounted within the recess 13 formed in the top of the tie.

After the rail 14 has been arranged tightly up against the brace members 3, the clamping member is slid upon the end of the tie until the vertical flange 10 is tightly engaged with the web of the rail. The tapering wedge member 15 is then inserted down through the opening 16 in the end of the tie, said opening being formed with a tapering rear wall 17 so that as the member is driven into the opening, the taper of the wedge and the wall 17 will force the wedge tightly against the end of the clamping member forcing the same into clamping engagement with the web of the rail. Each end of the tie is provided with a transverse opening 18 through which the securing pins 19 are driven, said openings 18 being formed out of alinement with the opening 16 so that when the pins 19 are driven through the openings they will pass through the recessed portions 20 of the wedge members 15 securely fastening the wedge members in position.

From the above description it will be apparent that I have provided a simple and durable fastening means for effectively securing the rails to the ties, and one which can be quickly and easily applied or readily removed when it is desired to replace the old rails with new, and also one which will entirely do away with the ordinary spikes or other undesirable fastening means of this character which are in use at the present time.

In the practical use of my invention, I prefer to use the fastening means which is illustrated in Figs. 1 and 2 at the meeting

ends of the rails, thus doing away with the fish plates, bolts, etc., in use at the present time. It will be apparent that the main form of fastening means provided with the flanges 4 and 10, will absolutely prevent lateral and vertical movement of the rails and the rails will also be held against longitudinal movement by having their abutting ends arranged close together and disposed within the central portion of the fastening member.

My invention, as illustrated in Fig. 3, is to be used in securing the rails to the ties at the joints thereof, thus doing away with the usual spikes which are now in use for securing the rails. It will be apparent that by having the brace members 3 formed integral with the ties, it will provide a more firm securing means than by having spikes driven into the tie, which in time will become loosened and withdrawn from the tie by the continual strain upon the rails. It will also be apparent that by having a removable fastening member secured to the tie by means of the transverse wedges, the rails will be held more securely in position than by the use of spikes driven into the ties and having their heads engaging the base flanges of the rail.

While I have shown and described the preferred form of my invention, it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope of the appended claim.

What I claim is:—

In a device of the character described, the combination of a body, the intermediate portion of which is hollow, brace members formed adjacent each end of the tie and facing the ends thereof, a clamping member having spaced parallel arms formed integral therewith and slidably mounted upon opposite sides of the tie, said tie being provided at its ends with vertical and transverse openings, a tapering wedge member disposed within the vertical opening at the rear of the clamping members and provided with a recess, and a key disposed within the transverse opening and arranged within said recess to retain the clamping member in its operative position.

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

CHARLES E. KLOGUS.

Witnesses:

W. E. JOHNSTON,

EDNA B. AYRES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."