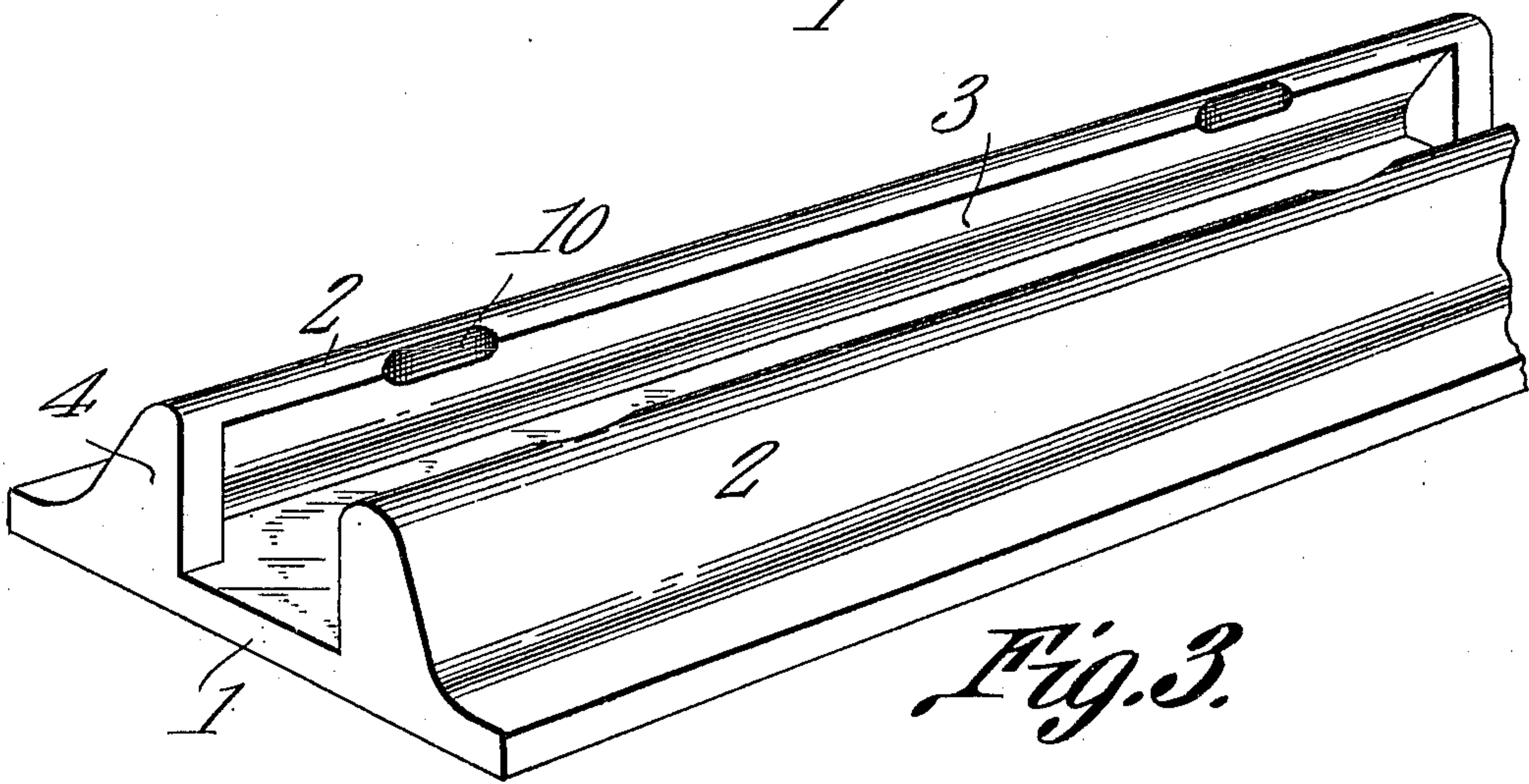
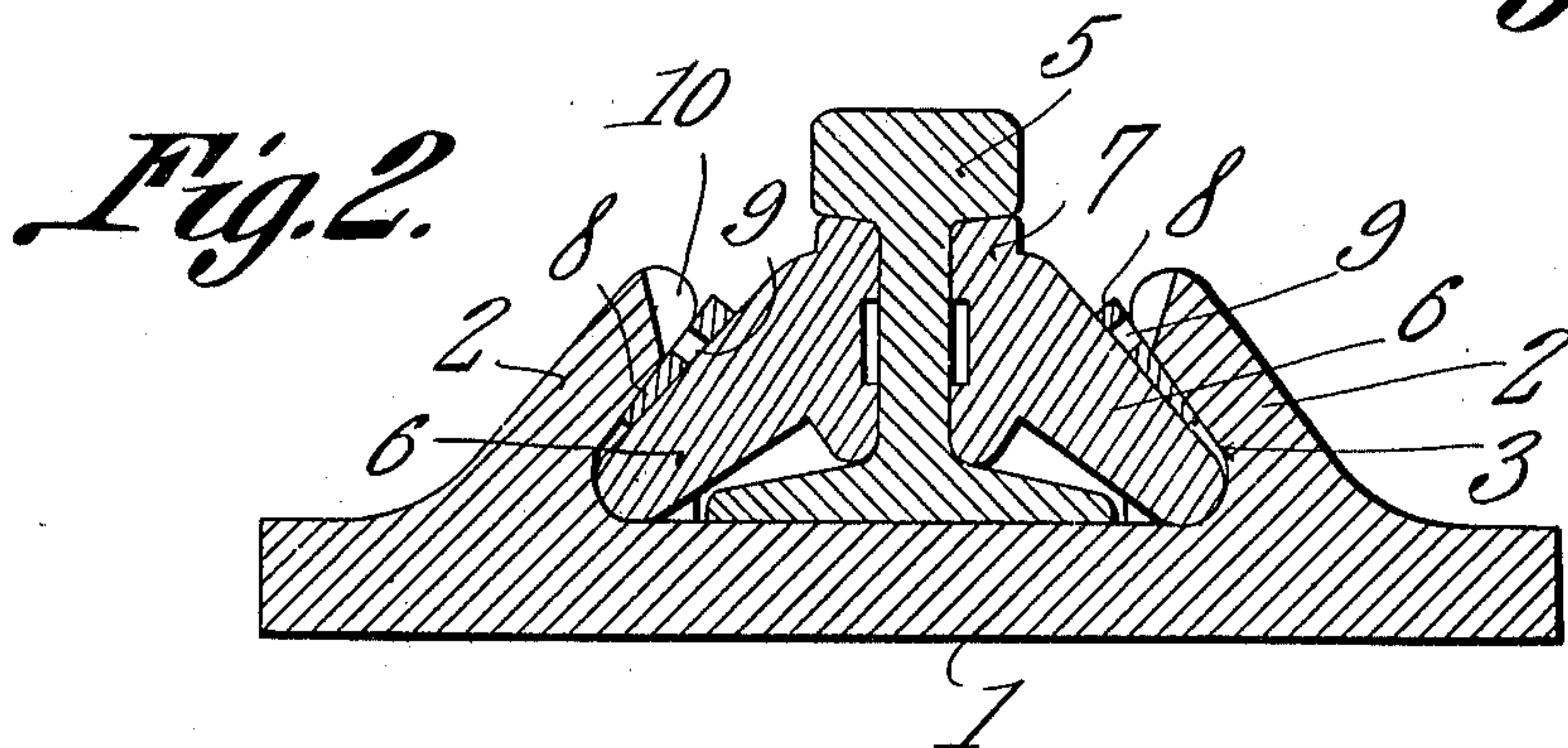
