

L. MUELLER.
TRUSS SUPPORT FOR RAIL JOINTS.
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931,459.

Patented Aug. 17, 1909.

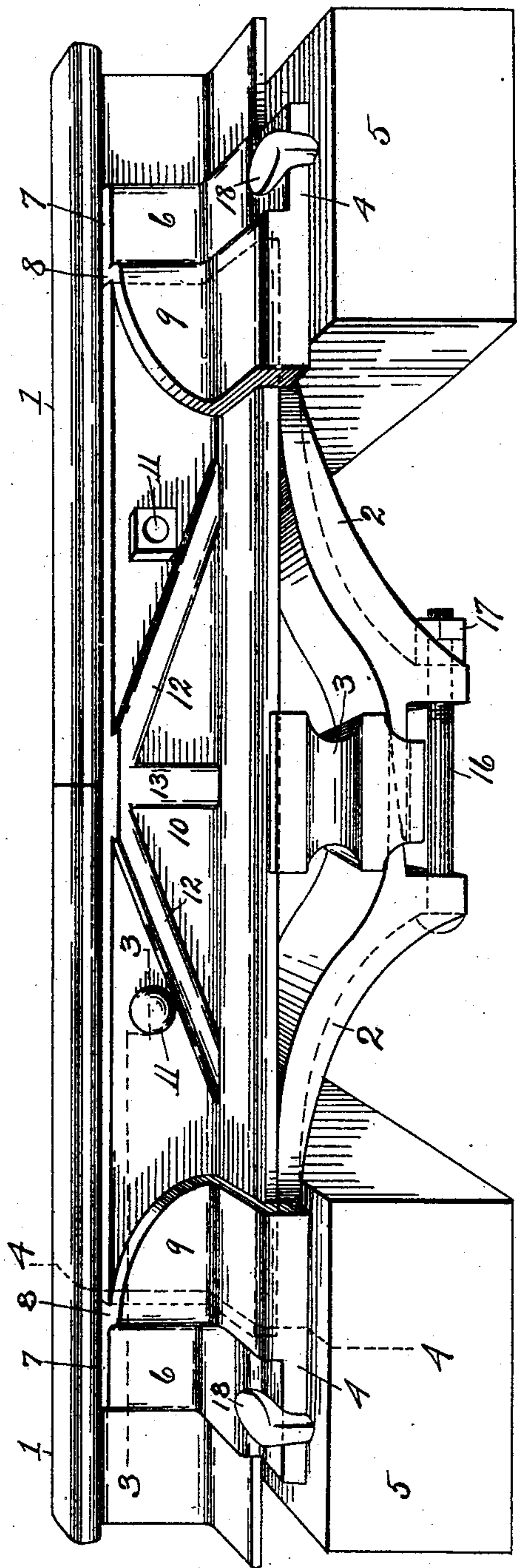


Fig. 1.

