

No. 717,287.

Patented Dec. 30, 1902.

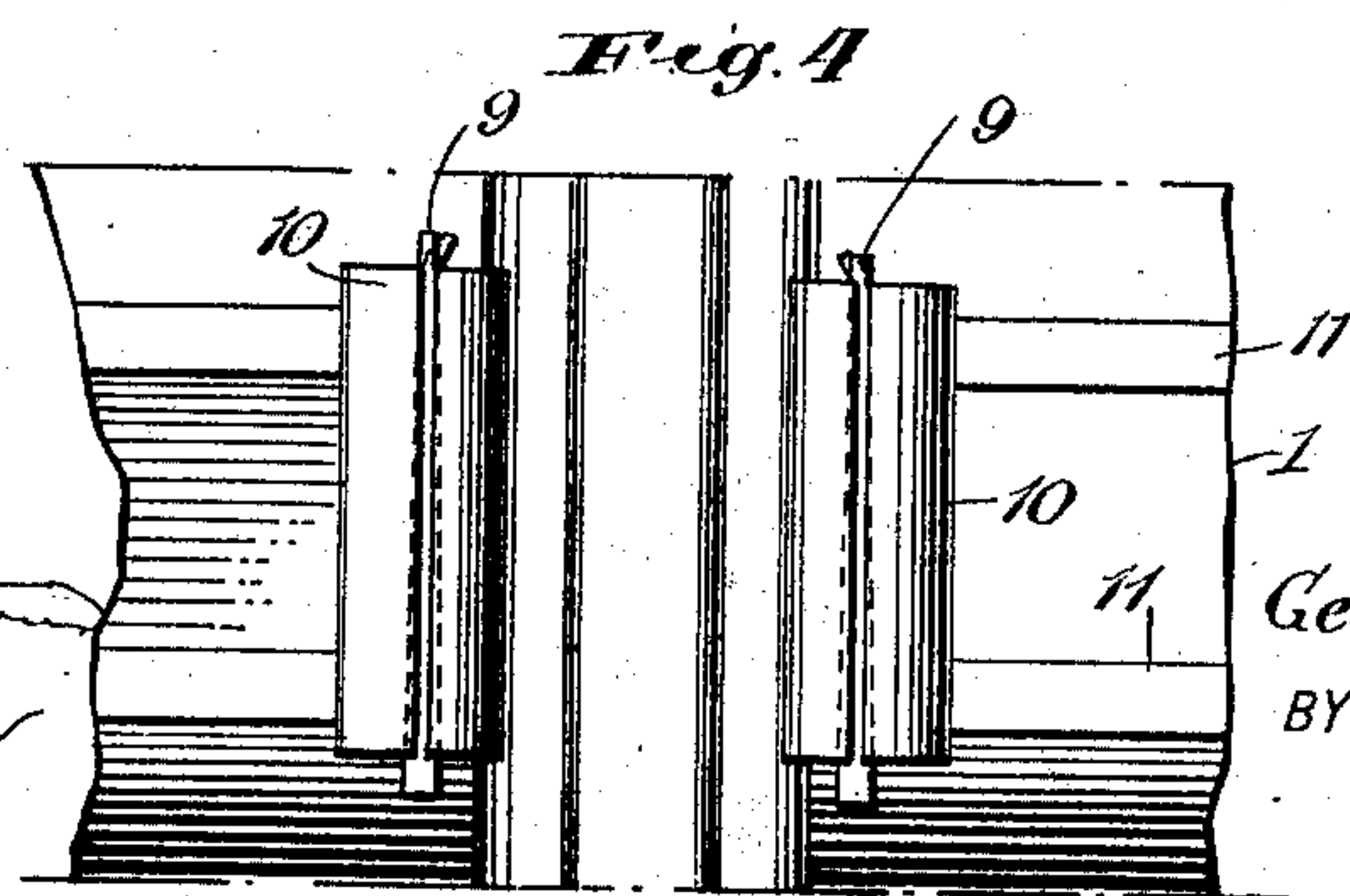
