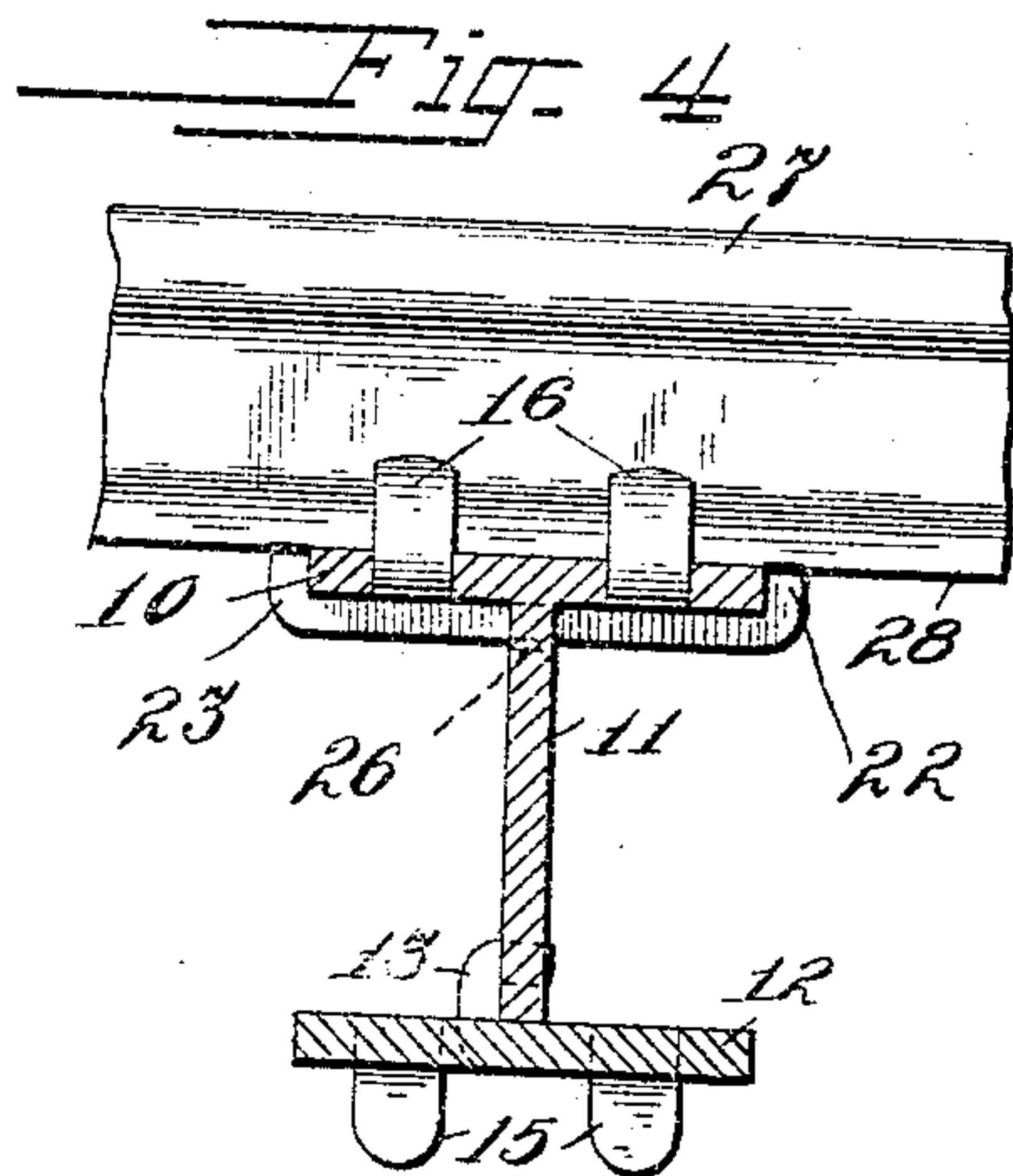
