

No. 762,617.

PATENTED JUNE 14, 1904.

L. J. DECKER.
RAILROAD TIE.

APPLICATION FILED FEB. 25, 1904.

NO MODEL.

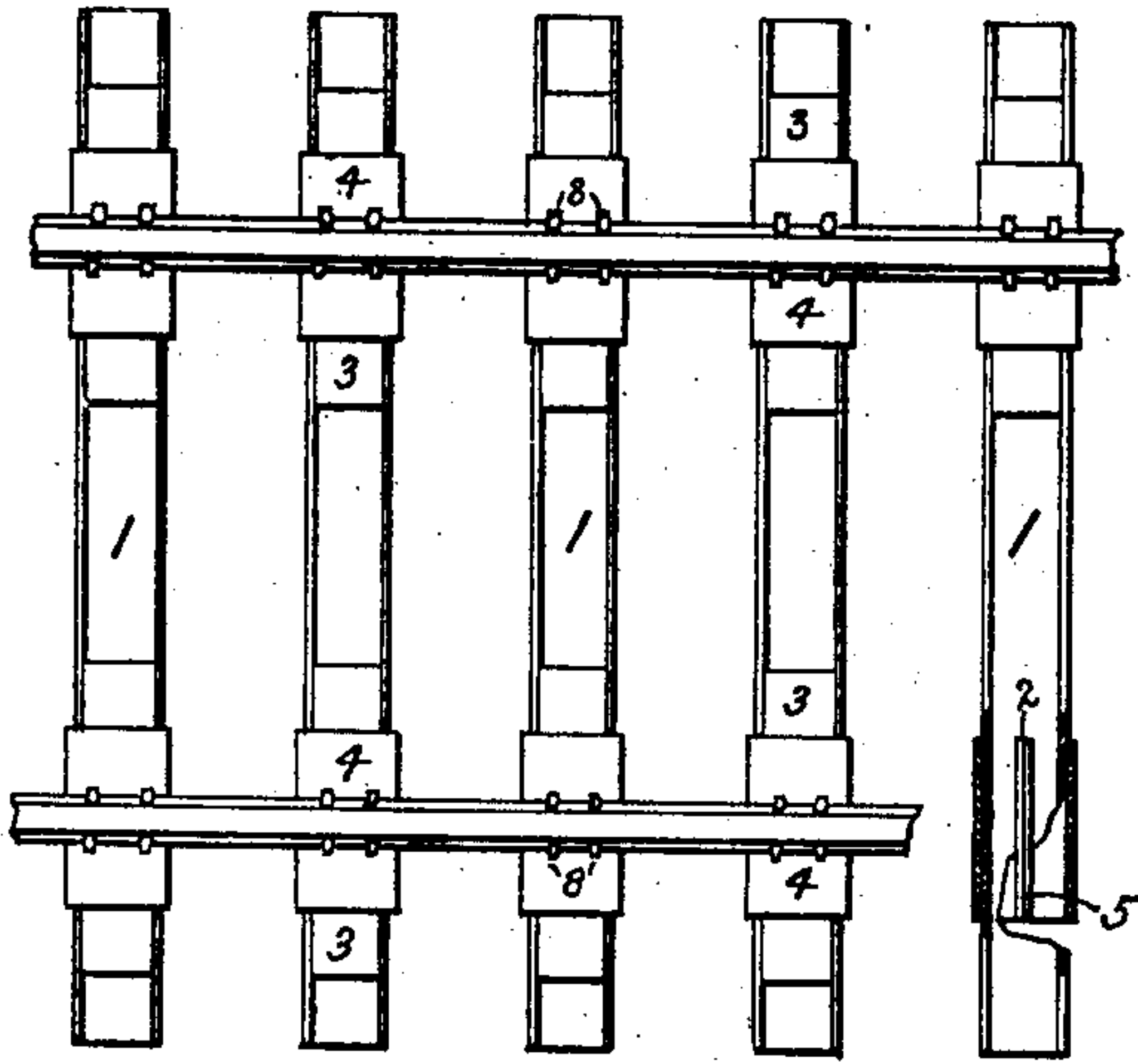


Fig. 1.