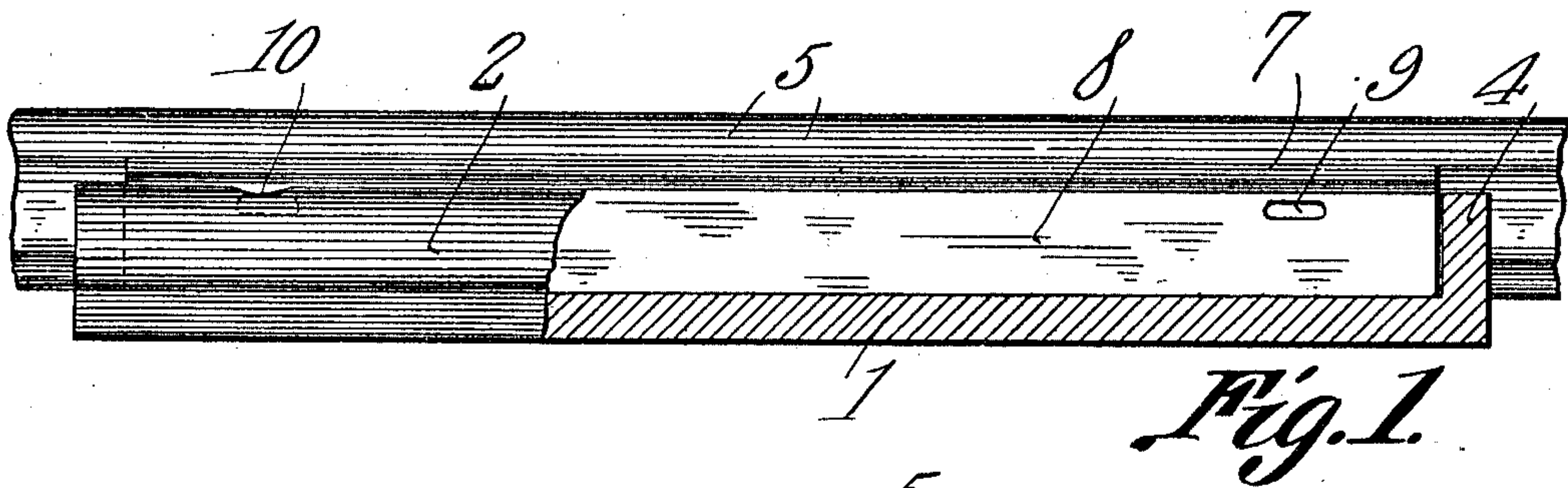


