

J. D. STITZELL.
RAIL JOINT.
APPLICATION FILED MAY 6, 1908.

898,799.

Patented Sept. 15, 1908.

Fig. 1.

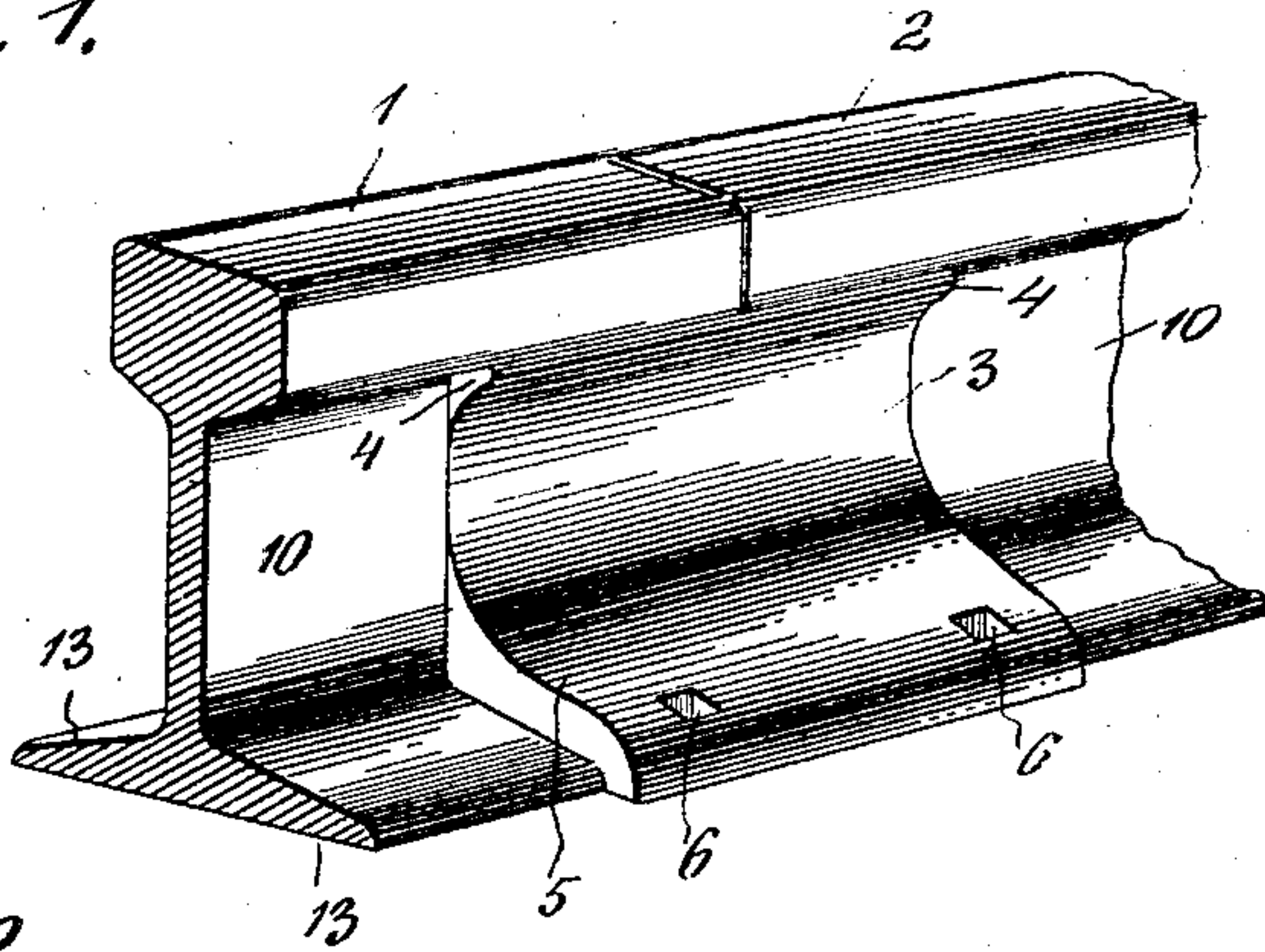


Fig. 2.