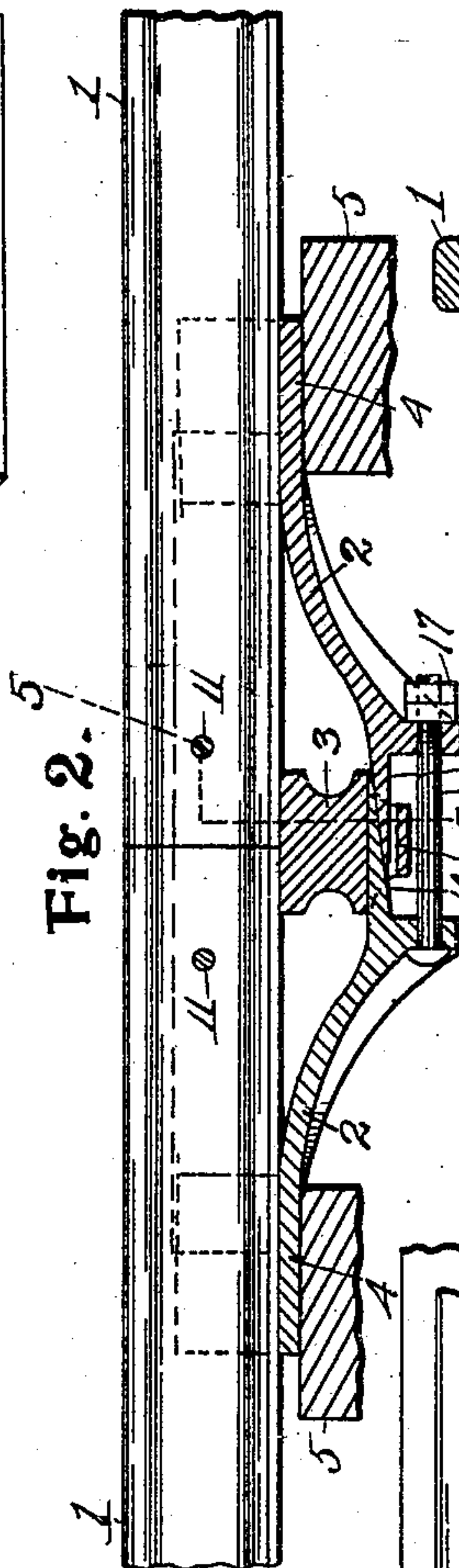


Fig. 2.

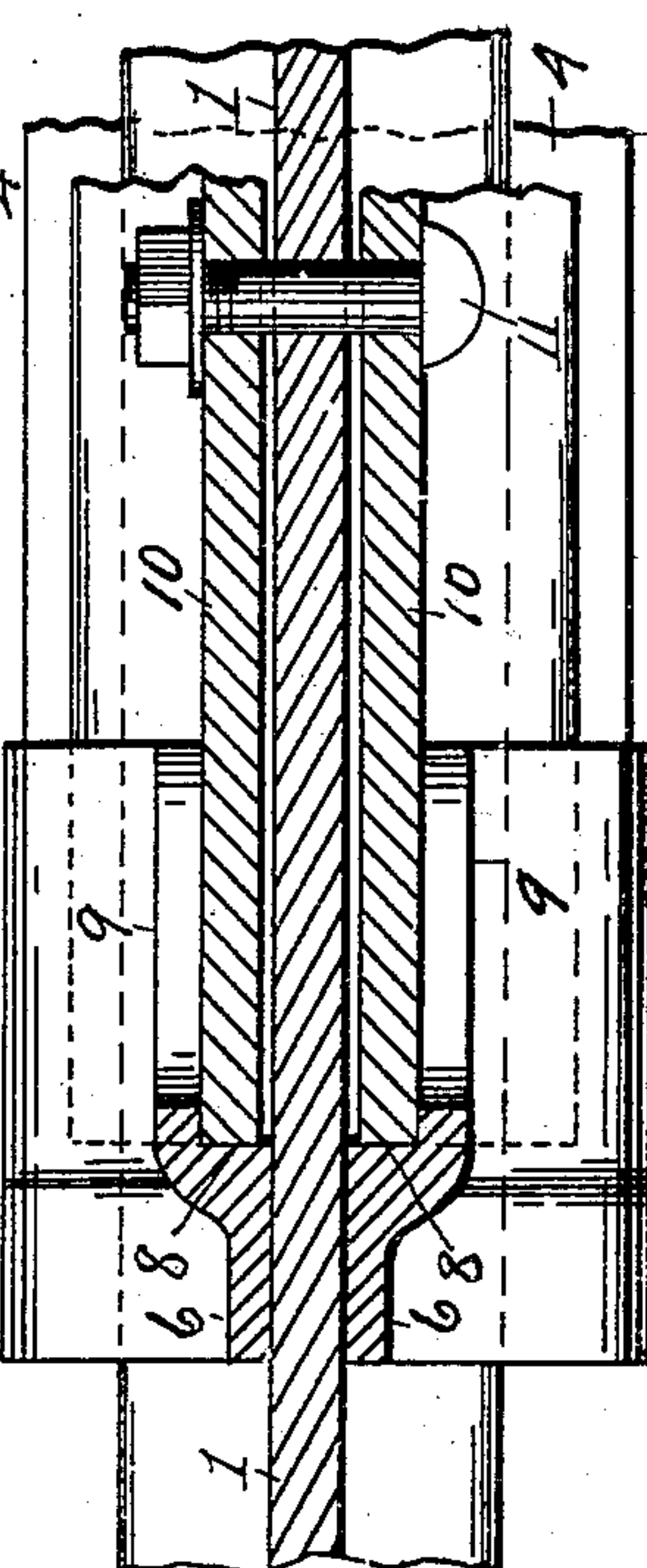


Fig. 3.