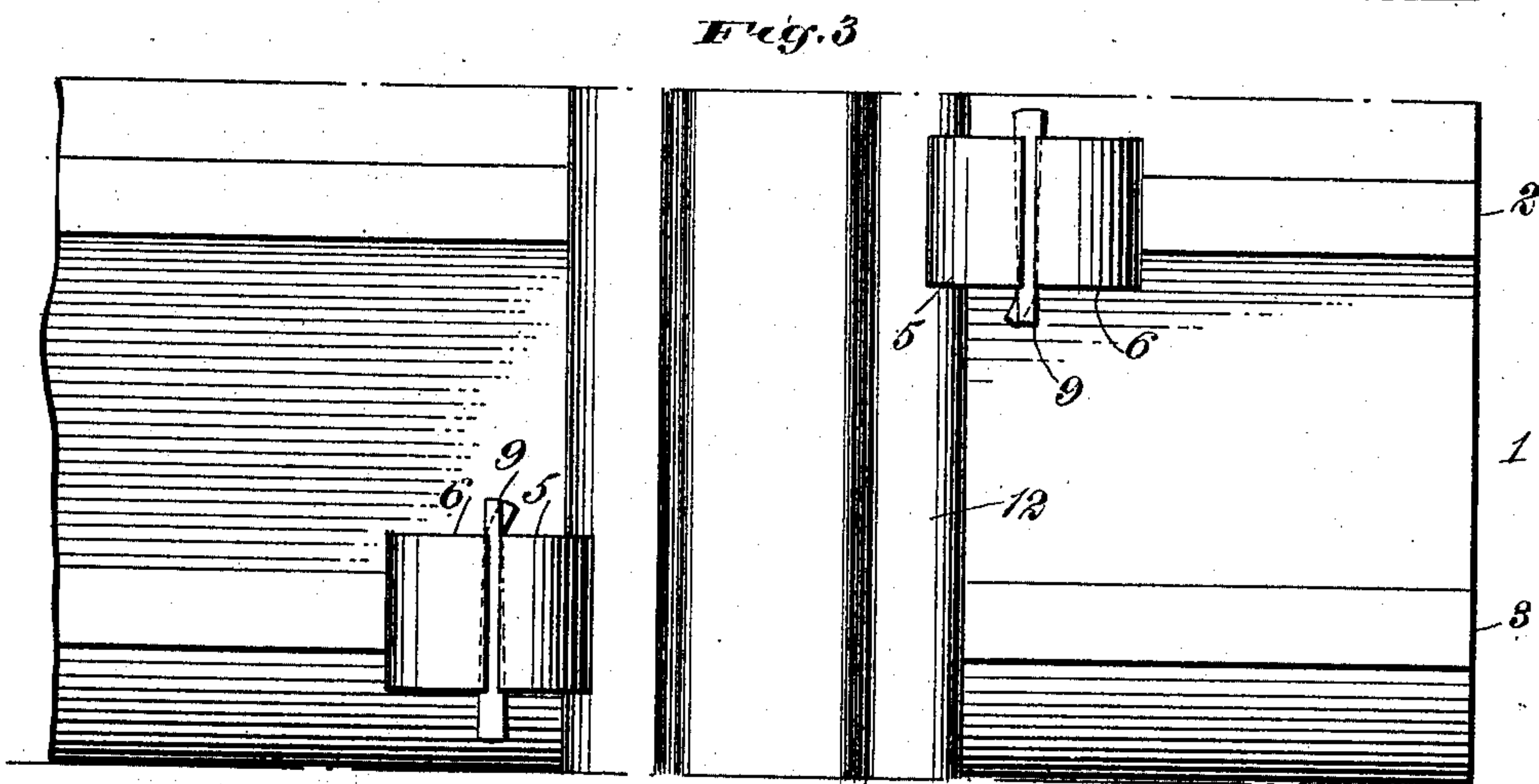
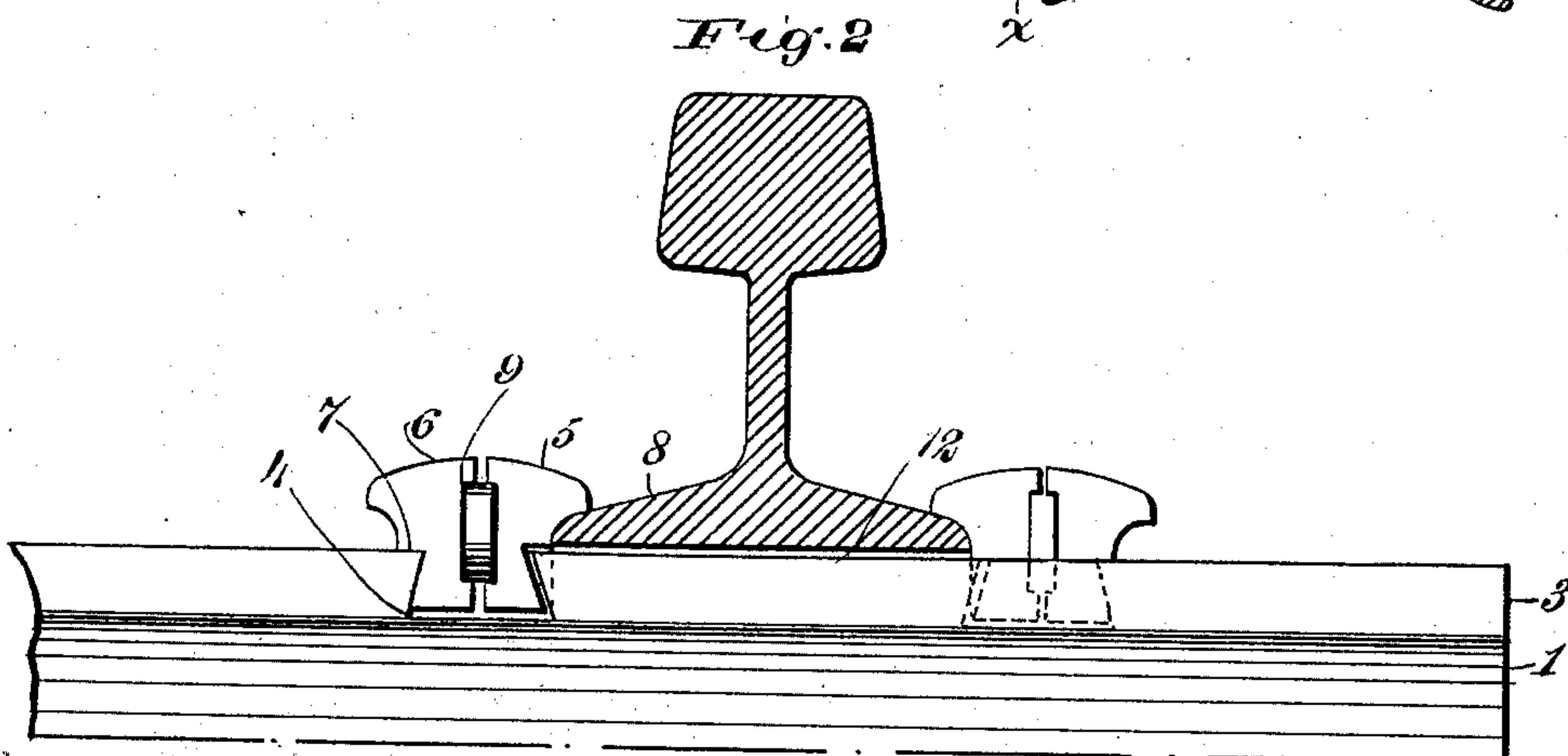
