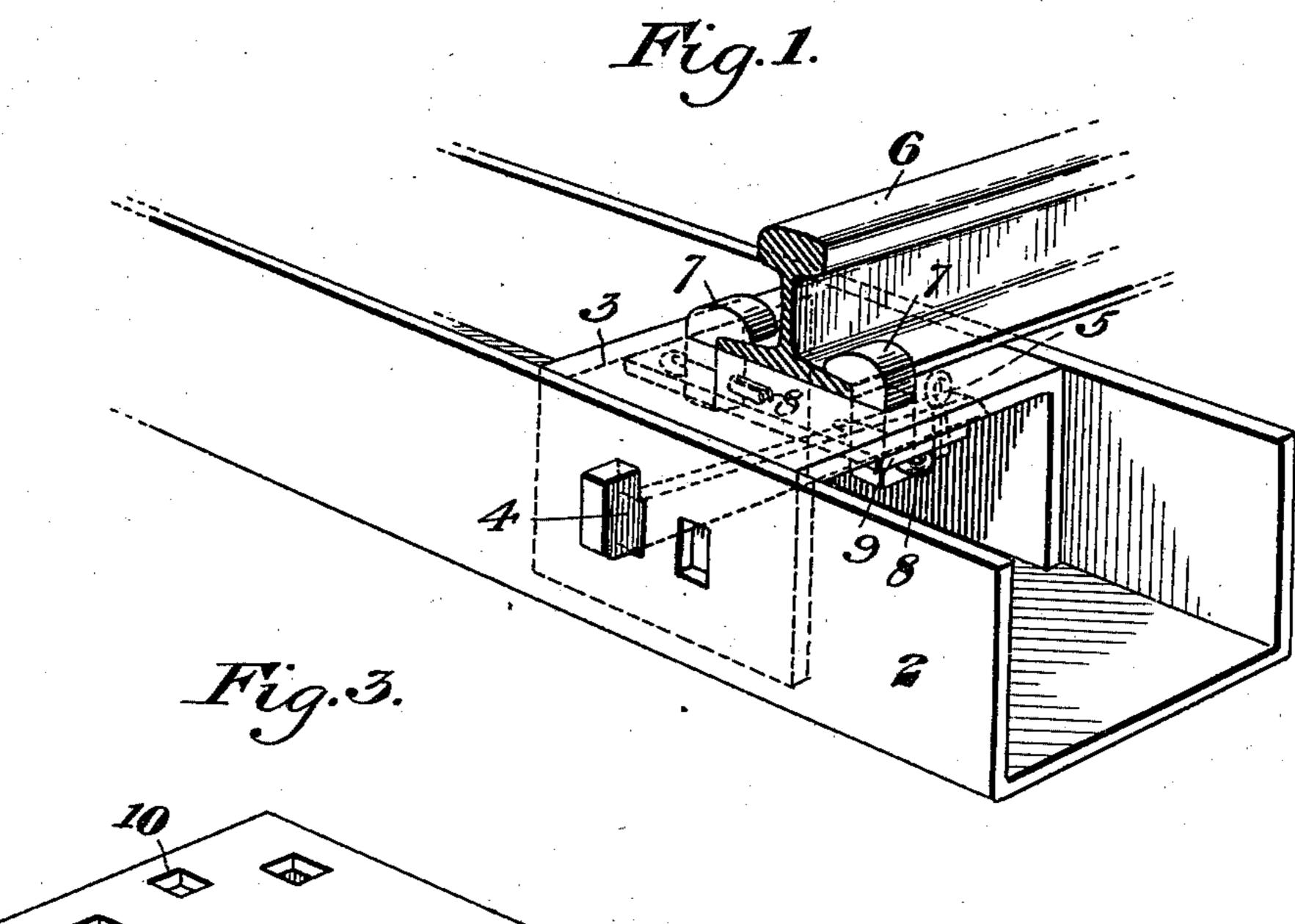
No. 670,754.

Patented Mar. 26, 1901.

R. R. ALLSHOUSE. METALLIC RAILWAY TIE AND CHAIR.

(No Model.)

(Application filed Dec. 13, 1900.)