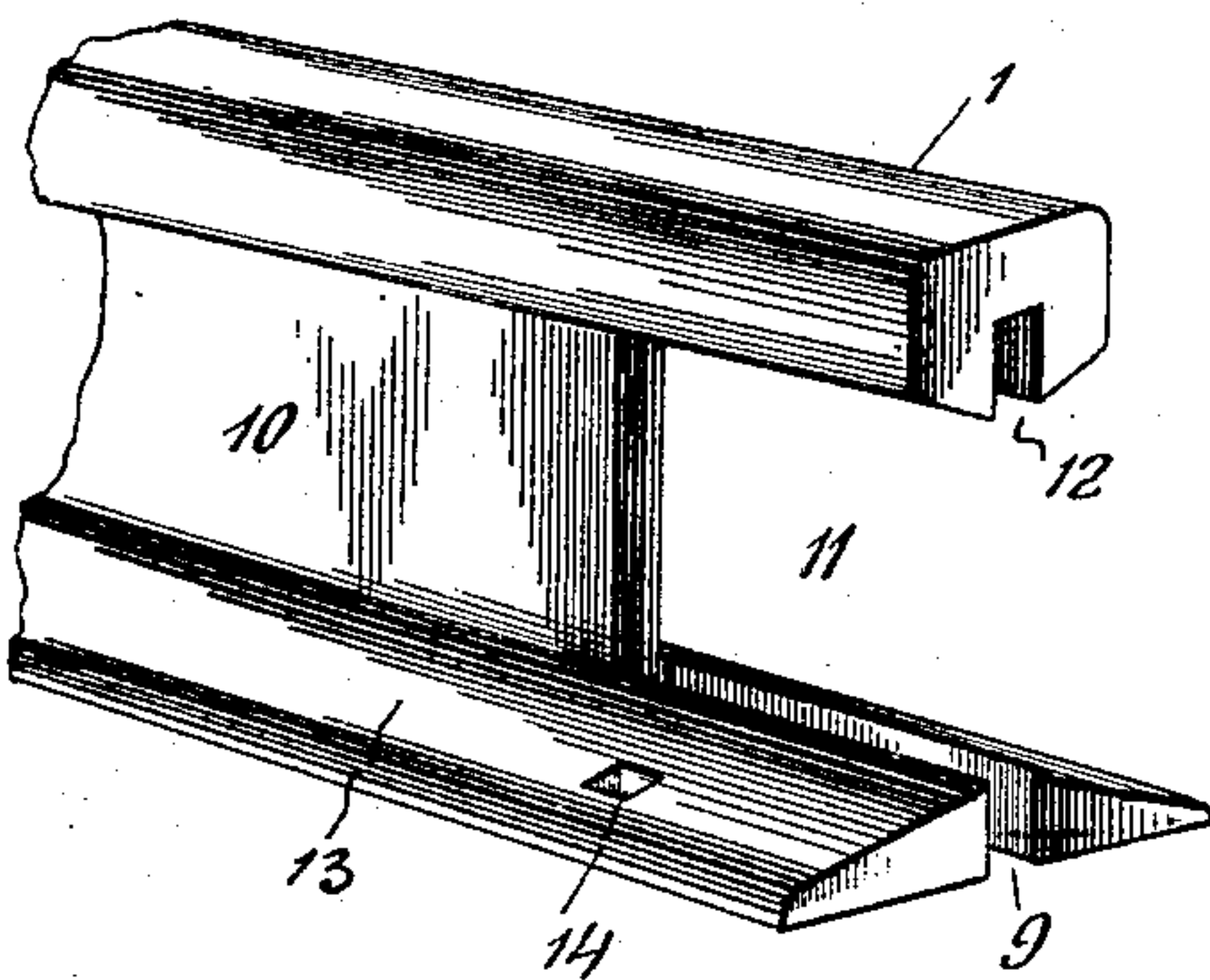


Fig. 3.