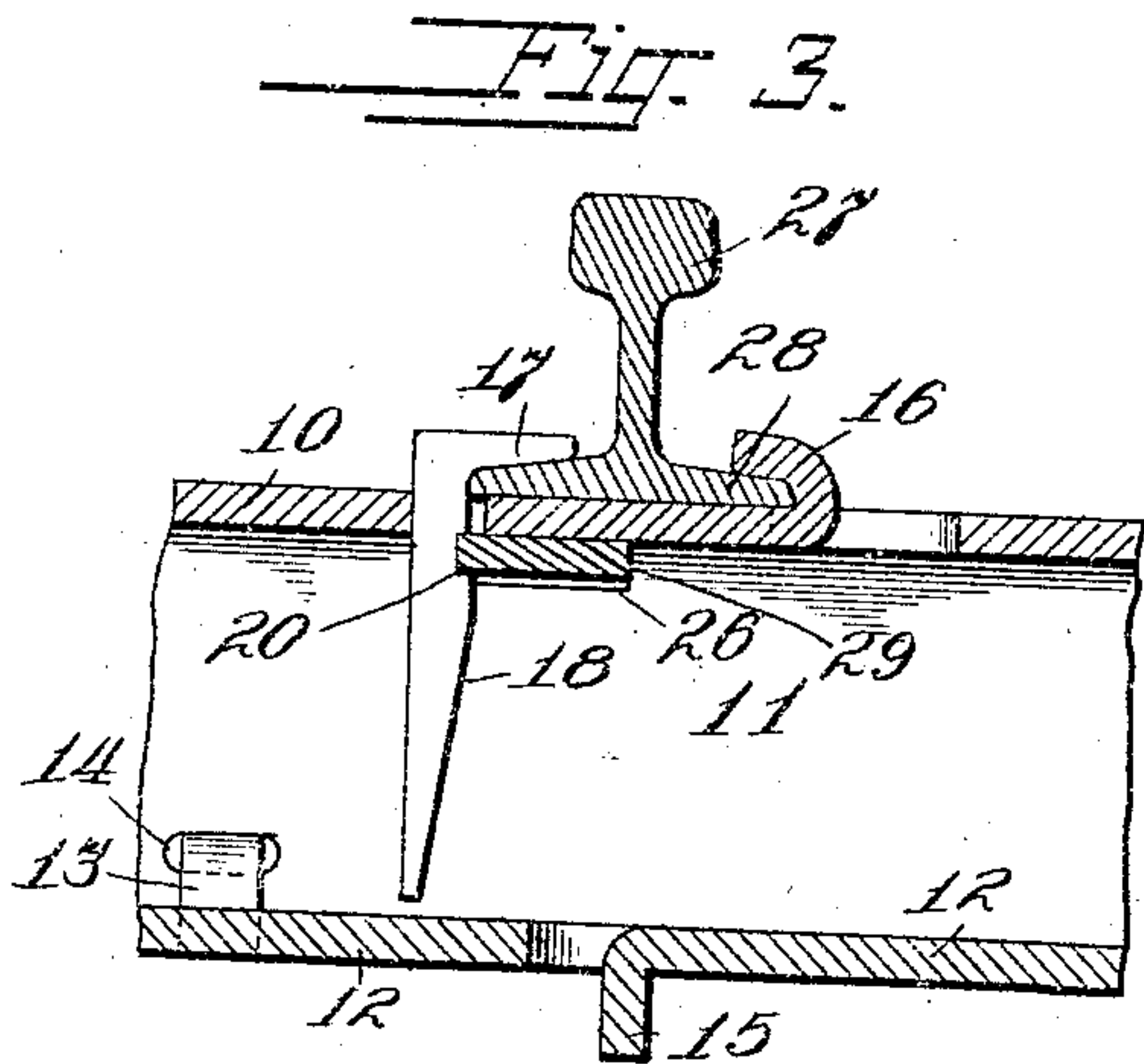
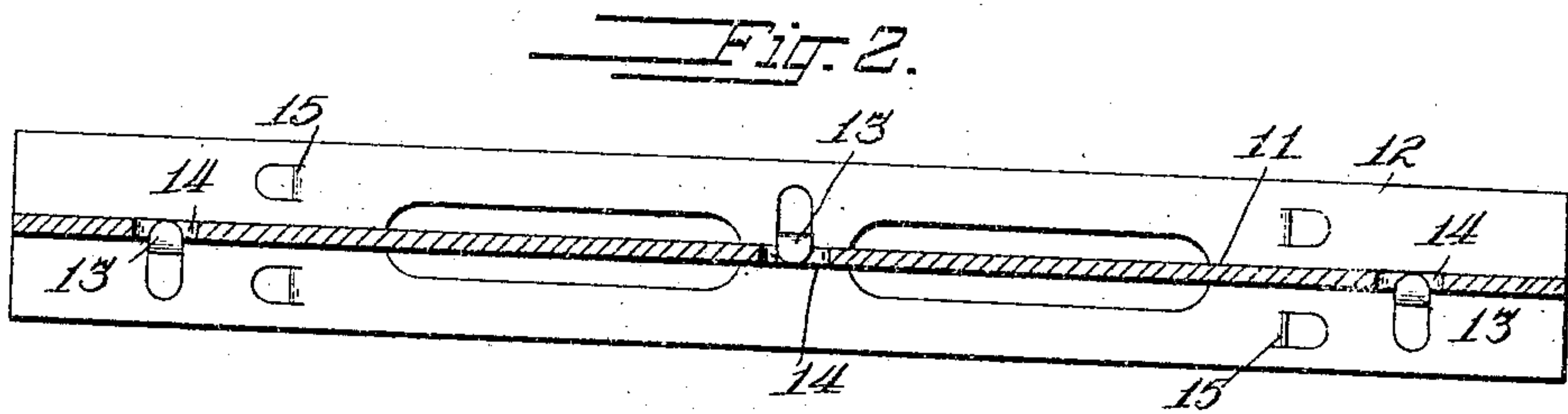
