

J. L. PFLEEGOR.
METALLIC RAILROAD TIE.
APPLICATION FILED JUNE 15, 1910.

988,947.

Patented Apr. 4, 1911.

2 SHEETS-SHEET 1.

Fig. 1.

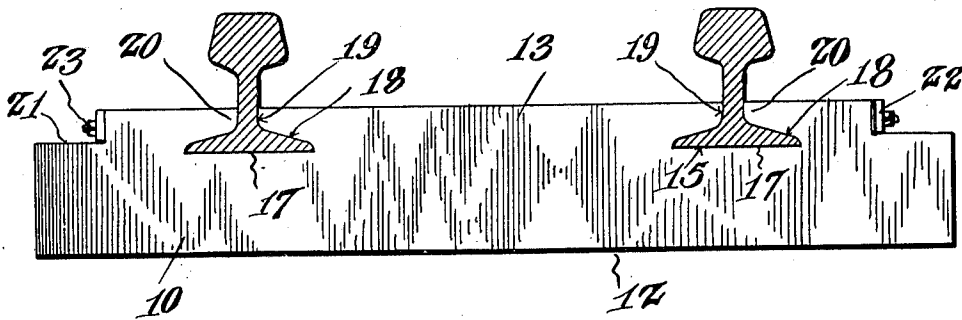


Fig. 2.

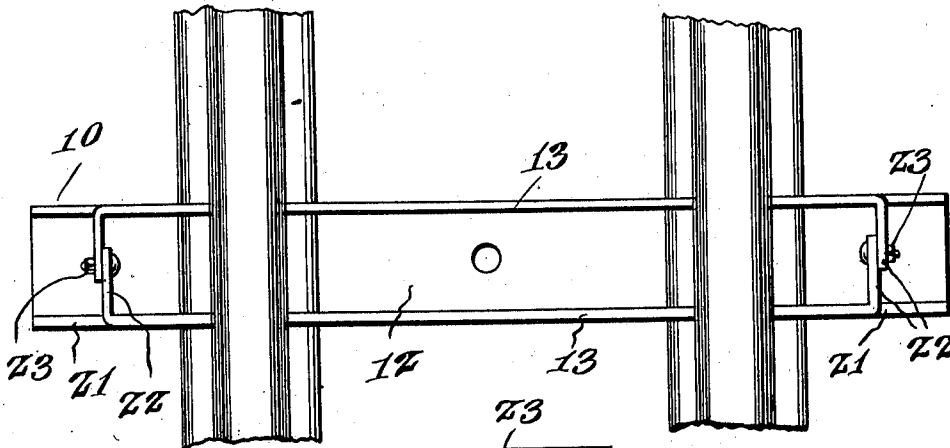
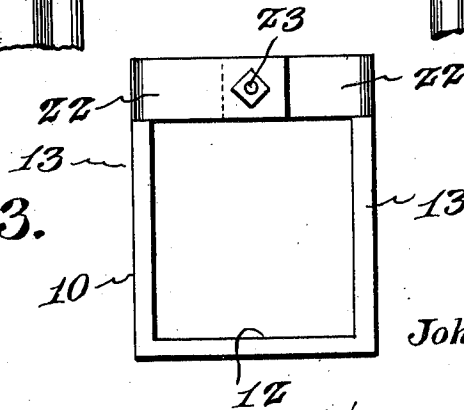


Fig. 3.



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2 SHEETS-SHEET 2.

Fig. 4.

Fig. 5.