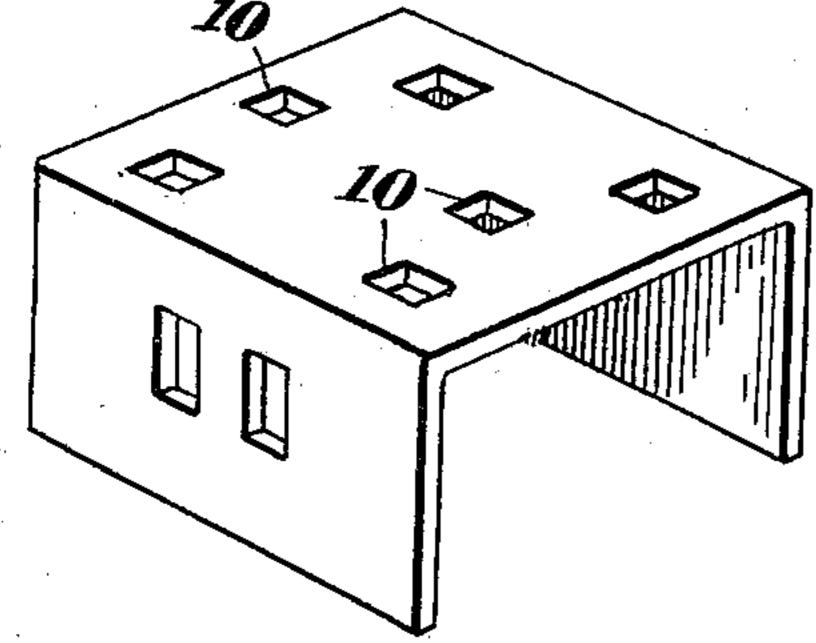
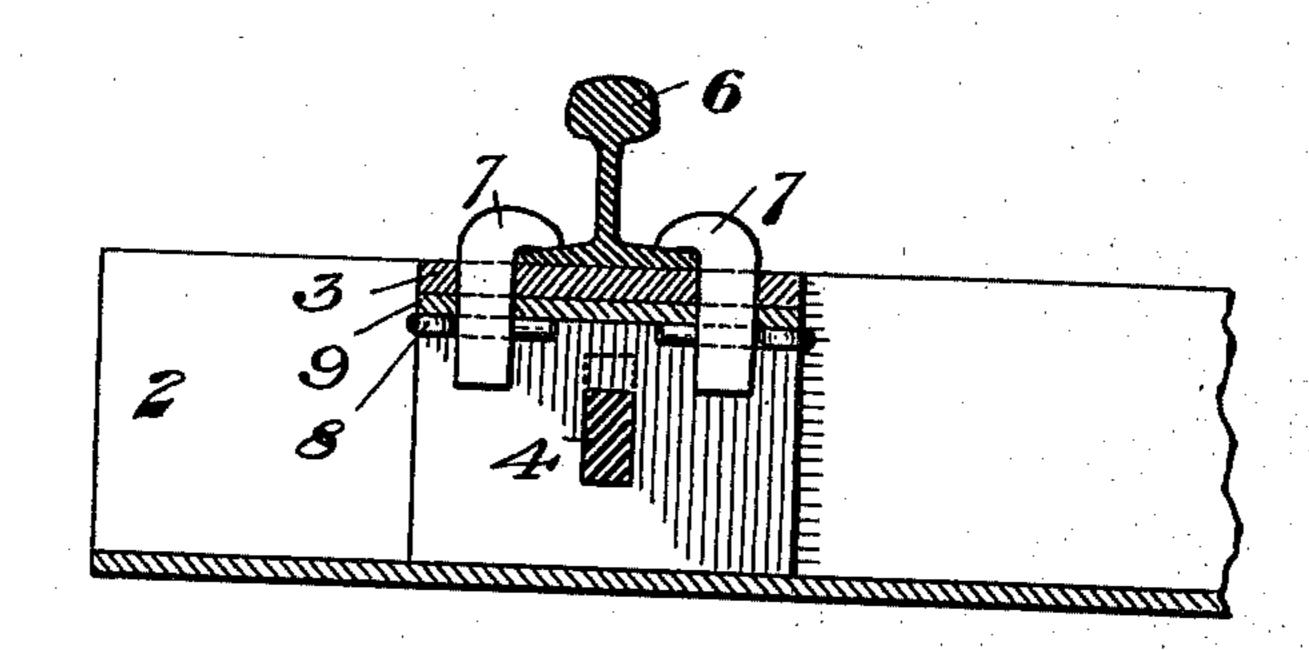


Fig. 2



St. Monney J. M. Commer J. M. M

RR. Allshouse Ly Ballacres Stakense his attejs.