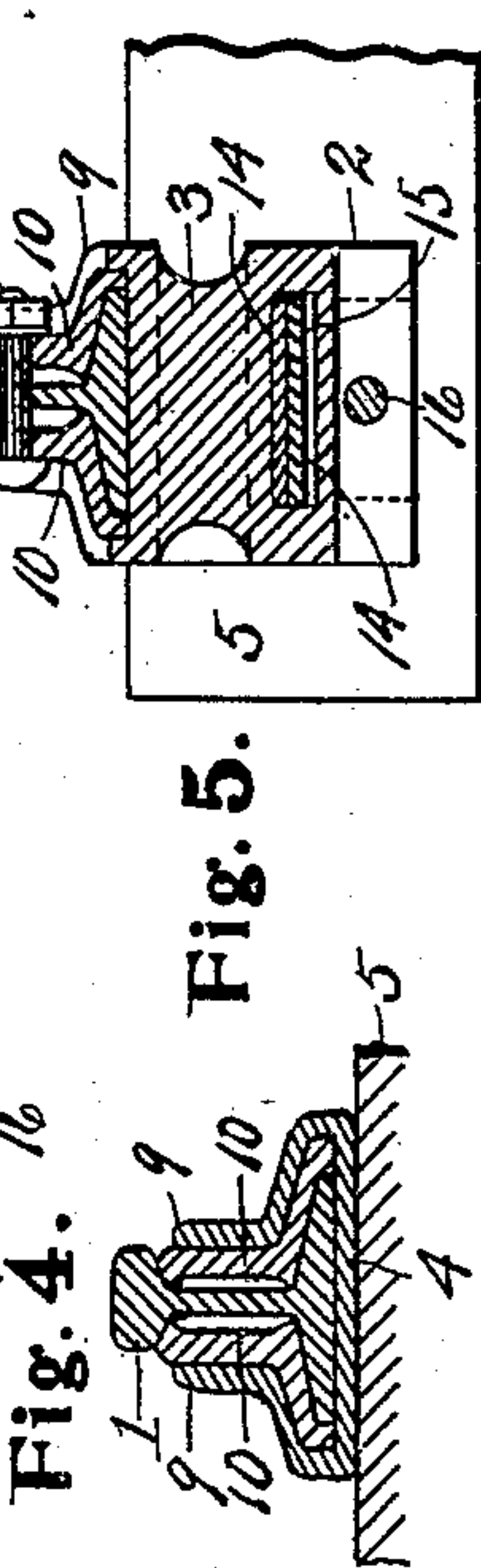


Fig. 4.

