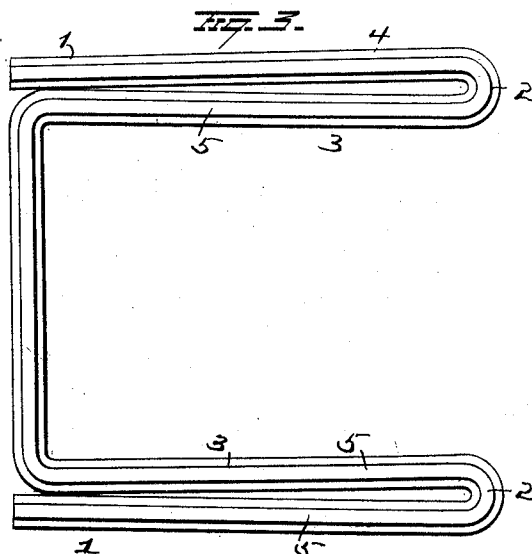
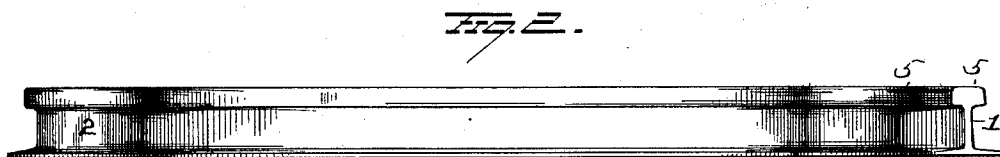
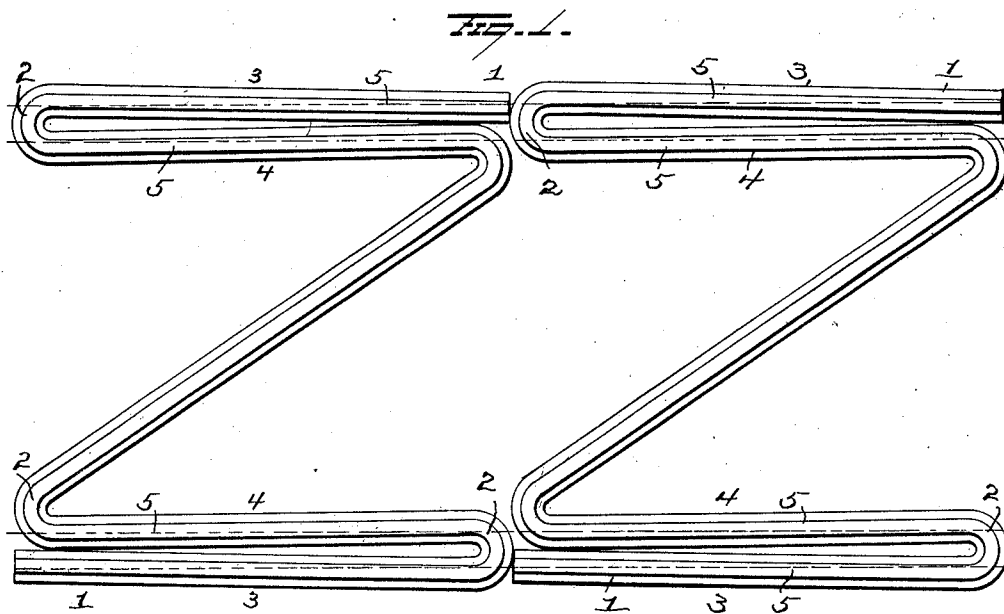


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METAL TIE.
APPLICATION FILED JAN. 31, 1911.

1,003,638.

Patented Sept. 19, 1911.



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METAL TIE.

1,003,638.

Specification of Letters Patent. Patented Sept. 19, 1911.

Application filed January 31, 1911. Serial No. 605,667.

To all whom it may concern:

Be it known that I, WILLIAM H. MORGAN, of Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Metal 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.

My invention relates to an improvement in metal ties, the object being to utilize old and discarded rail road rails, by cutting them into proper lengths or sections, and bending the ends of the sections to produce ties with ends sufficiently wide to solidly support the rails.

With this and other objects in view, my invention consists in a tie made from a section of a rail road rail, the two ends of the section being bent into U-shape, the U-shaped ends resting parallel with each other, and with their long axes parallel with the long axes of the rails.

In the accompanying drawings Figure 1 is a view in plan of several ties with the rails in dotted lines therein. Fig. 2 is an end view of one of the ties and Fig. 3 is a view of a modified form of tie.

The tie is made from rail road rail, and preferably discarded or scrap rails, by cutting the rail into sections of proper length and bending the ends into U-shape as shown in Fig. 1. The tie, as a whole, may be Z-shape as in Fig. 1 or U-shape as in Fig. 3. In both instances the ends 1 are bent parallel to each other, and at proper distance apart to support the track rails. The bent ends are then bent or folded upon themselves as at 2, the two members 3 and 4 of the bent ends being brought close together so that the heads or treads 5 thereof may be spanned or overlapped by the base flange

of the rail. The two members of each bent end, are approximately the same length, and of sufficient width to allow for some lateral adjustment of the rails thereon, both in new work and in resetting the rails to compensate for wear. If desired the two members of each bent end may be tied together so as to prevent any independent bending movement of said members, and the space between the members 3 and 4 may be filled with a wood block terminating flush with the heads 5, and forming a central support and cushion for the rails. The ties thus constructed are placed with their edges abutting or nearly so, so that the rails will be supported approximately throughout their entire length on supports extending lengthwise the rails.

With this tie, no parts of the rail section from which the tie is made, are reworked, but on the contrary the base web and head are left intact, hence the only expense incidental to transforming a rail into ties is that of cutting the rail into sections and then bending the sections.

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:—

1. A railroad tie made from a section of rail, the ends of the rail section being bent into U-shape, the two U-shaped ends being parallel.

2. A railroad tie made from a section of rail the said tie having U-shaped parallel ends and a diagonally disposed body intermediate its ends.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

WILLIAM HENRY MORGAN.

Witnesses:

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