

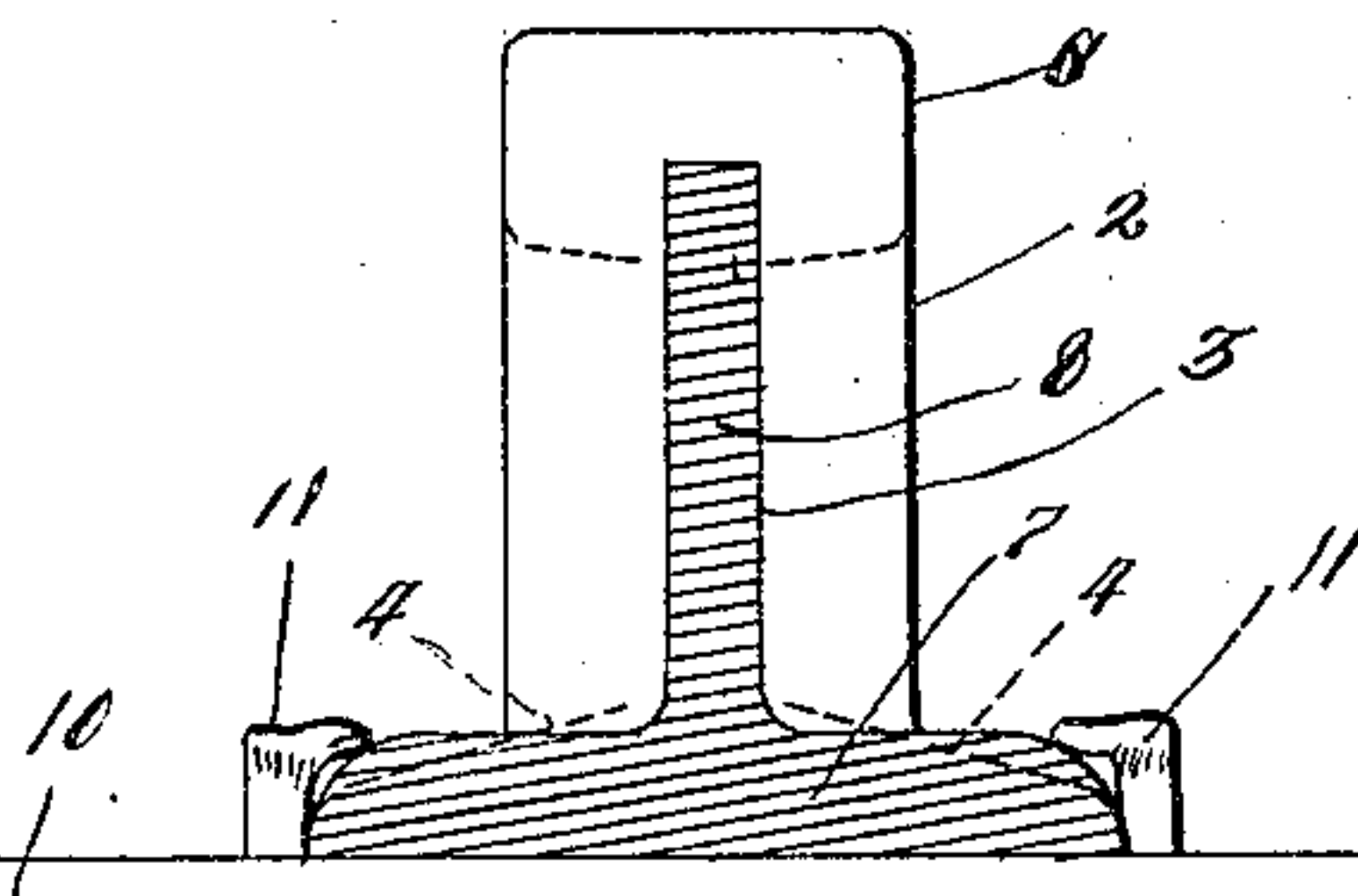