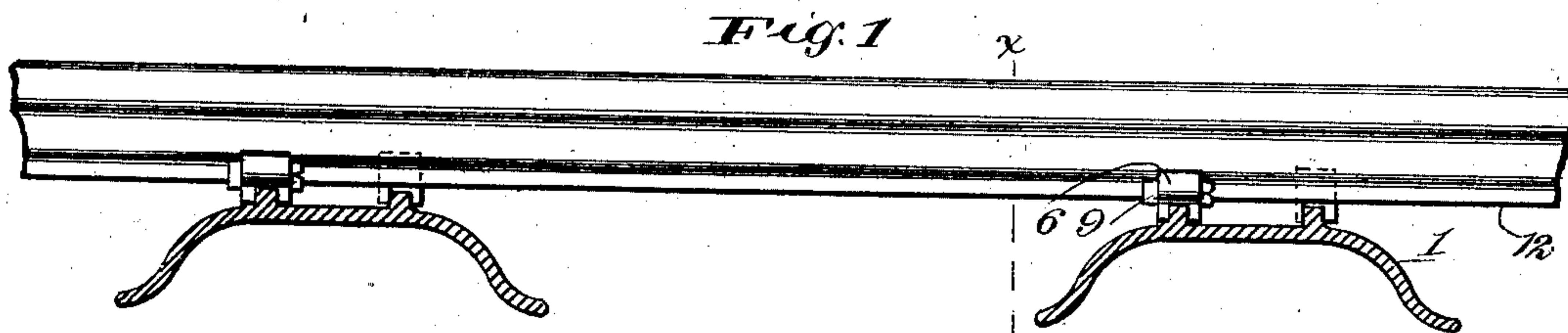
G. W. SCHELLENBACH.