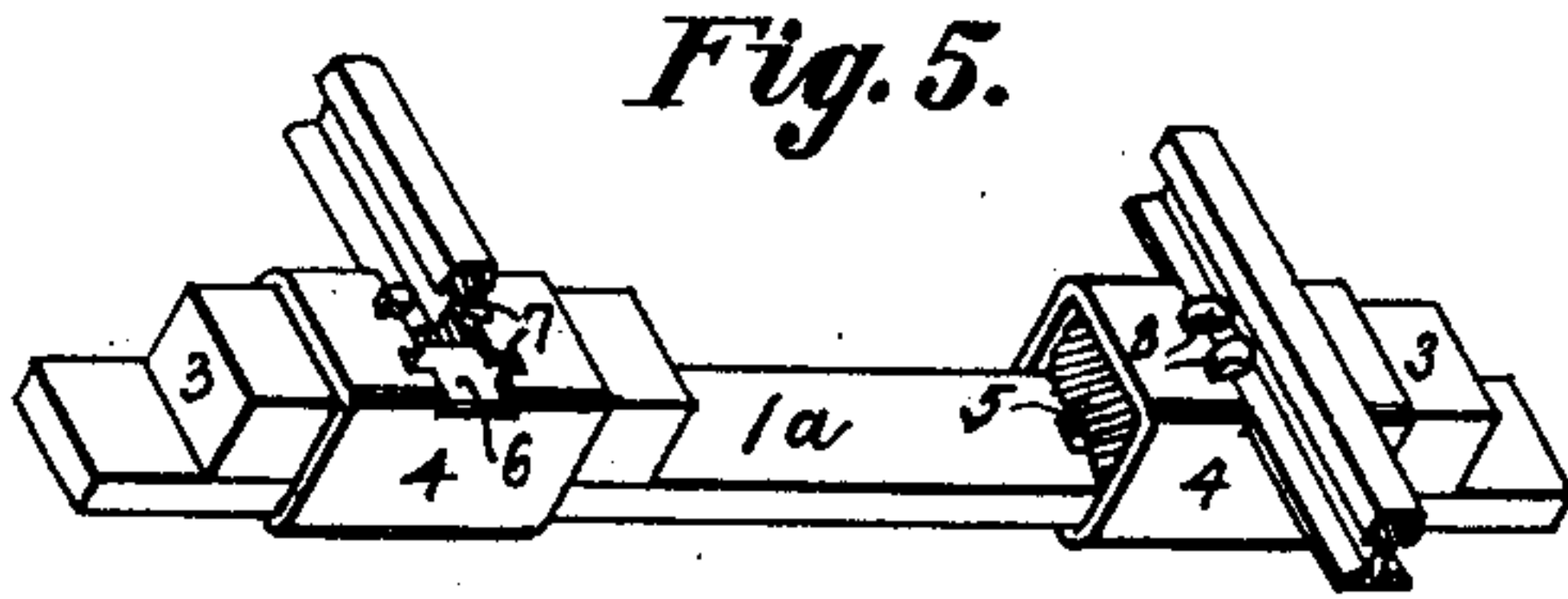


Fig. 5.