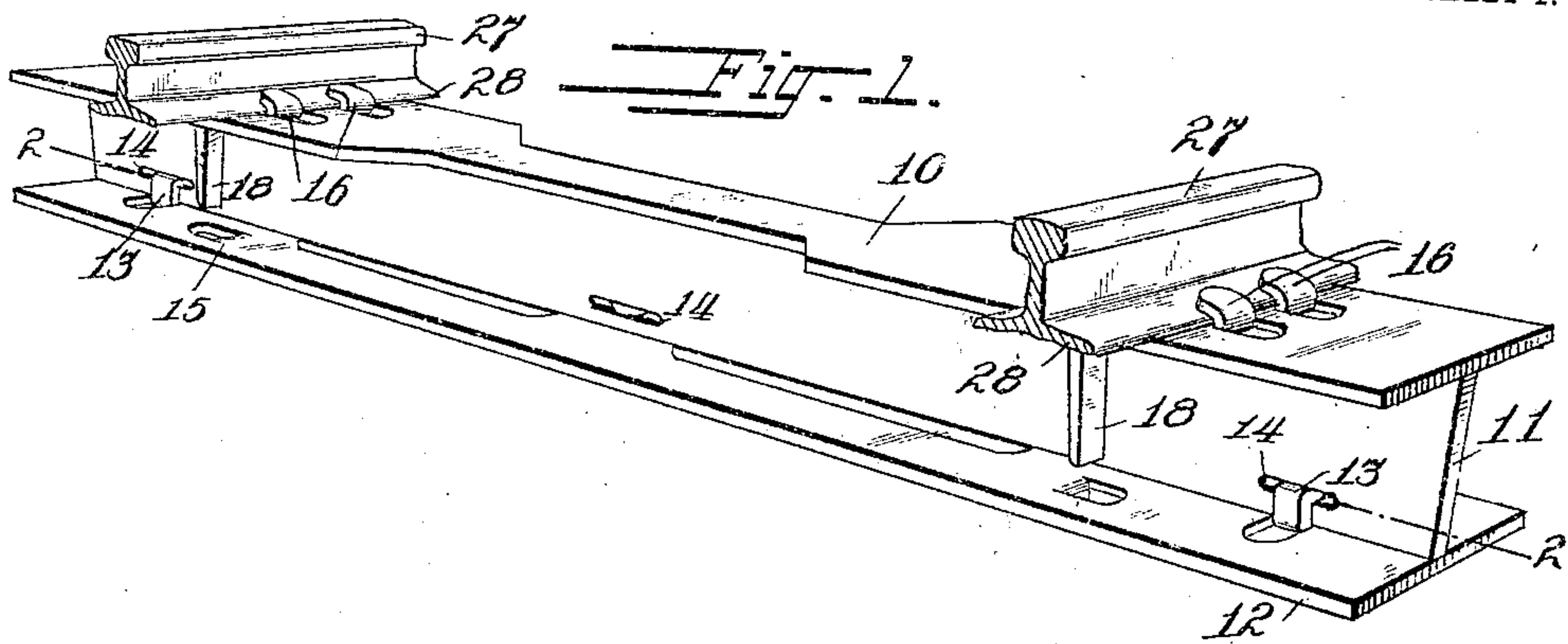