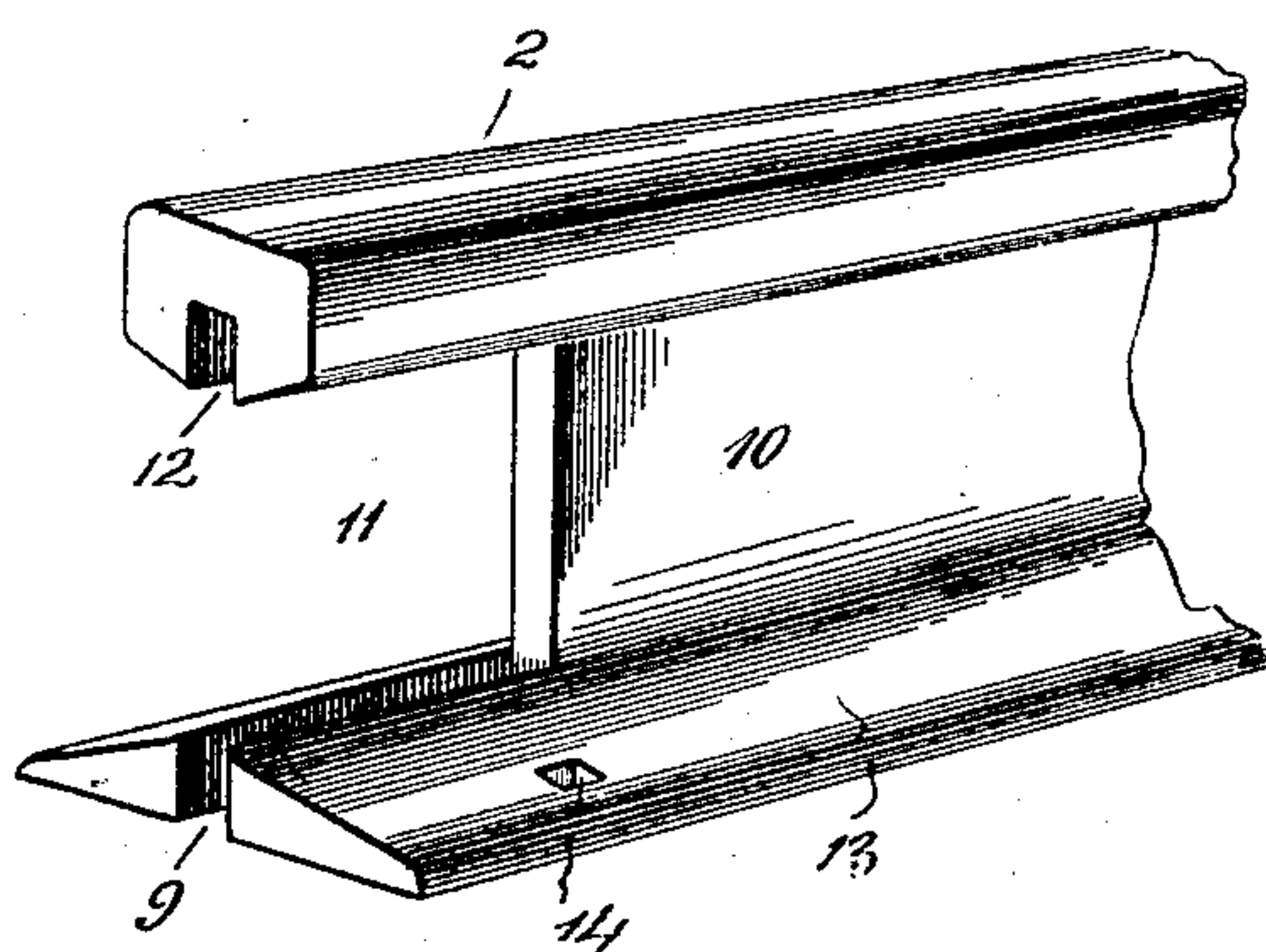


Fig. 4.