RAILWAY TIE.

(Application filed Mar. 12, 1902.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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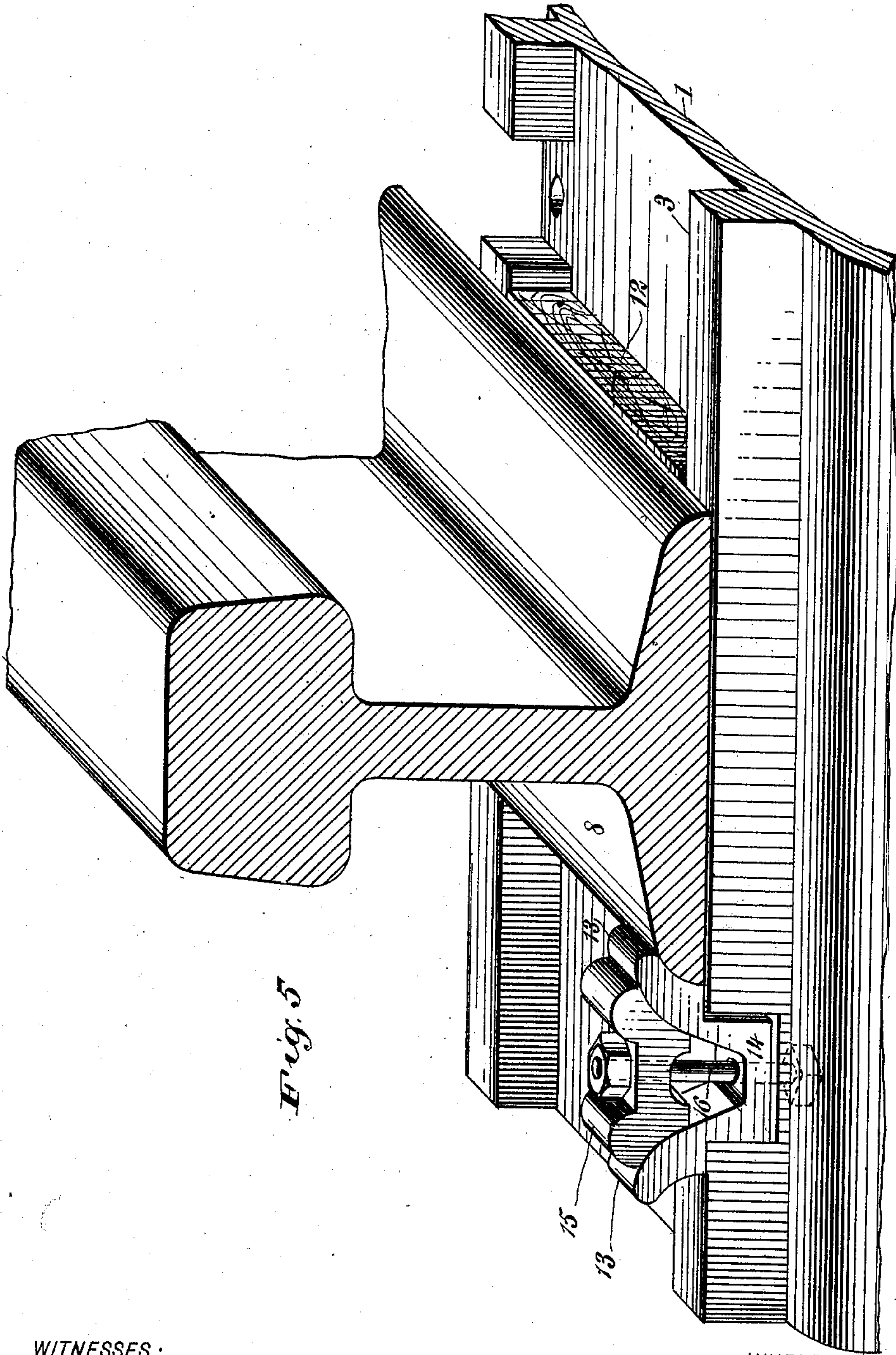


Fig. 5

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# UNITED STATES PATENT OFFICE.