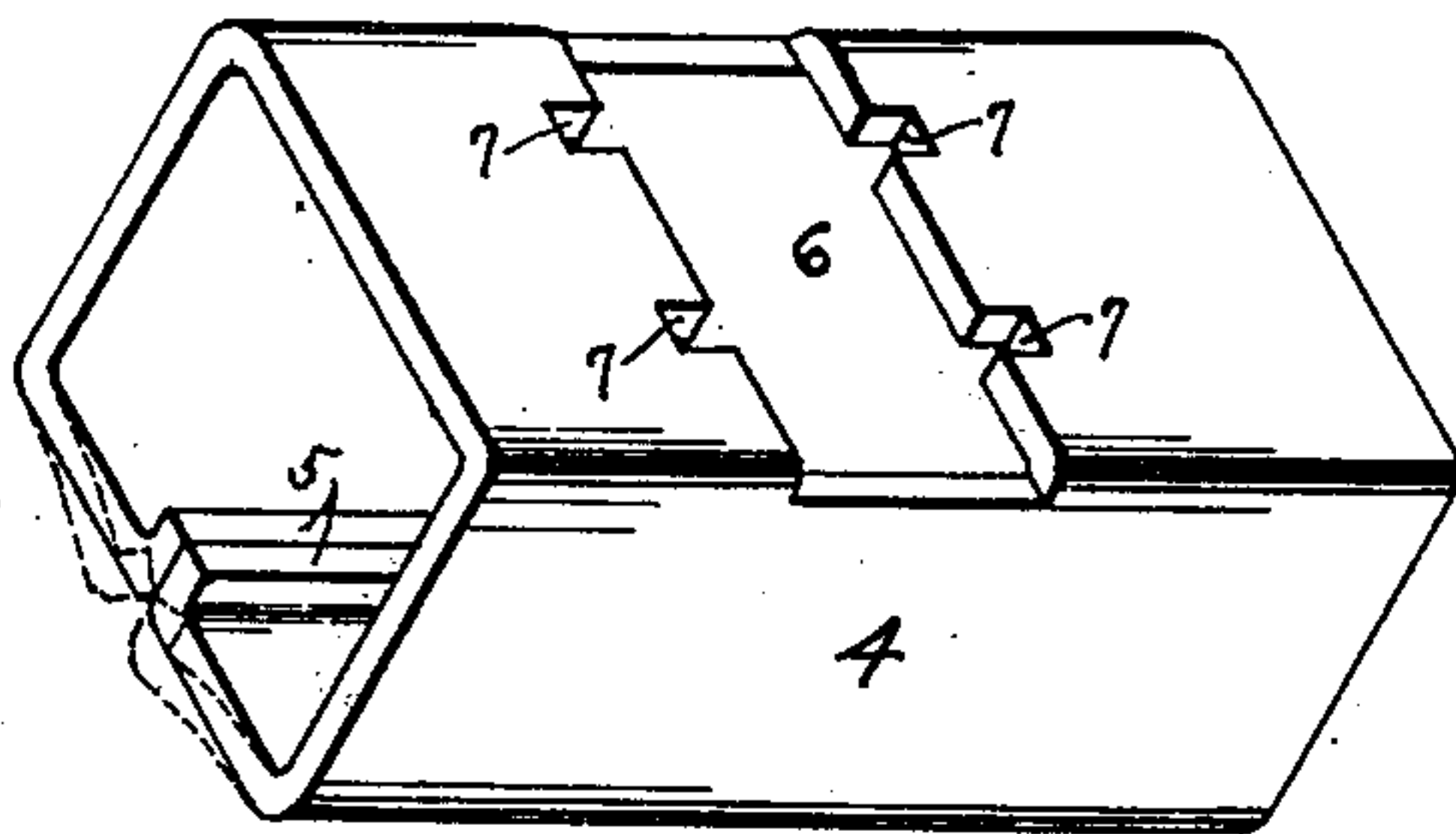


Fig. 4.

Fig. 2.