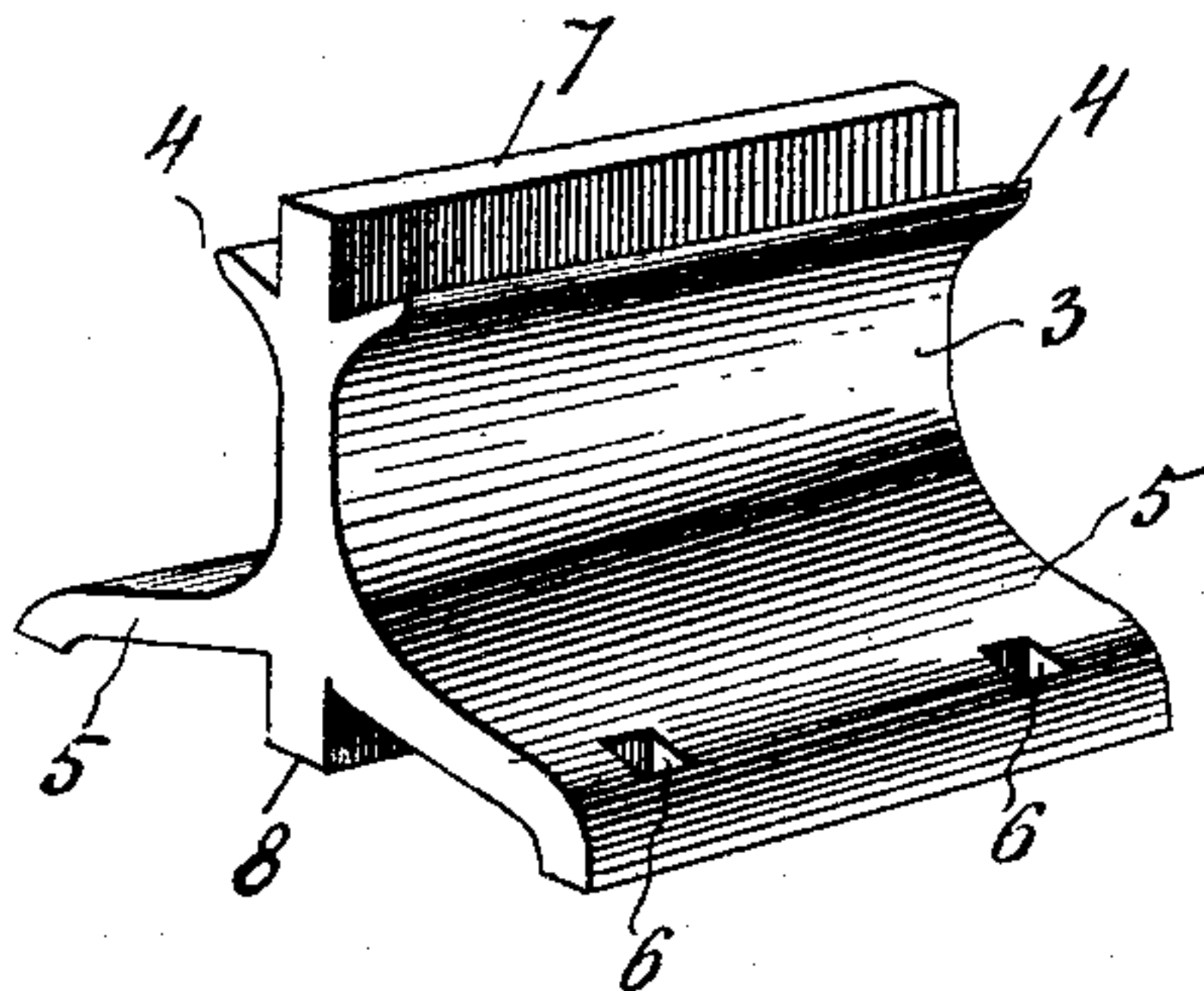
