

C. O. THOMAS.

RAIL JOINT.

APPLICATION FILED MAY 25, 1908.

914,616.

Patented Mar. 9, 1909.

FIG. 1.

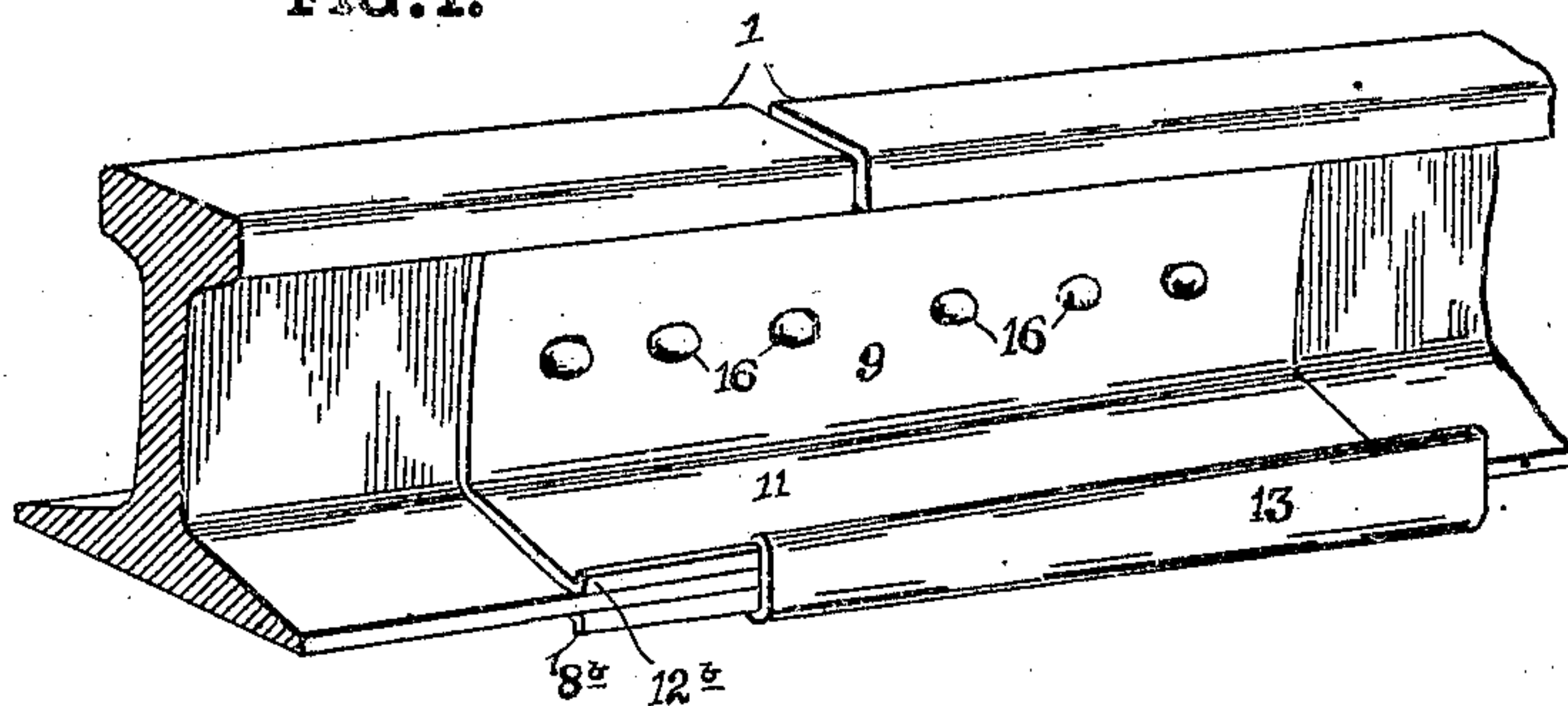


FIG. 2.

