No. 814,701. PATENTED MAR. 13, 1906.

P. HOLMES.

RAILWAY TIE.

APPLICATION FILED NOV. 17, 1905.

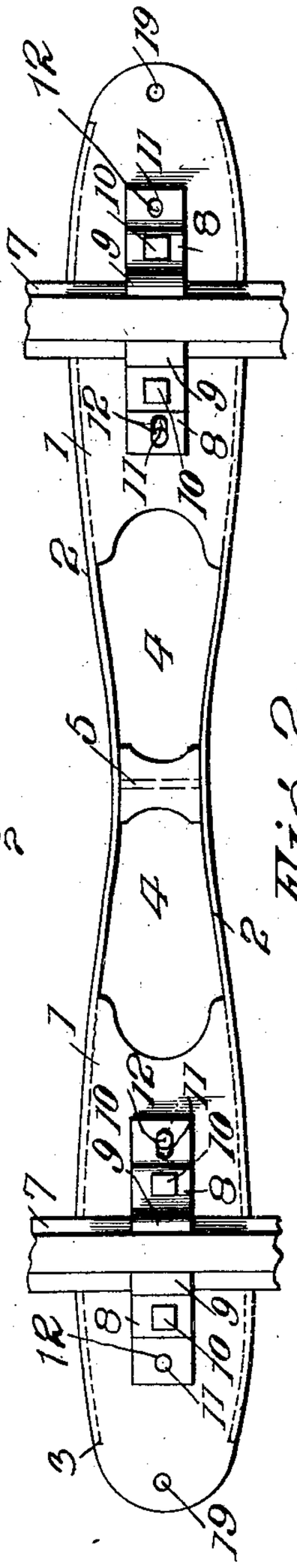

Fig. 1.

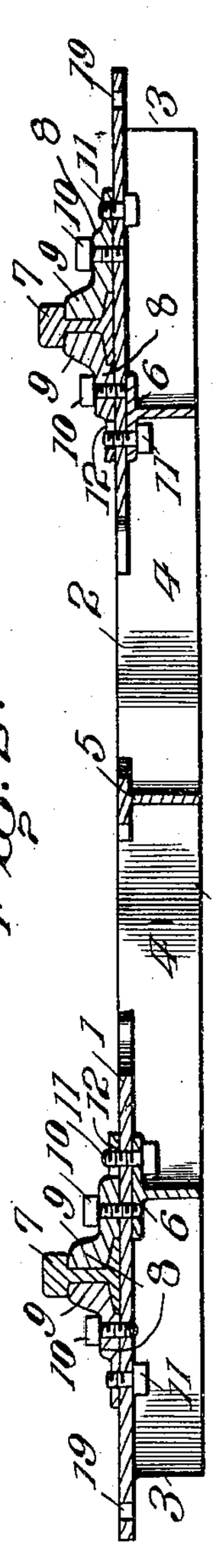

Fig. 2.

Witnesses

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UNITED STATES PATENT OFFICE.

PHINEAS HOLMES, OF NATIONAL SOLDIERS HOME, TENNESSEE.

RAILWAY-TIE.

No. 814,701. Specification of Letters Patent. Patented March 13, 1906.

Application filed November 17, 1905. Serial No. 287,887.

To all whom it may concern:

Be it known that I, PHINEAS HOLMES, a citizen of the United States, residing at National Soldiers Home, in the county of Washington and State of Tennessee, have invented certain new and useful Improvements in Railway-Ties, of which the following is a specification.

This invention embodies improvements in the construction of metallic ties, and resides in details of structure which will appear more fully hereinafter and finally claimed.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings.

Figure 1 is a top plan view of a railway-tie embodying the invention. Fig. 2 is a longitudinal sectional view of the structure shown in Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in both views of the drawings by the same reference characters.

The tie illustrated comprises a body consisting of the top 1 and the sides 2. The sides and top of the tie are formed integral with each other, preferably, in the actual manufacture of the article. The sides 2 of the tie are cut away at the ends thereof, as shown at 3, the tie being therefore open at its opposite ends. The top 1 of the tie is likewise cut away centrally thereof, as shown at 4, the sides 2 being connected at a central point by means of the horizontal web 5 integral therewith. At each end of the tie are located T-shaped plates 6, disposed beneath the top 1 and extending transversely thereof between the sides 2. The plates 6 are so arranged as to brace or reinforce the sides 2, and may be connected with the sides and top in any suitable manner. The rails of the track are indicated at 7 and rest upon the top of the tie at the ends, and are secured in place by means of clamp-plates 8, which are arranged upon opposite sides of each rail. Each clamp-plate has an upwardly-projecting wing 9 engaging the side of the rail, and is secured to the tie by means of a vertical bolt or fastening 10, passing through the top 1. Each plate is also provided near each outer end with an opening 11, in which a pin 12, projecting upwardly from the top of the tie, is received, said pin coacting with the bolt 10 to properly position the plate with reference to the rail.

The plates 6 are so located that the rails when in position on the ties will rest just above the said braces 6. The above preserves the rigidity and strength of the tie at the ends on which the weight of the rolling-stock is received. The manner of disposing the ties on the rail-bed and ballasting the same will probably be obvious and will therefore not be described. The ties are very cheaply and simply constructed.

Having thus described the invention, what is claimed as new is—

A railway-tie consisting of a body comprising a top and sides, the sides being cut away at the ends of the tie, the top being cut away centrally of the ends of the tie, a horizontal web connecting the sides at the center of the tie, transverse reinforcing-braces beneath the top of the tie at the ends thereof and connected with the sides to reinforce the same, and rail-clamping plates disposed on the top of the tie near the ends adjacent to the portions beneath which the transverse reinforcing-braces aforesaid are arranged.

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

PHINEAS HOLMES. [L. S.]

Witnesses:
CARL A. THORNBURG,
CHARLES F. DOUGLASS.