GEORGE W. SCHELLENBACH, OF JOPLIN, MISSOURI.

## RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 717,287, dated December 30, 1902.

Application filed March 12, 1902. Serial No. 97,924. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. SCHELLENBACH, a citizen of the United States, and a resident of Joplin, in the county of Jasper and State of Missouri, have invented a new and Improved Railway-Tie, of which the following is a full, clear, and exact description.

This invention relates to improvements in cross-ties and fastening devices for railway-rails; and the object is to provide a simple tie that may be readily formed by rolling and then drop-forged into shape and to provide in connection therewith a simple device by means of which rails may be quickly and securely fastened.

I will describe a railway-tie embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional view through two ties embodying my invention and showing a rail in side elevation as secured thereto. Fig. 2 is a section on the line  $xx$  of Fig. 1. Fig. 3 is a plan view. Fig. 4 is a plan view of a modification, and Fig. 5 is a perspective view showing a modification.

The tie 1 consists of metal, which may be formed by rolling and then drop-forged, as before mentioned, and it is trough-shaped on the under side, so that dirt or stone may be packed underneath the same. On the top of the tie, near opposite sides, are ribs 2 3, provided each with an opening 4 to receive the fastening device, to be described. The opposite walls of these openings 4 are undercut, and the fastening devices consist of two jaw portions 5 6, the outer sides of the bases of which are inclined to engage with the inclined walls of the openings 4. As clearly shown in Fig. 2, these jaws have shoulder portions 7 for engaging in the upper side of the rib. The outer sides of the jaws are made hook-shaped to engage the base-flange 8 of the railway-rail. Of course only one jaw of a pair will be engaged with the rail; but I prefer to make them of similar shape, so that should one become worn the device may be turned and the other jaw engaged with the rail. After placing the fastening devices in the openings 4 wedges 9 are forced between the jaws, which will cause the inner jaw to clamp closely on the rail-base flange.

In Figs. 1, 2, and 3 I have shown short fastening devices, which engage with a rib 2. In Fig. 4, however, I have shown the fastening devices 10 as made sufficiently long to engage in opposite openings or opposite ribs 11.

Obviously by my invention a rail may be quickly fastened in place, and very little packing will be required at the outer sides of the tie.

In Fig. 5 the fastening device consists of two jaws 13, connected at the bottom by a cross-piece 14, and the jaws are held and slightly spread by means of a wedge 15, arranged between them and forced down by a bolt 16, passing through the tie.

The wedges 9 (shown in Figs. 1 to 4) are split at the thin end, so that the ends may be bent outward, as shown in Figs. 3 and 4, to prevent accidental displacement.

To reduce noise, I place a block of wood 12 between the rail and the tie.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A railway-tie having ribs on its upper side, said ribs being provided with openings, fastening-jaws designed to engage in said openings, and wedges for forcing the jaws apart, substantially as specified.

2. A metal railway-tie having ribs on its upper side, the said ribs having openings, the opposite walls of which are undercut, and fastening devices consisting of jaws having base portions beveled to engage said undercut walls, the upper portions of the jaws being of hook shape, and wedges adapted to be driven between pairs of jaws, substantially as specified.

3. A railway-tie consisting of metal and having ribs on its upper side and provided with openings, the opposite walls of the openings being undercut, and fastening devices consisting of jaw members engaging in the openings of opposite ribs, the said jaw members being provided with hook portions for engaging with the base-flange of a rail, and wedges adapted to be driven between pairs of jaws, substantially as specified.

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

G. W. SCHELLENBACH.

Witnesses:

BOONE JENKINS,  
ART C. COX.