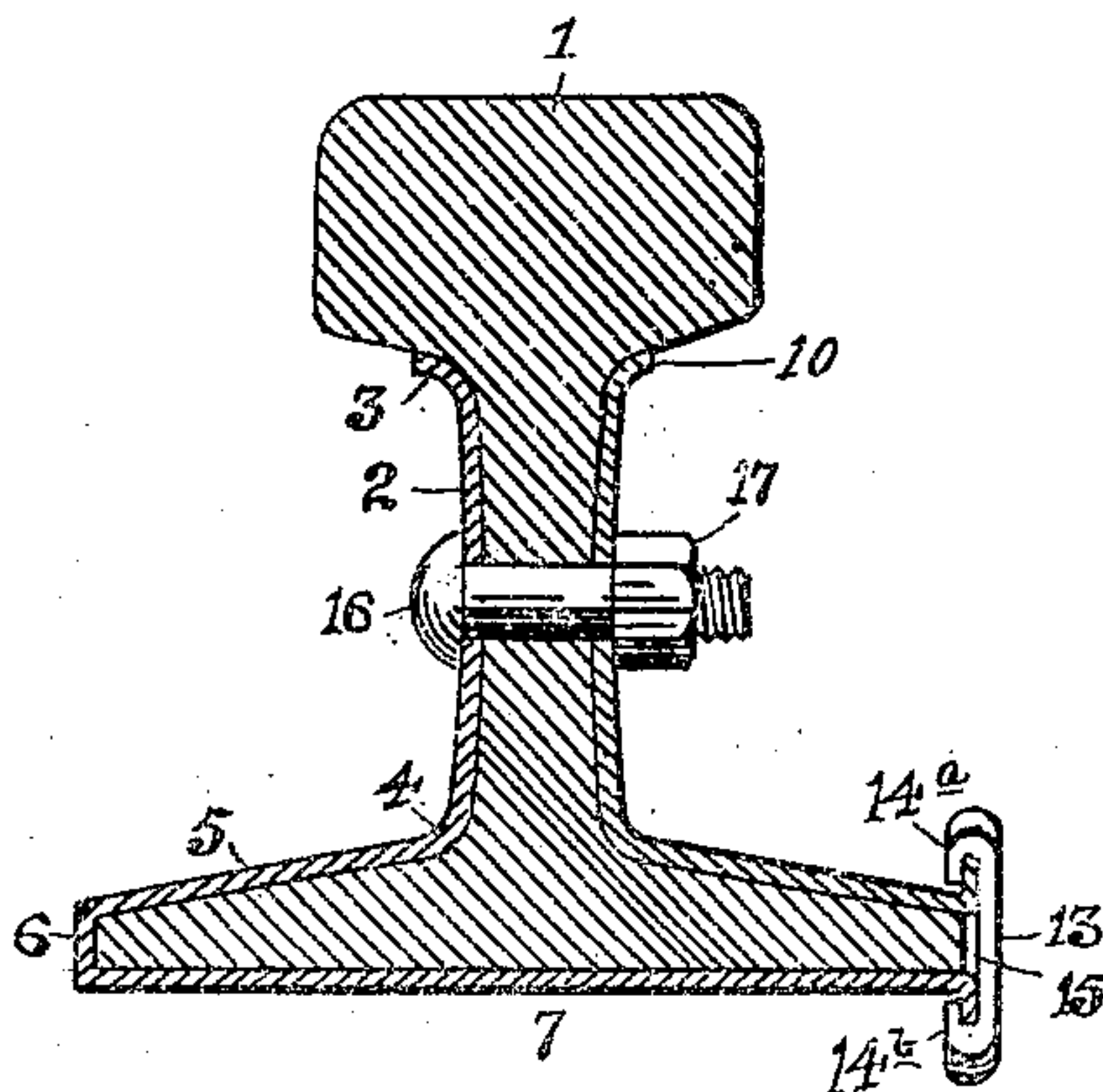


FIG. 3.