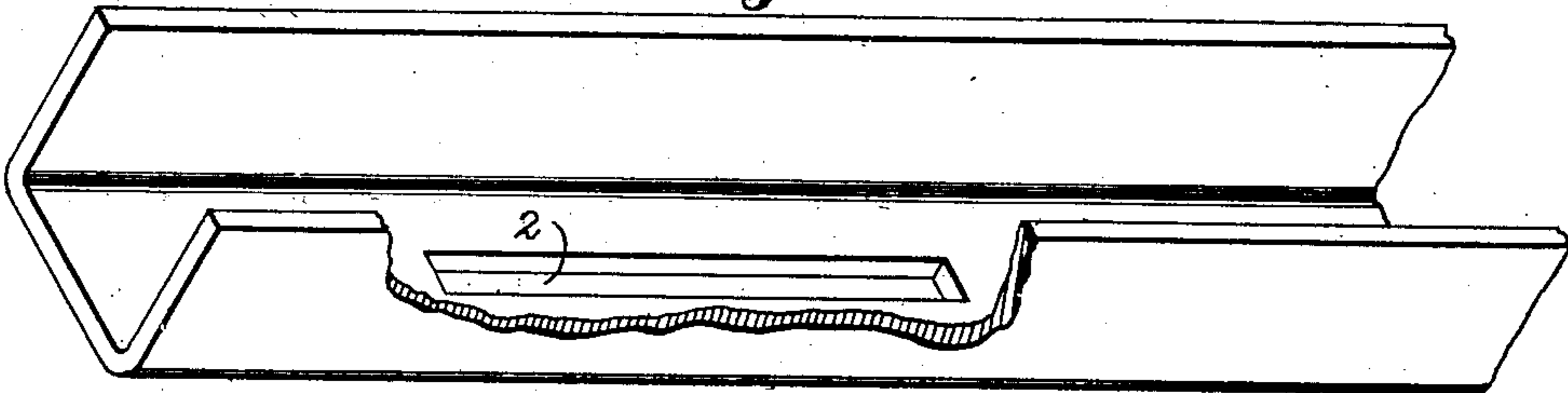
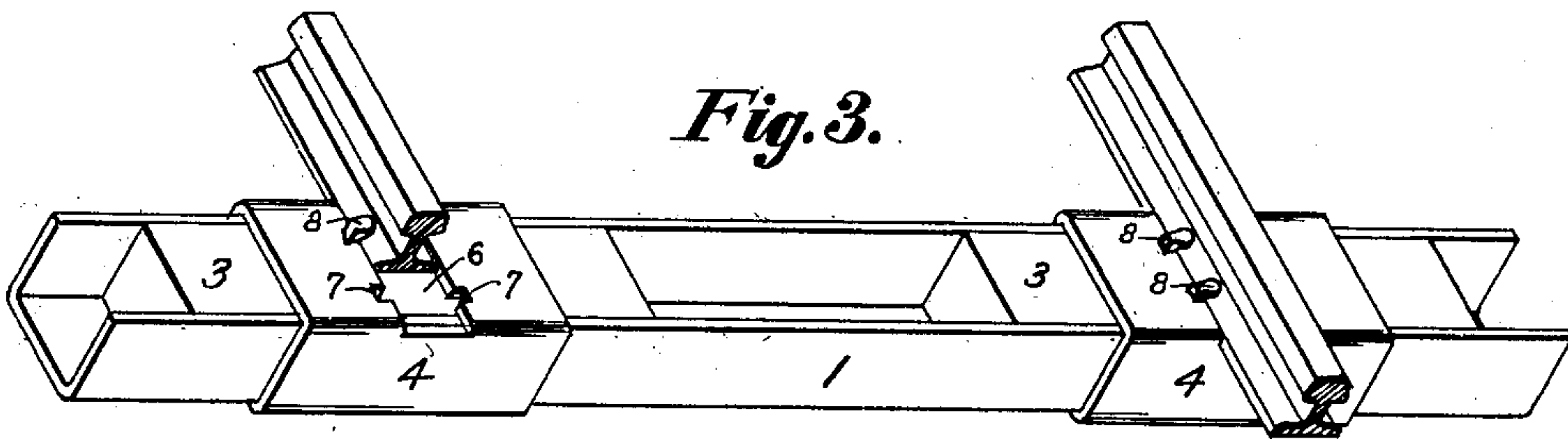


Fig. 3.