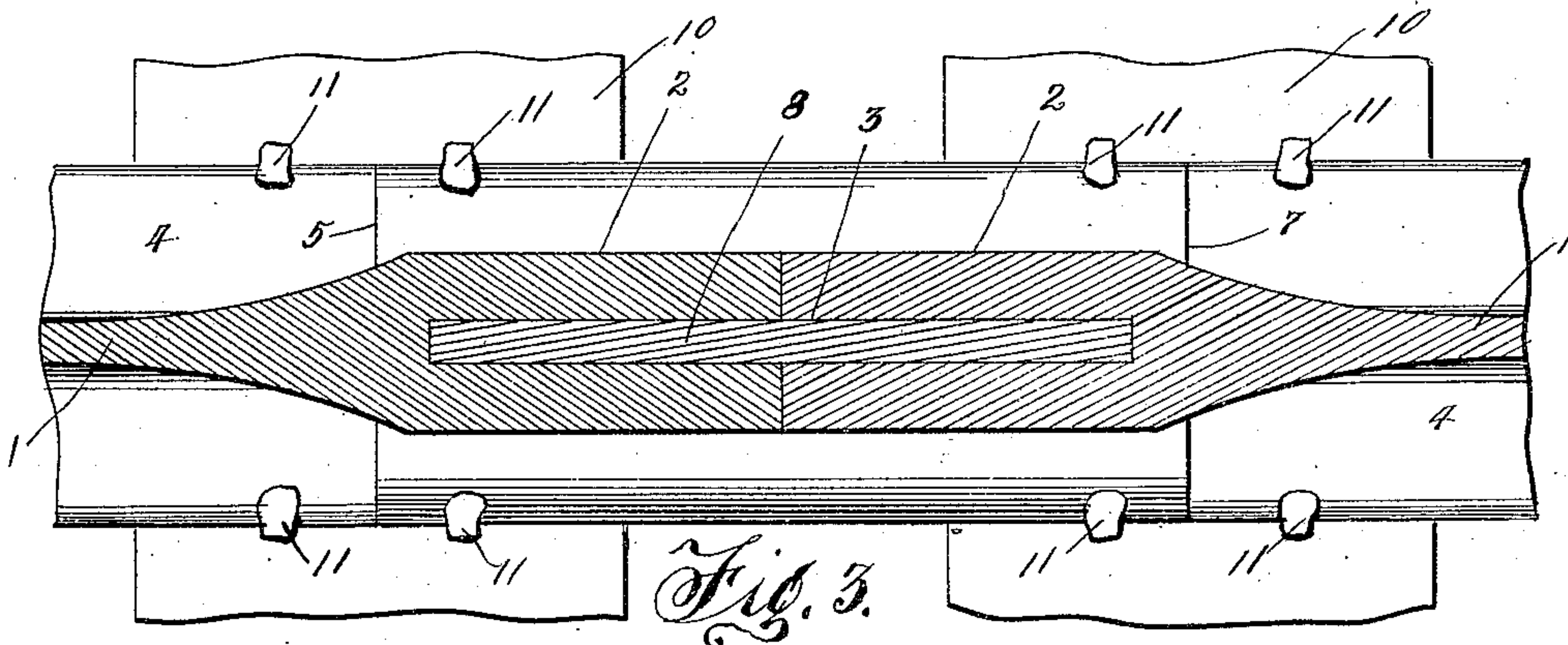
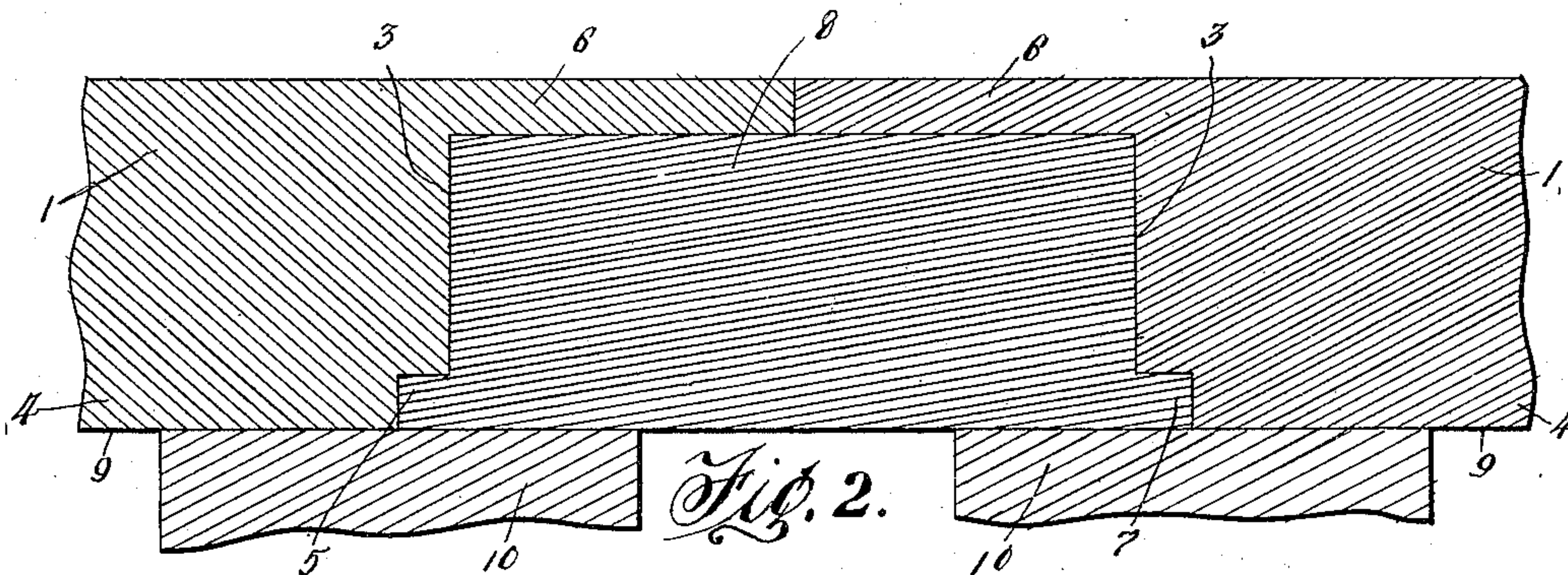