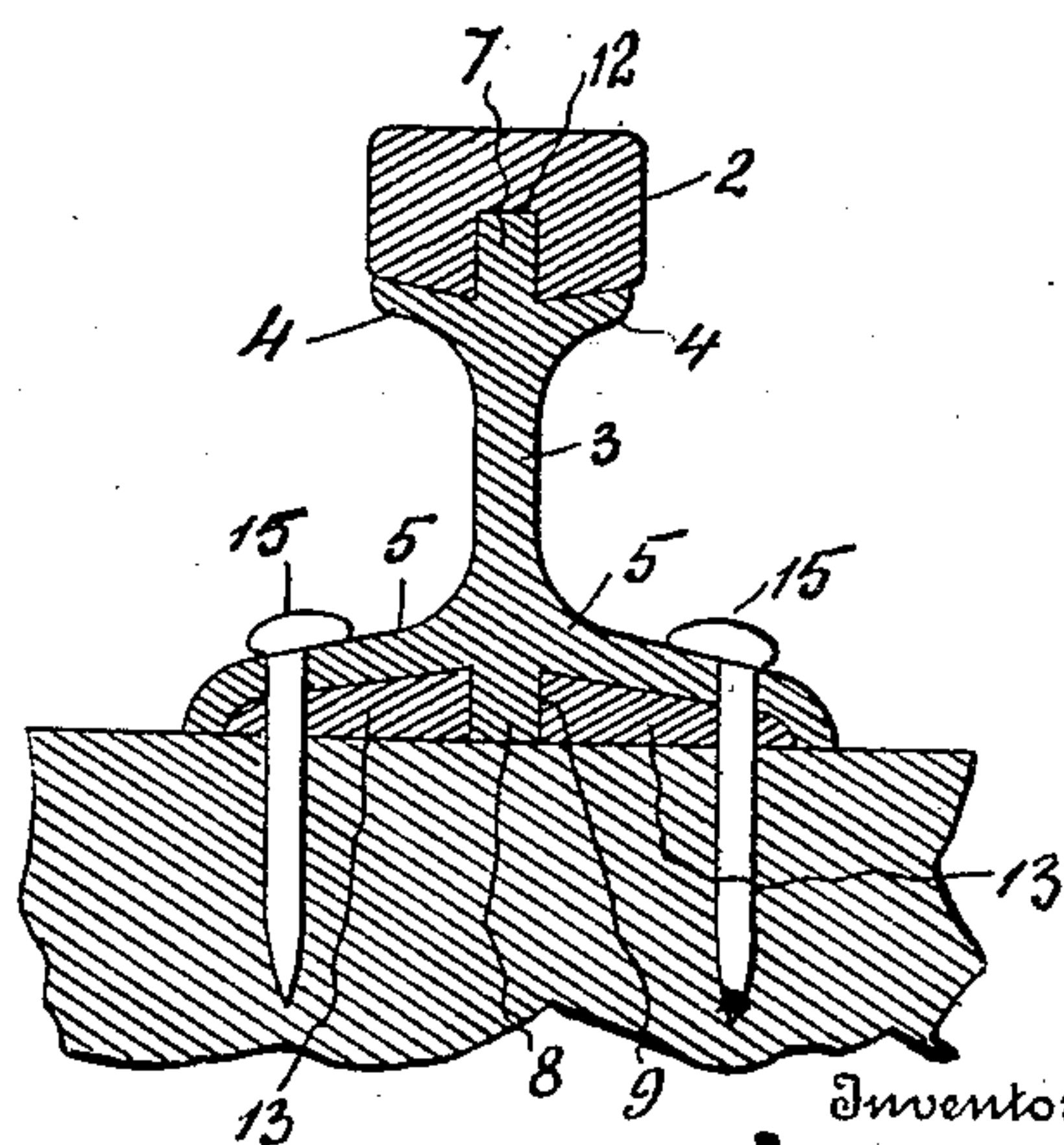


