

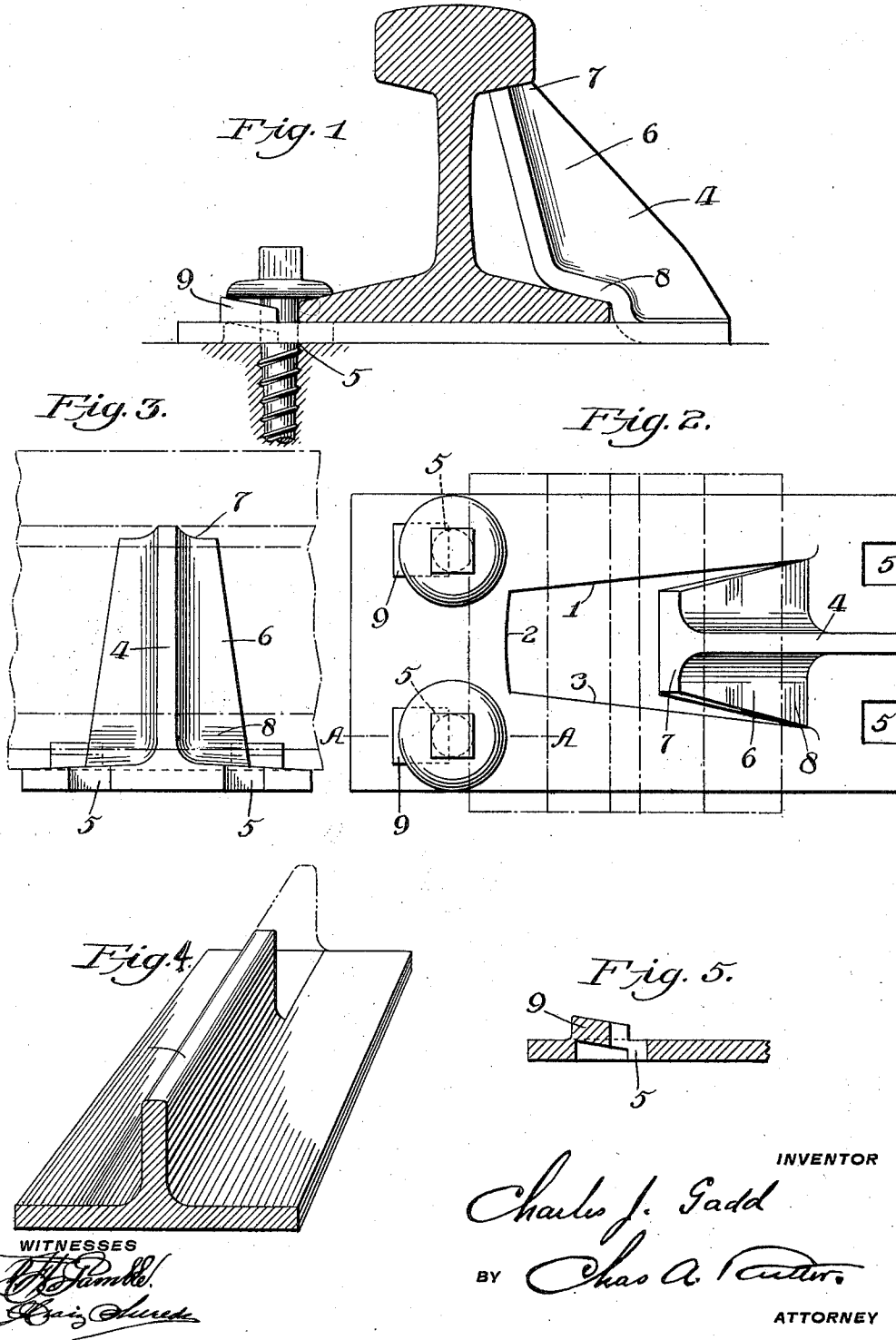
C. J. GADD.

TIE PLATE.

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1,032,330.

Patented July 9, 1912.



UNITED STATES PATENT OFFICE.

CHARLES J. GADD, OF LEBANON, PENNSYLVANIA, ASSIGNOR OF FORTY-NINE ONE-HUNDREDTHS TO EDMUND P. PYEWELL, OF LEBANON, PENNSYLVANIA.

TIE-PLATE.

1,032,330.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES J. GADD, a subject of the King of Great Britain, and a resident of Lebanon, in the county of Lebanon, State of Pennsylvania, have invented certain new and useful Improvements in Tie-Plates, of which the following is a specification.

The object of my invention is to furnish an inexpensive and efficient brace-tie-plate the integrally formed brace of which will support the outer part of the head of a rail or serve as a fastener to retain the outer part of the base of the rail, while supporting the head, and to furnish in connection with the tie plate a means formed integrally therewith for engaging the under side of the head of a screw spike, thus forming a bearing for both sides of the spike head and preventing the unequal strain that so often results in a bent or broken screw spike.

In the accompanying drawings forming part of this specification and in which similar letters of reference indicate similar parts throughout the several views: Figure 1, is a side elevation of my improved brace-tie-plate showing a rail in place; Fig. 2, a plan of Fig. 1; Fig. 3, a front elevation of Fig. 1; Fig. 4, a perspective view of the rolled T section from which the brace-tie-plate is constructed; Fig. 5, a section of Fig. 2 on line A—A.

My brace-tie-plate is formed from a rolled metal shape having the form of a T. This is cut into suitable lengths, a portion of the web is sheared off completely so as not to interfere with placing the rail in the device, the interior is punched out and up in dies, the necessary punching to accommodate the spikes used to fasten the device to the ties is performed and the article is ready for use.

In Fig. 4 a perspective view of the rolled T section from which my brace-tie-plate is formed is shown, that portion of the web that is completely cut away being indicated in dotted lines. The section having been cut is placed in suitable dies and its interior is cut upon the lines 1—2—3, the portion of the web 4 extending from cut 2 to the inner end of the piece which is to form

the tie-plate is cut away. That portion of the section included between the lines 1—2— and 3 is now struck up by suitable dies to form the brace 6.

In many cases screw spikes are employed to secure the base of the rail to the tie-plate, the head of the spike engaging the upper side of the rail base. In order to overcome this I strike up from the tie-plate seats 9 upon the outer sides of the holes 5 through which the screw spikes pass. The tops of these seats form a support for the head of the spike opposite to and at the same height as the part of the rail base engaged by the head of the spike. As these seats are formed by forcing up a portion of the tie plate a hollow space will be left directly beneath them. A plan of these seats is shown in Fig. 2, a side elevation in Fig. 1, and a section through one of them in Fig. 5.

I am aware that tie-plates and rail-braces have heretofore been constructed from a flat piece of metal punched out and bent up to form hence I do not claim this construction broadly, but

What I do claim is:

1. As a new article of manufacture, a brace-tie-plate constructed from a roller section, preferably T shaped, the head portion of the section forming the tie-plate and being punched for the passage of the spikes and cut out and bent up to form the rail-brace, the web on the tie-plate portion between the cut out part and the inner end being sheared off.

2. As a new article of manufacture, a brace-tie-plate constructed from a rolled section, preferably T shaped, the head portion of the section forming the tie-plate and being punched to permit the passage of spikes and struck up to form seats for the spike heads, the central portion of the head of said section being cut out and bent up to form a rail-brace, the web between the inner end of said plate and said cut out portion being sheared off.

CHARLES J. GADD.

Witnesses:

E. P. PYEWELL,
EUGENE HOASTER.