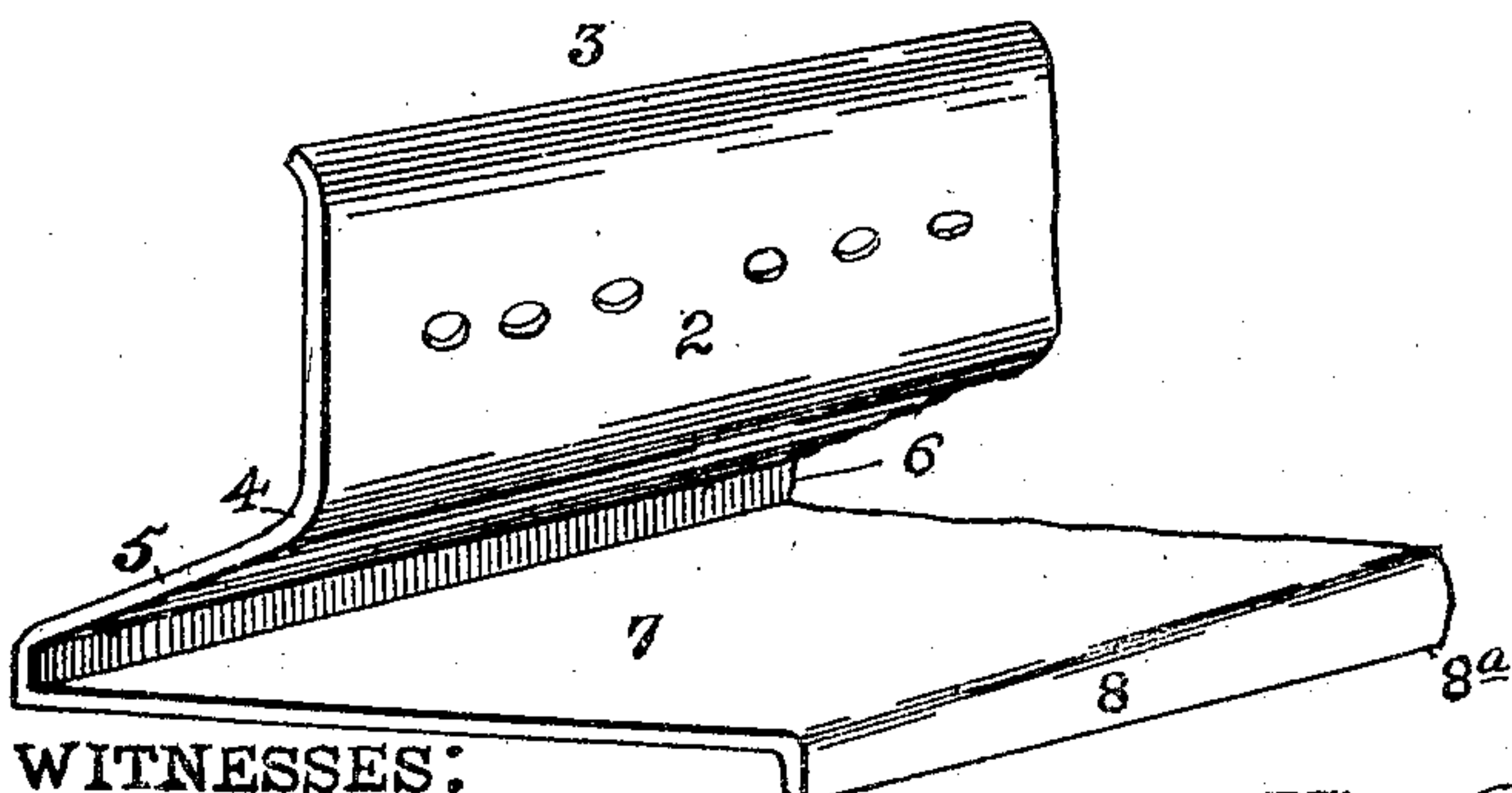
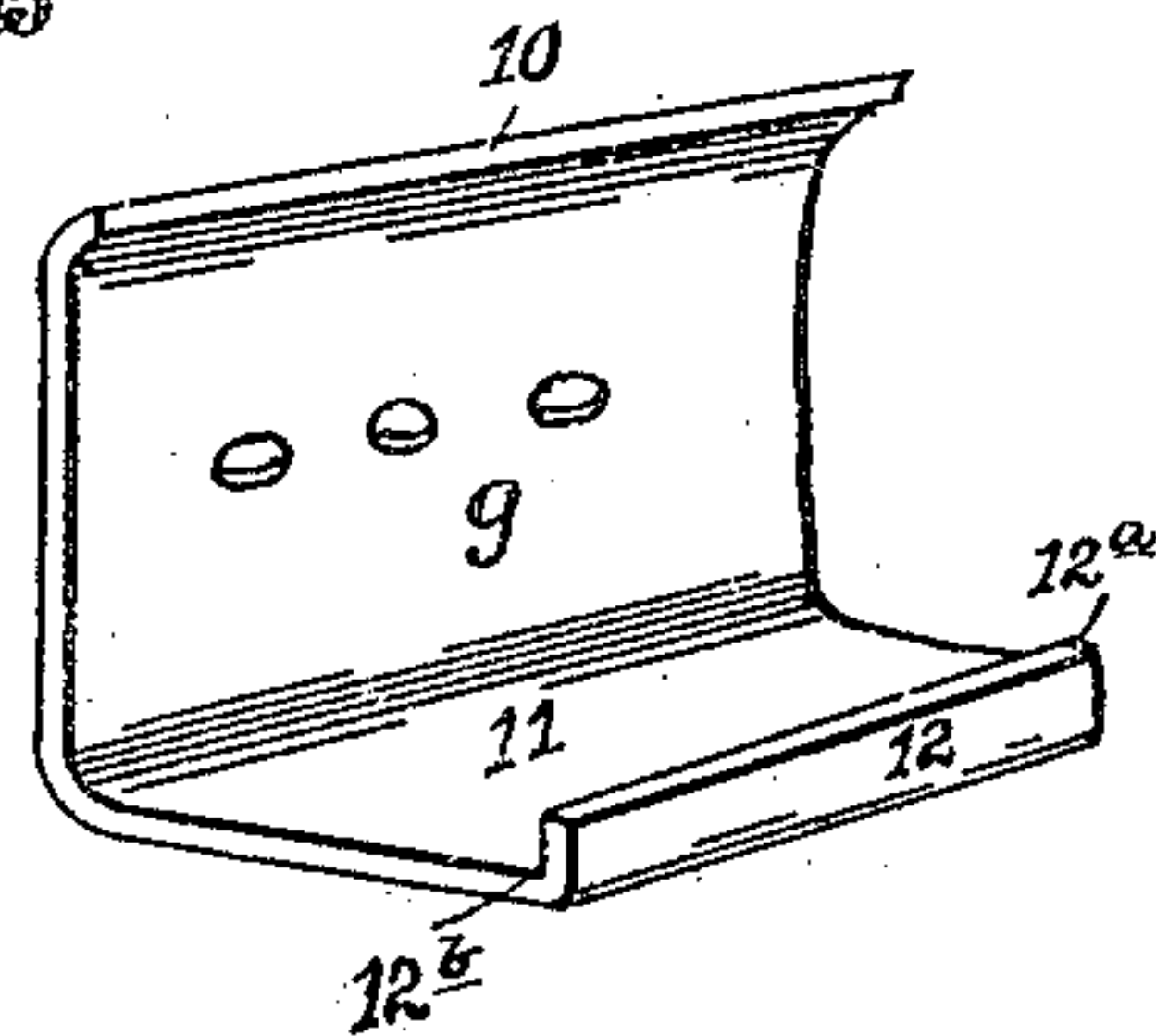