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN D. STITZELL, OF PITTSBURG, PENNSYLVANIA.

RAIL-JOINT.

No. 898,799

Specification of Letters Patent.

Patented Sept. 15, 1908.

Application filed May 6, 1908. Serial No. 431,174.

To all whom it may concern:

Be it known that I, JOHN D. STITZELL, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rail joints, and the objects of my invention are, first, to provide a continuous tread for rolling stock; second, to dispense with the use of nuts and bolts as the connecting medium of the confronting ends of two rails; third, to provide a strong and durable joint that will prevent lateral displacement of one rail with relation to the other; and fourth, to provide a rail joint that can be advantageously used in connection with street railways and roads of small gage.

The above objects are accomplished by a novel connecting member for the confronting ends of rails, said member being designed to firmly brace the heads or treads thereof, and prevent vertical or lateral displacement of one rail with relation to the other. In connection with the connecting member or joining piece, I use spikes or similar fastening means for securing the confronting ends of the rails and said member to a tie or similar support.

The present invention is an improvement upon my rail joint, for which Letters Patent were granted April 14th, 1908, No. 884,774, said improvement being designed to increase the strength, durability and efficiency of the rail joint as a connecting medium for two rails.

My invention will be presently described in detail and reference will now be had to the drawing forming a part of this specification, wherein,

Figure 1 is a perspective view of the rail joint, Fig. 2 is a perspective view of the end of one of the rails, Fig. 3 is a perspective view of the end of the adjoining rail, Fig. 4 is a perspective view of the connecting member or joining piece, and Fig. 5 is a cross sectional view of the rail joint.

In the accompanying drawings, 1 and 2 designate rails, similar to the present type of rail, and the confronting ends of these rails are cut away to accommodate a connecting member. The connecting member comprises a bar 3 provided adjacent to its upper

edge and upon each side thereof with longitudinal angularly disposed flanges 4, and adjacent to its lower edge upon each side thereof with outwardly extending flanges 5, said flanges being provided with spike openings 6. The formation of the flanges 4 and 5 permits of the upper and lower edges of the connecting member serving functionally as tongues 7 and 8.

The bases of the rails 1 and 2 are cut away, as at 9 to accommodate the lower tongue 8 of the connecting member, while the webs 10 of said rails are cut away as at 11 to receive the connecting member and allow the tongue 7 of the upper edge of said member to fit in longitudinally disposed grooves 12 provided therefor in the under side of the heads of the rails 1 and 2.

The flanges 4 of the connecting member are adapted to engage the under sides of the heads of the rails 1 and 2 and assist in conjunction with the webs 10 in supporting said heads. The flanges 5 are adapted to overlie the base flanges 13 of the rails 1 and 2, said flanges being provided with spike openings 6 of the flanges 5. Spikes 15 of a conventional form can then be employed for securing the flanges 5 to the base flanges 13 of the rails 1 and 2.

While in the drawings forming a part of this application there is illustrated a preferable form of construction embodying the invention, it will be understood that the elements therein may be changed or varied without departing from the spirit of the invention.

Having now described my invention what I claim as new, is:—

1. The combination with rails having the webs thereof cut away at the ends of the rails, and having their base flanges cut away centrally for a length equal to the distance of the cut away portion of the web, the treads of said rails being provided on the underneath face with a groove equal in length to the cut away portion of the web and base flange, of a connecting member fitting in the cut away portions of said rails, longitudinal flanges carried adjacent to the upper edges of said member for bracing the treads of said rails, outwardly extending flanges carried by the lower edges of said member for engaging the base flanges of said rails, said outwardly extending flanges having spike openings formed therein adapted to align with similar openings formed in the

base flanges of said rails, and means mounted in said openings for retaining said member in engagement with said rails.

2. The combination with rails having the
5 webs thereof cut away at the ends of the rails and having their base flanges cut away centrally for a length equal to the distance of the cut away portion of the web, the treads of said rails being provided on their underneath
10 face with a groove equal in length to the cut away portion of said web and base flange, of a connecting member fitting in the cut away portions of said rails, flanges carried by said

member and adapted to engage the underneath face of the tread of said rails, and the 15 upper face of the base of said rails, and means engaging in the base flanges of said rails for holding said member in engagement with said rails.

In testimony whereof I affix my signature 20 in the presence of two witnesses.

JOHN D. STITZELL.

Witnesses:

MAX H. SROLOVITZ,
K. H. BUTLER.