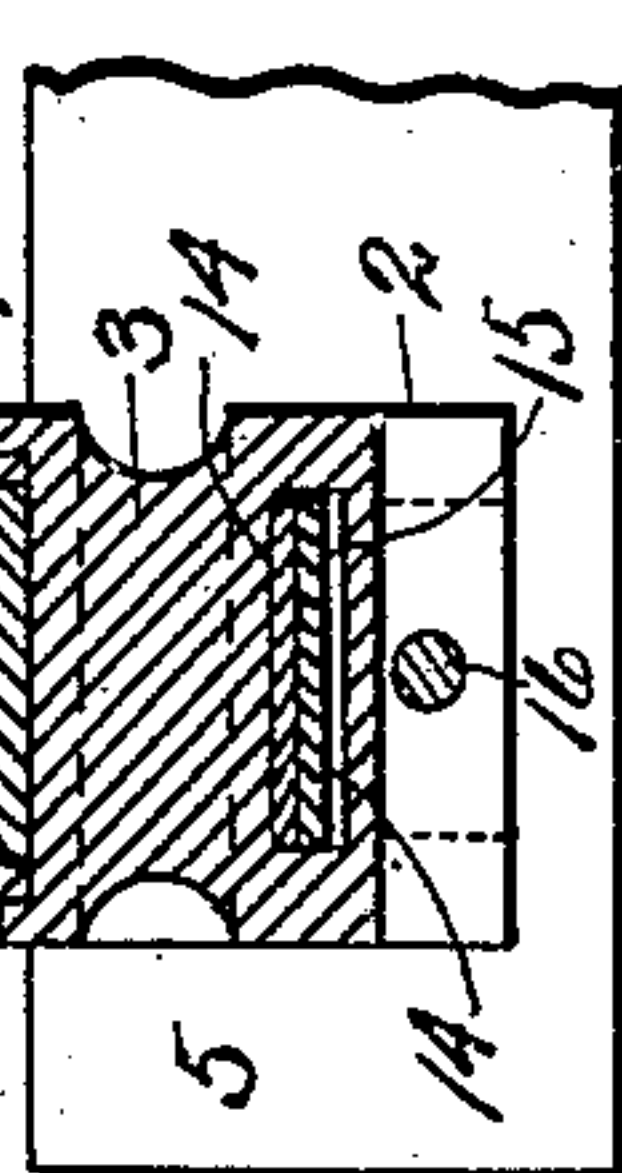


Fig. 5.

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TRUSS-SUPPORT FOR RAIL-JOINTS.

No. 931,459.

Specification of Letters Patent.

Patented Aug. 17, 1909.

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To all whom it may concern:

Be it known that I, LOUIS MUELLER, a citizen of the United States, residing at Owosso, in the county of Shiawassee, State of Michigan, have invented certain new and useful Improvements in Truss-Supports for Rail-Joints; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to an adjustable truss support for rail joints, especially designed for supporting the joints of railway rails, and consists in the construction and arrangement of parts hereinafter more fully set forth and pointed out particularly in the claims.

The object of the invention is to provide a truss support for rail joints wherein the arrangement is such as to render the supporting truss adjustable and provide a take-up for all lost motion between the supporting parts incident to wear or to any variation in the size thereof.

The above object is attained by the structure illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view showing the employment of my adjustable truss support in supporting the joint between the meeting ends of railway rails. Fig. 2 is a central longitudinal section through the truss members, the ends of the rail sections appearing in elevation. Fig. 3 is an enlarged fragmentary view in longitudinal section as on line 3—3 of Fig. 1. Fig. 4 is a reduced transverse section as on line 4—4 of Fig. 1. Fig. 5 is a transverse section as on line 5—5 of Fig. 2.

Referring to the characters of reference, 1 designates the rail sections whose ends are joined by my improved truss support and which are of the well known T-rail type. The truss members comprise the truss plates 2 and the supporting block 3 carried by the truss plates and upon which the meeting ends of the rails rest. The outer end of each of the truss plates 2 has a flat bearing surface 4 which extends under the base of the rail and rests upon the tie 5. Extending upwardly from the extreme outer end of each of the truss plates 2 on each side are the

angle plates 6 which embrace the base and web of the rail and the tops of which extend upwardly and engage under the flange of the rail head, as shown at 7 in Fig. 1. At the free edge of each of the angle plates 6 is an offset 8 and from the outer edge of each of said offsets extends a longitudinally projecting angle plate 9 which conforms in cross section to the shape of the splice bar 10. Said plates in conjunction with the offsets 8 form angular receiving sockets into which the opposite ends of the splice bars 10 may pass when the parts are assembled, so that the angle plates 6 and said plates 9, both of which are integral parts of the outer ends of the truss plates 2, serve to embrace the web and base of the rail and the outer face and base of the splice bars at their ends, the offsets 8 serving as abutments against which the ends of the splice bars engage. The splice bars bear at their upper edges under the flanges of the heads of the rails and extend at their lower edges over the bases of said rails so as to embrace them as shown. The position of the splice bars is such as to cross the joint between the ends of the rails, to the webs of which they are secured by the transverse bolts 11. For the purpose of stiffening the splice bars, they are provided with inclined ribs 12 and a vertical rib 13.