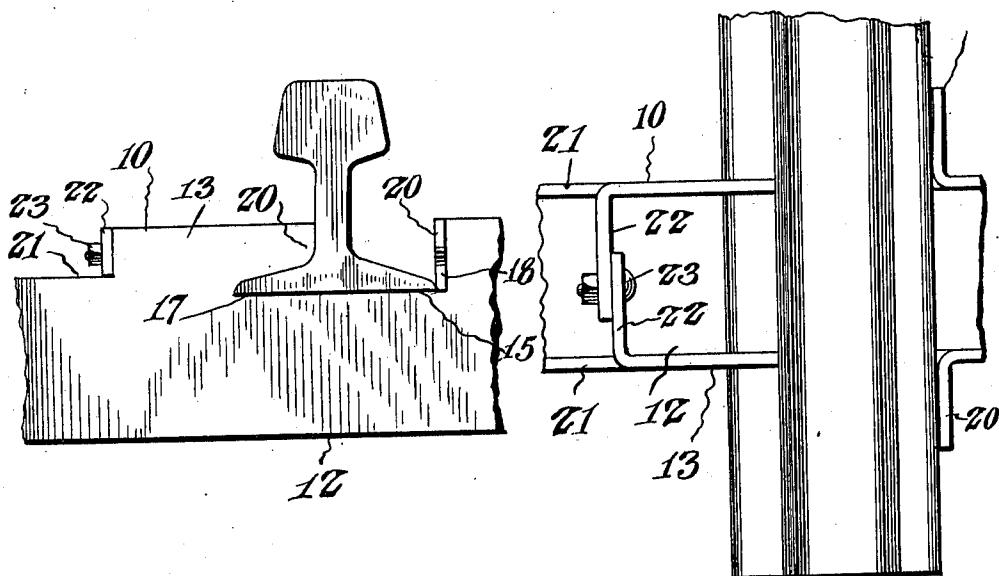
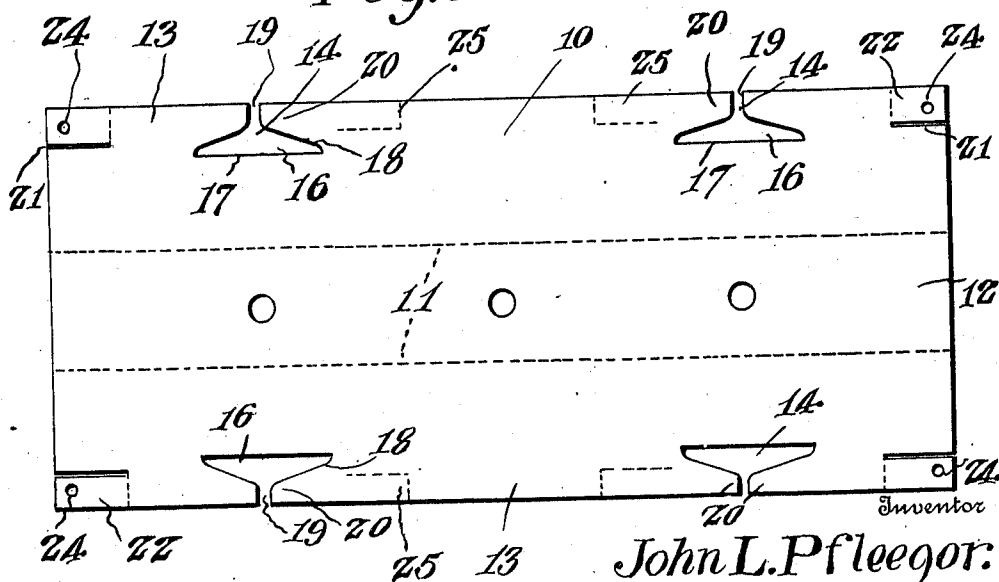


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN L. PFLEEGOR, OF MILTON, PENNSYLVANIA.

METALLIC RAILROAD-TIE.

988,947.

Specification of Letters Patent.

Patented Apr. 4, 1911.

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To all whom it may concern:

Be it known that I, JOHN L. PFLEEGOR, a citizen of the United States, residing at Milton, in the county of Northumberland and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Railroad-Ties, of which the following is a specification.

This invention pertains to improvements in railroad ties, and particularly to metallic ties.