United States Patent Office.

REUBEN R. ALLSHOUSE, OF ALLEGHENY, PENNSYLVANIA.

METALLIC RAILWAY TIE AND CHAIR.

SPECIFICATION forming part of Letters Patent No. 670,754, dated March 26, 1901.

Application filed December 13, 1900. Serial No. 39,592. (No model.)

To all whom it may concern:

Be it known that I, REUBEN R. ALLSHOUSE, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Metallic Railway Ties and Chairs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view showing a portion of my improved tie with the chair in place. Fig. 2 is a partial longitudinal section of the same, and Fig. 3 is a perspective view of the improved chair I employ.

My invention relates to metallic railwayties, and is designed to provide an improved construction of tie and chair which will allow adjustment of the rail and clamps and will securely fasten the rail to the tie in the difconstruction of tie and clamps and will securely fasten the rail to the tie in the difsigned to provide an improved tie and chair which may be made from commercial shapes.

In the drawings, 2 represents a metallic tie, consisting of a channel-shaped beam with the 25 flanges projecting upwardly. Within the tie fit the chairs 3, each of which is also composed of a cross-section of a channel with the flanges extending downwardly and fitting neatly against the inner faces of the tie sides. The 30 chair is made of the proper height, so that its flat top will be flush with the upper edges of the tie sides, and it is adjustably secured to the tie by suitable detachable means. have shown for this purpose a key 4, which 35 extends through registering holes in the sides of the tie and the chair, the key being held in place by a suitable spring-pin or cross-key 5, driven through a hole in its protruding end. In order to adjust the chair lengthwise 40 of the tie, the holes in the sides of the tie may be lengthened horizontally to allow the chair to be moved to different points along its length, or separate holes may be made in the tie sides, as shown in Fig. 1. Bolts may 45 also be used to secure the chairs instead of the key shown.

The rail 6 is secured to the chair by a pair of hook-clamps 77, whose stems extend down through the top of the chair and are held by split keys 8. A rectangular washer or spacing-plate 9 is preferably fitted over the stems

of the clamps and against the lower face of the top of the chair to serve as a connector for the clamps.

The chair is preferably made in the form 55 of Fig. 3, with a series of holes 10 for the clamp-shanks, which are at different points along the top of the chair, and also with a plurality of side holes for securing to the tie. The holes 10 allow an adjustment of the rail 60 on the chair by securing the pair of clamps in different holes.

The advantages of my invention will be apparent to those skilled in the art, since a simple, strong, and efficient construction is 65 afforded by which the rail is secured to the tie. The adjustability of the chair and of the clamps upon the chair renders the device of wide adaptability for curves and other locations.

Changes may be made in the form of the tie, the chair, and the clips or clamps without departing from my invention.

Î claim—

1. The combination with a tie consisting 75 of a channel with its flanges projecting upwardly, of a chair consisting of a channel-section having its flanges projecting downwardly, and fitting against the inner faces of the channel-flanges, the top of the chair being flush with the edges of the tie-flanges, and adjustable clamps upon the flush portion of the chair for securing the rail to said flush portion of the chair; substantially as described.

2. A tie consisting of a channel having upwardly-projecting flanges, a chair consisting of a channel-section having downwardly-projecting flanges fitting against the inner faces of the tie-flanges, means for adjustably secur- 90 ing the chair at different points in the length of the tie, and hook-clamps on the chair; substantially as described.

3. The combination with a metallic tie of channel form, of a chair of inverted-channel 95 form having its ends fitting within the side flanges of the tie, rail-clamps secured within a series of holes in the chair and arranged to adjust the position of the rail, and keys adjustably securing the chair to the tie; substantially as described.

4. The combination with a metallic rail-

way-tie of channel form, of a chair of inverted-channel form having its ends fitting within the sides of the tie, adjustable mechanism for securing the chair to the tie, and adjustable clamps having stems extending through holes in the top of the chair; substantially as described.

In testimony whereof I have hereunto set my hand.

R. R. ALLSHOUSE.

Witnesses:

C. P. BYRNES,

G. I. HOLDSHIP.