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APPLICATION FILED DEC. 26, 1907.

917,831.

Patented Apr. 13, 1909.  
2 SHEETS—SHEET 1.



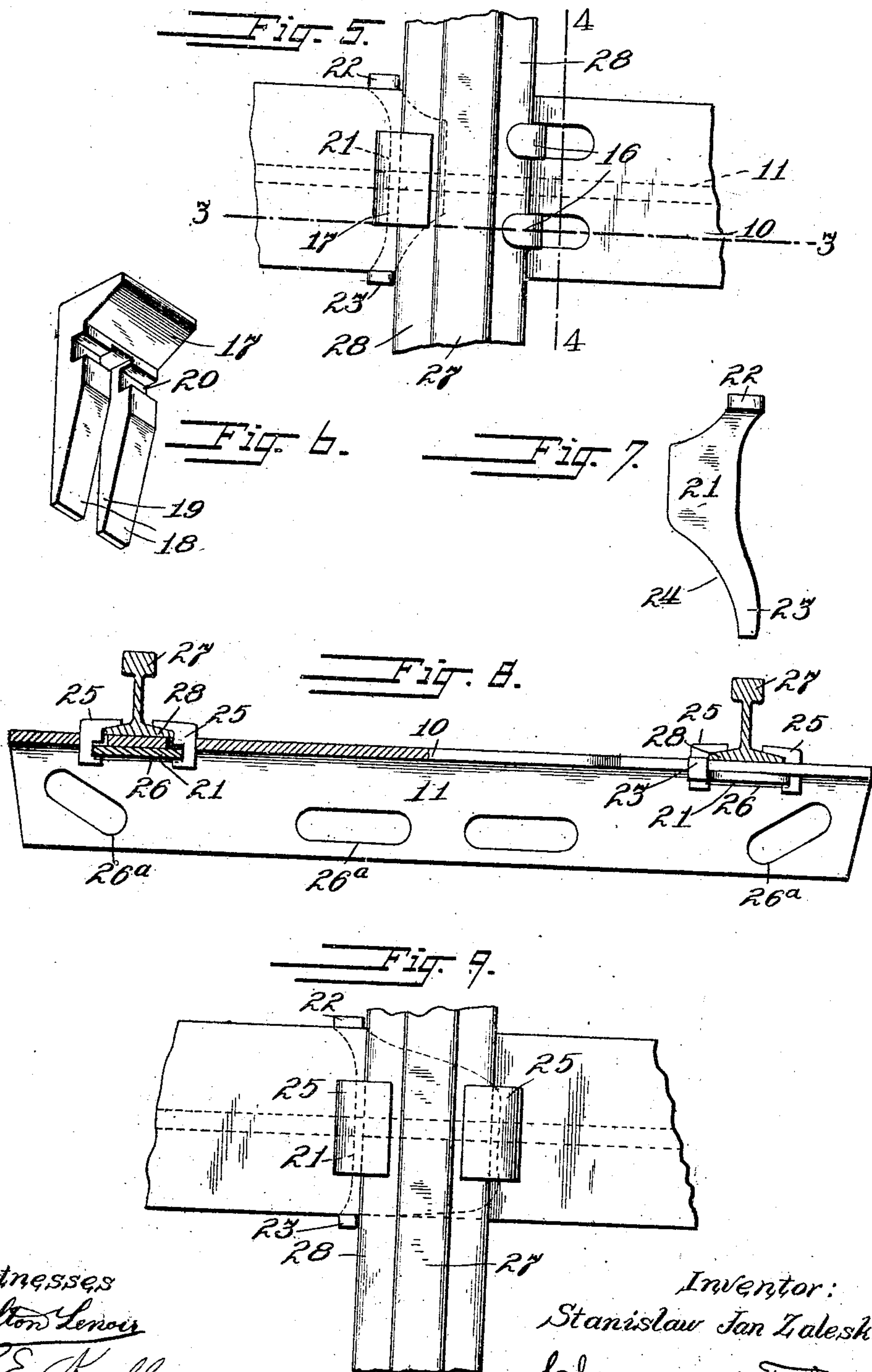
Witnesses  
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S. E. Kellogg.

Inventor:  
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# UNITED STATES PATENT OFFICE.

STANISLAW JAN ZALESKI, OF CHICAGO, ILLINOIS, ASSIGNOR TO SIMPLEX RAIL FASTENER & METALLIC TIE CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## METALLIC TIE AND RAIL-FASTENER.

No. 917,831.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed December 26, 1907. Serial No. 408,057.

*To all whom it may concern:*

Be it known that I, STANISLAW JAN ZALESKI, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metallic Ties and Rail-Fasteners, of which the following is a specification.

My invention relates to improvement in a metallic tie and rail fastener, and the objects of my improvement are, first, to provide a detachable base for the web of a T-shaped tie; second, the provision of means for longitudinally sliding the web on such base; third, to afford simple and effective means to secure the rail to the tie; and, fourth, the provision of integral lugs on the upper surface of the tie and all facing one way so that when each alternate tie is laid oppositely the strain which frequently results in the spreading of the rails will be against the integral lugs of the tie.