The inner ends of the truss plates 2 curve downwardly and each is provided with an inwardly projecting wedge shaped supporting member 14. Said members pass freely from opposite directions into an opening 15 in the bottom portion of the truss block 3 and lie one upon the other therein, whereby said block is supported in position below the ends of the rails. Crossing between the inner ends of the plates 2 is a strong tie bolt 16 having on one end the nuts 17. By tightening said nuts the truss plates 2 may be drawn together to draw the abutment shoulders or offsets 8 against the ends of the splice bars, and at the same time wedge the block 3 upwardly against the meeting ends of the rails by reason of the lapping ends of the wedge shaped supporting members 14 sliding one upon the other. By means of this adjustment of the truss members, all lost motion may be taken up and such tension placed upon the truss plates as to afford a proper support for the joint.

The arrangement and formation of the parts is such that the wedge shaped supporting members 14, as the inner ends of the

truss plates 2 are drawn together by the bolt 16, will raise the block 3 into forcible engagement with the bottom of the rails at the joint, in advance of the engagement by the abutments or shoulders 8 with the ends of the splice bars to insure a proper bearing for the rail ends upon said block. By reason of the fact that the plates 9 at the outer ends of the truss plates embrace the splice bars and the abutments or shoulders 8 engage the ends thereof, the longitudinal thrust incident to a downward strain upon the truss plates is directed against the ends of the splice bars, thereby making the support for the joint very rigid. The upper face of the truss member or block 3 is channeled so as to enable the base of the rail and of the splice bars to seat therein, preventing any lateral movement between said parts. To secure the joint supporting members in place, spikes 18 are driven into the ties 5 so as to cause their heads to engage the outer ends of the bearing plates 4 on opposite sides of the rails.

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

1. In an adjustable truss support for rail joints, the combination with the rails, of the truss plates engaging the rails at each side of the joint and extending downwardly below the meeting ends thereof, a truss member interposed between the joined ends of the truss members and the rail joint, and means for drawing the truss plates together to wedge the truss member between their joined ends and the joint of the rail.

2. In an adjustable truss support for rail joints, the combination with the rails, of a truss comprising two independently movable members having inwardly and downwardly curved end portions which join below the rail joint, a block mounted upon the joined ends of the truss members and affording a bearing for the ends of the rails, and means extending between the truss members for drawing them together.

3. In an adjustable truss support for rail joints, the combination with the rails, of splice bars crossing the joint between their ends, a truss member comprising independently movable parts, the outer end of each part affording a bearing for the rail, and embracing the rail and the ends of the splice

bars, the inner ends of said independently movable parts curving downwardly and meeting below the rail joint, a block supported upon the meeting ends of said movable parts and affording a bearing for the ends of the rails, and means extending between the ends of the movable truss members for drawing them together.

4. In an adjustable truss support for rail joints, the combination with the meeting ends of the rails, of truss members upon the outer ends of which the rails lie, said members having at their outer ends angle plates which embrace the rails and abutments to receive the ends of the splice bars, splice bars crossing the joint between the rail ends, the ends of said splice bars being engaged by said abutments, the inner ends of the truss members curving downwardly and meeting below the rail ends, the meeting parts of said truss members being wedge shaped, a supporting block carried by said wedge shaped parts and affording a bearing for the ends of the rails, and means for drawing the inner ends of the truss members together.

5. In an adjustable truss support for rail joints, the combination with the meeting ends of the rails, of the splice bars joining said rail ends, movable truss plates having members at their outer ends which embrace the rails and the ends of the splice bars, the inner ends of said truss plates curving downwardly and meeting below the rail joint, a block supported by the meeting ends of said plates and affording a bearing for the ends of the rails, and means for drawing the meeting ends of the truss plates together.

6. In a truss support for rail joints, the combination with the meeting ends of the rails, of splice bars joining said ends, a downwardly curved truss support for the rail joint, a supporting block interposed between said support and the ends of the rails, the outer ends of the truss support having bearing plates upon which the rails lie and embracing members which receive and confine the rails and the opposite ends of the splice bars.

In testimony whereof, I sign this specification in the presence of two witnesses.

LOUIS MUELLER.

Witnesses:

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