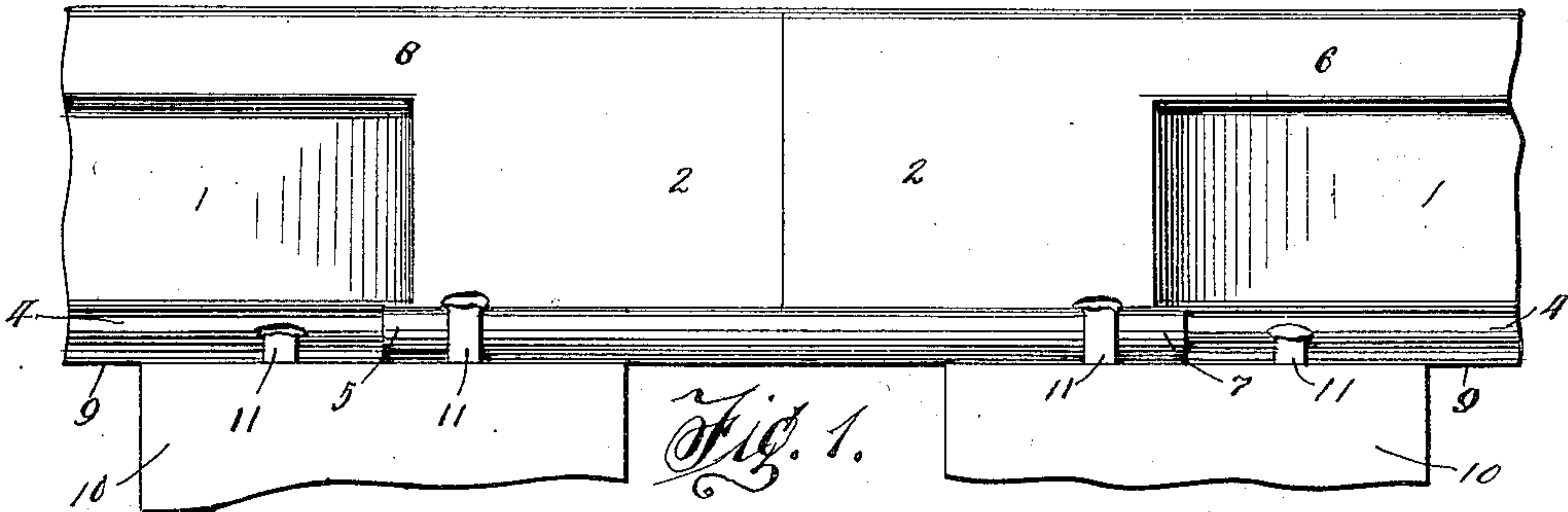
B. A. JOHNSON.