With the above and other objects in view, this invention consists in the novel features and in the combination and arrangement of parts all hereinafter more specifically described, illustrated in the drawings, and particularly pointed out in the claims hereunto appended.

In describing the invention in detail reference is had to the accompanying drawings forming a part of this specification wherein like numerals of reference indicate corresponding parts throughout the several views, and in which—

Figure 1 is a perspective view of the tie. Fig. 2 is a section on line 2—2 of Fig. 1 looking downward. Fig. 3 is a longitudinal section showing the rail in fastened position on the tie on line 3—3 of Fig. 5. Fig. 4 is a vertical section through the tie and base outside the rail on line 4—4 of Fig. 5. Fig. 5 is a top plan view showing the rail in position on the tie and the fastening key shown in dotted lines. Fig. 6 is a perspective view of the pronged clamp. Fig. 7 is a detail view of the fastening key. Fig. 8 is an elevation partly in section showing a tie with a short clamp and the fastening key increased in width. Fig. 9 is a top plan view of a double clamp fastener.

One embodiment of my invention is described as follows: The numeral 10 denotes the top of a T-shaped metallic tie with a web portion 11 and a detachable base 12, which

is provided with integral lugs 13, the free ends of which are adapted to move in slots 14 of the web to permit longitudinal movement of the tie on the base. Extending from the lower surface of the base are integral lugs 15 to prevent lengthwise movement of the base. Integral lugs 16 are forced up out of the top of the tie near each end and all extending toward one end of the tie. The pronged clamp shown in Fig. 5 has a rail flange-bearing portion 17, prongs 18, vertical slot 19, and horizontal groove 20. The slot 19 is adapted to receive the web of the tie, and the groove 20 will receive one edge of the fastening key 21. The fastening key preferably is made of wrought iron, having a body portion 21 with opposite parallel edges, one of which edges to engage with the bottom of the groove 20 and the other to engage the end of the slot 26 in the web 11. It will be noted the key also has one end 22 turned at right angle to the body of the key and that the opposite end 23 may be turned up when the key is in position to prevent withdrawal of the key. The wedge-shaped portion 24 of the key facilitates the insertion of the key through the key-receiving slot 26. For the purpose of setting the tie in concrete and preventing its withdrawal therefrom I omit the base 12, and provide the web 11, with openings 26<sup>a</sup> therethrough, as shown in Fig. 8, in which figure the clamp shown in Fig. 6 has shorter prongs and the rail is secured by two clamps, the integral lugs 16 being omitted for the reason in such case there would be no spreading of rails hereinbefore mentioned. The lower flange 28 of the rail is partly embraced by lug 16 and the flange embracing portion 17 of the clamp shown in Fig. 3.

In operation the parts are assembled in a manner obvious to those familiar with the art, and the free end 23 of the fastening-key shown in Fig. 7, with the stop 22 thereof upward is inserted in the horizontal slot 26 of the web 11, and one edge of the key bears against the end 29 of the slot in the web and the other edge of the key bears against the bottom of the groove 20 in the pronged clamp shown in Fig. 6. When the key is in final position the end 23 is bent upward to prevent withdrawal, as shown at 23 in Fig. 4. Manifestly, this key should be made of a material which will permit the end 23 to be bent without breaking.

I do not limit my invention to the exact



construction and arrangement above described of the preferred form in which it has been embodied.

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

1. A substantially T-shaped railroad tie having integral lugs in its upper surface a distance from the ends thereof and facing in the same direction, key-receiving slots in the web of the tie, pronged clamps, and a fastening-key for each slot.

2. A substantially T-shaped railroad tie having integral lugs in its upper surface a distance from the ends and facing in the same direction, key-receiving slots in the web of the tie, pronged clamps to engage the flanges of the rails, a fastening-key for each slot, and a detachable base for the tie.

3. A substantially T-shaped railroad tie having a plurality of slots in the lower part

of the web, a base having lugs with their free ends in the slots and adapted to slidably secure the tie on the base.

4. In a metallic tie and fastener, the combination of a tie having integral lugs in its upper surface and a horizontal slot in the upper edge of the web, a pronged clamp having a vertical slot and a horizontal groove, and a fastening key comprising a rectangular portion with opposite parallel edges adapted to bear against the web at one end of the slot therein and in the groove in the clamp respectively and having a wedge-shaped end capable of being bent to prevent withdrawal of the key.

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

STANISLAW JAN ZALESKI.

Witnesses:

S. ELVA KELLOGG,  
WALTER WAGNER.