WITNESSES

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RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 762,617, dated June 14, 1904.

Application filed February 25, 1904. Serial No. 195,139. (No model.)

To all whom it may concern:

Be it known that I, LEWIS JOHN DECKER, a citizen of the United States, residing at Vermilion, in the county of Erie and State of Ohio, have invented a new and useful Improvement in Railroad-Ties, of which the following is a specification.

The invention relates to a railroad-tie made of metal with a wood or fibrous cushion for the rail; and the object of the improvement is to make the metal part of the tie out of a simple or standard shape or sheet of metal and to attach the wood or fibrous parts thereto by simple and convenient clamps, by which all the parts of the track are held rigidly together. I attain this object by the construction and arrangement illustrated in the accompanying drawings, in which—

Figure 1 is a plan of a short piece of track laid with the tie; Fig. 2, a detached perspective view of the metallic part of the tie made in the form of a channel; Fig. 3, a perspective view of a single tie, showing all the parts and the manner of attaching the rails; Fig. 4, a detached perspective view of the preferred form of clamp, and Fig. 5 a perspective view of a tie made with a plate for the metallic part.

Similar numerals refer to similar parts throughout the drawings.

The metallic part of the tie is preferably made of the channel-bar 1, which can be either a rolled structural shape or a plate having its sides bent up to form a channel, and in the bottom near the ends of the channel are cut the longitudinal slots 2. The wood or fibrous blocks 3 are neatly fitted into the channel, after which the clamps 4 are put on the tie. The clamps 4 are made of a plate of metal bent to neatly fit around the metallic and fibrous parts of the tie and having the side edges bent inward and joined preferably along the middle line of the bottom of the clamp, thus forming the flanges 5, which are adapted to be entered into the slots 2 in the web of

the channel-bar. The clamps are put in place by springing out the flanged edges and then telescoping the clamps over the ends of the tie to their proper position, when the flanges will enter the slots, and the parts of the tie are thus bound tightly together. By making the channel-slots and clamp-flanges of equal length the clamps are held against endwise movement. The transverse apertures 6 are cut in the upper side of the clamp, preferably of a width to neatly receive the bottom of the rail, so that it rests on the fibrous block, and in the edges of the apertures are provided the notches 7, adapted to receive the spikes 8, by which means when the rails are laid and spiked on the tie all parts of the track are held rigidly together.

The metallic part of the tie can be made of a flat bar, as 1^a in Fig. 5, and the fibrous blocks fastened thereto by the clamps in the same manner as described for the channel-bar; but the channel-bar is of course the preferred form, because of the increased vertical stiffness it gives to the tie.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A railroad-tie comprising a bar having longitudinal slots in its under side, fibrous blocks on the bar, and clamps around the bar and blocks having inturned flanges on adjoining edges adapted to be entered in the slots, there being apertures and notches in the upper side of the clamps adapted to receive the rails and the spikes.

2. A railroad-tie comprising a bar having longitudinal slots in its under side, fibrous blocks on the bar, and clamps around the bar and blocks having inturned flanges on adjoining edges adapted to be entered in the slots.

3. A railroad-tie comprising a channel-bar having longitudinal slots in its web, fibrous blocks in the bar, and clamps around the bar and blocks having inturned flanges or adjoining edges adapted to be entered in the slots, there being apertures and notches in the

clamps exposing the blocks and adapted to receive the rails and spikes.

4. A railroad-tie comprising a channel-bar, having longitudinal slots in its web, fibrous
5 blocks in the bar, and clamps around the bar and blocks having intumed flanges on adjoining edges adapted to be entered in the slots.

In testimony whereof I have signed my name

to this specification in the presence of the subscribing witnesses.

LEWIS JOHN DECKER.

Witnesses:

H. R. WILLIAMS,

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E. J. LAW.