RAIL JOINT.

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917,447.

Patented Apr. 6, 1909.



Witnesses  
R. L. Jamington.

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Fig. 4.

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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

No. 917,447.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed February 20, 1909. Serial No. 479,019.

*To all whom it may concern:*

Be it known that I, BENJAMIN A. JOHNSON, a citizen of the United States of America, residing at Heidelberg, 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.

10 This invention relates to rail joints, and the objects of the invention are, first, to provide a simple and durable connection for the confronting ends of two rails; second, to obviate the necessity of using splice bars, bolts  
15 and nuts for connecting two rails; third, to provide a novel bond between the confronting ends of two rails; and fourth, to provide a connection for rails that will prevent lateral displacement of one rail with relation to  
20 another, the connection being easily and quickly made without skilled labor.

The above objects are obtained by a structure that will be presently described in detail, and then specifically claimed.

25 In the drawings, Figure 1 is a side elevation of the rail joint constructed in accordance with my invention, Fig. 2 is a longitudinal sectional view of the rail joint, Fig. 3 is a horizontal sectional view of the same, and  
30 Fig. 4 is a cross sectional view of one of the rails.

In the accompanying drawings I have illustrated two rails having the ends thereof confronting, and the web portion 1 of each rail reinforced, as at 2, and provided with  
35 vertical slots 3. The base flanges 4 of the rails are cut away, as at 5, beneath the reinforced portion, and the slots 3 extend upwardly in the reinforced portions and into  
40 the heads 6 of the rail.

In connection with the rails a coupling

piece comprising a base 7 and a web 8 are used, said coupling piece being the shape of an inverted T in cross section. The base 7 corresponds in width to the base flanges 9 of 45 the rails and of a length to fill the space between the base flanges 9 of the rails when said rails abut, as best shown in Fig. 2. The web 8 of the coupling piece is adapted to snugly fit in the slots 3 and securely support the 50 heads 6 of the rails and prevent lateral displacement of the same. The rails and the coupling piece are retained upon ties 10 by spikes 11.

While in the drawings there is illustrated 55 the preferred embodiments of my invention, I would have it understood that the details of construction can be varied or changed as to shape, proportion and manner of assemblage without departing from the spirit of 60 the invention.

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

In a rail joint, the combination of rails having the webs thereof reinforced and the 65 base flanges cut away beneath said reinforced webs, the reinforced webs having slots formed therein extending upwardly into the heads of said rails, and a coupling piece for connecting said rails, said coupling piece 70 corresponding in shape to an inverted T and comprising a base with a web adapted to fit in said slots, while the base fills the space between the confronting ends of the base flanges of said rails, substantially as, and for 75 the purpose herein described.

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

BENJAMIN A. JOHNSON.

Witnesses:

MAX H. SROLOVITZ,  
A. J. TRIGG.