One object of the present invention is to provide a metallic tie which is simple in construction, effective in operation, and cheap to manufacture.

Another object is to provide a metallic tie of such simple construction that the rail may be easily and quickly removed therefrom, with the minimum of time and labor, and with the aid of a sledge hammer.

A still further object is to provide a metallic railroad tie constructed of a single sheet of malleable metal—preferably steel or iron—and formed into a trough with integral means to secure the rails thereto, and means to prevent the sides of the tie from being spread, incident to the pounding of the rolling stock.

A yet further object is to provide means for securing the rails to the tie, which will obviate the use of bolts, or similar fastening devices.

With these and other objects in view, the invention consists in the construction, combination, and arrangement of the parts, as will be more fully, hereinafter, described and particularly pointed out in the claims, but it will be understood that changes in the specific structure shown and described, may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings, in which is illustrated a tie made in accordance with the preferred form of my invention, Figure 1 is a side elevation of a tie made in the form of my invention, rails being secured thereto, Fig. 2 is a top plan view of the same, Fig. 3 is an end elevation of the tie, Fig. 4 is a side elevation of one end of the tie, showing the method of inserting a rail, Fig. 5 is a top plan view of the invention as seen in Fig. 4, Fig. 6 is a plan view of the blank from which my tie is formed, the dotted lines indicating where the same is to be bent.

Referring now more particularly to the

drawings, it will be seen that the tie is formed from a single blank sheet of metal 10, which is folded on the dotted lines 11, as shown in Fig. 6. The tie comprises the bottom 12, and the side members 13, disposed in parallel relation. In each of the side members, at either end thereof, and near the upper edge are formed the cut away portions 14, which are of the same shape in their peripheral contour as the base and web of the rail 15, the horizontal portion 16 having a straight bottom wall 17 and the upwardly curved upper walls 18, from which leads the vertical portion 19 outwardly of the upper edge of the side wall of the tie.

The peculiar shape of the cut away portion 14 produces the tongues 20, which are adapted to be bent laterally of the side walls of the tie, to permit the rails to be inserted within the cut away portions, by means of a sledge hammer. If desired the ties may be slipped on the ends of the rail and the tongues 20 swaged against the rails.

To prevent the spreading of the side walls 13, of the tie, I provide longitudinal and horizontal slits or cuts 21, near the upper edges and at opposite ends of said side walls, which produce the tongues 22. These tongues, when the tie is in position and the rail secured thereon, are adapted to be bent to overlap each other.

By means of bolts or rivets 23, adapted to be passed through the openings 24, of the tongues, said tongues are fastened together, to serve as a brace for the said side walls 13. It will be understood that ballast is heaped up around the sides of the ties, and also filled into the trough of the tie, between the side walls, so that the ties are securely anchored in the road bed.

By means of the simplicity of the construction of the tie, and the provision of the tongues, it will readily be seen that it is only necessary to bend outwardly the said tongues, when the rail may be easily and quickly inserted in the cut away portions. Further the walls of the tie are effectively prevented spreading by means of the bracing or tying tongues 22. Should it be found necessary to brace the side walls of the tie on the other side of the rail, I may form additional tongues 25, as shown in dotted lines in Fig. 6.

What is claimed is:

A metallic railroad tie formed of a single sheet of material, comprising a bottom wall,

side walls arranged in parallel spaced relation, said side walls having openings cut therein of a shape to snugly fit the base and web of a rail, tongues formed by said openings and disposed thereover and adapted to be bent laterally of the side walls to permit of the insertion of a rail within said openings, said side walls being cut at their ends and near their upper edges to produce
10 tongues, said tongues adapted to be bent laterally and overlapped at the ends of the tie,

and fastening means adapted to pass through openings formed in said tongues, whereby the tie is firmly held together and prevented spreading.

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

JOHN L. PFLEEGOR.

Witnesses:

WM. P. WENDLE,
FRANK ALLEN.

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