FIG. 4.



WITNESSES:

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CHARLES O. THOMAS, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO J. T. REINSEL, OF CLARION, PENNSYLVANIA.

RAIL-JOINT.

No. 914,616.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed May 25, 1908. Serial No. 434,793.

To all whom it may concern:

Be it known that I, CHARLES O. THOMAS, citizen of the United States, 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.

My invention relates to rail-joints and has for its object the providing of means for preventing the breaking down of the rail-ends at the joints which object I accomplish by the novel means hereinafter described.

In the accompanying drawings, which form part of this specification, Figure 1 is a perspective view of a pair of rail-ends joined by my novel rail joints. Fig. 2 is a cross section through the rail joint at one of the bolt holes and Fig. 3 illustrates in perspective one of the joined members and Fig. 4 illustrates in similar view the complementary member.

Referring again to the drawings for detailed description of my invention 1—1 represents the ends of two abutting rails.

2 is a plate adapted to engage one side of the web of the abutting rails and is provided with a slightly outwardly curved upper portion 3 adapted to conform to the curvature of the under portion of the head of the rail adjacent to the web. The lower portion of said plate 2 is also outwardly curved as at 4 to intimately contact and conform with the angle of juncture of the rail web with the base of said rail and said plate as an extension portion 5 extending outwardly to the edge of said rail base, thence passing around said edge at 6 and terminating in a flat portion 7 forming a seat for said rail and provided with a downwardly turned flange 8 at right angles to said seat portion 7. This downwardly turned flange portion 8 is tapered so that said flange at one end 8^a projects farther than at the other end 8^b. On the opposite side of the web of the rail is provided a plate 9 having an outwardly turned upper edge 10 similar and performing the same function as the corresponding portion 3 of plate 2 and is provided with an extension 11 adapted to conform with the adjacent upper portion of the rail base and terminates in an upwardly turned flange portion 12 tapered similarly to the flange 8 that is one end 12^a

of said flange is somewhat deeper than the opposite end 12^b; this flange, however, may be without taper if desired. It will be seen that these tapered flanges 8 and 12 are located one above the other at one edge of the rail base. A locking member 13 consisting of a plate with its edges 14^a and 14^b is adapted to engage the complementary flanges 8 and 12. Bolts and nuts 16 and 17 respectively connect the oppositely placed plates 2 and 9 and join the rail ends after a manner of the usual fish-plate.

The locking member 13 above described is adapted to engage the complementary flanges 8 and 12 and by reason of its tapered groove and the corresponding taper of the complementary flanges it will be apparent that by driving said locking member upon the complementary flanges the portions 7 and 11 of the plate will be drawn tightly together thus tending to hold up the rail ends and provide a rigid seat for said rail ends, thus eliminating the sagging of the rail-ends so objectionable and unavoidable with the usual fish-plate.

Having thus fully described my invention what I claim as new and desire to protect by Letters Patent of the United States, is:

In a rail-joint, in combination with the abutting rail-ends and bolts, of a plate conforming and contacting with one side of the rail-web and extending beneath the rail base and embracing same and provided with a downwardly turned tapered flange, a complementary plate conforming to and contacting with the opposite side of said rail web and the adjacent upper portion of the rail base and provided with an upturned tapered flange adapted to locate directly above the aforesaid downturned tapered flange when in position, and a locking member provided with an intumed edge forming a groove to embrace the aforesaid upturned and downturned flanges, substantially as described and for the purpose set forth.

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

CHARLES O. THOMAS.

Witnesses:

GEO. A. YOUNG,

ROBT. F. DILWORTH.