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RAIL JOINT.  
APPLICATION FILED APR. 1, 1910.

984,492.

Patented Feb. 14, 1911.



Witnesses  
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# UNITED STATES PATENT OFFICE.

CHARLEY C. ROSS, OF ROSWELL, TERRITORY OF NEW MEXICO.

## RAIL-JOINT.

984,492.

Specification of Letters Patent. Patented Feb. 14, 1911.

Application filed April 1, 1910. Serial No. 552,782.

*To all whom it may concern:*

Be it known that I, CHARLEY C. ROSS, a citizen of the United States, residing at Roswell, in the county of Chaves and Territory of New Mexico, have invented a new and useful Rail-Joint, of which the following is a specification.

This invention relates to rail joints and its object is to provide improved means whereby the adjoining ends of two rails, may be not only securely held together but rigidly supported so as to eliminate sagging and thus prevent wheels from pounding to an undesirable extent when passing over the meeting ends of the rails.

Another object is to provide means for fastening the rails together, said means dispensing with the use of bolts or the like and being so constructed as to automatically grip the rails, any play between the parts being taken up automatically by devices provided for that purpose.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown. In said drawings:—Figure 1 is a view partly in side elevation and partly in section of a rail joint constructed in accordance with the present invention. Fig. 2 is an enlarged section through the joint and showing a rail in position therein. Fig. 3 is a perspective view of a portion of the rail chair.

Referring to the figures by characters of reference 1 designates the base of the chair or body portion of the joint, this base being provided with upstanding flanges 2 which are inclined upwardly toward each other thus forming elongated pockets 3 between them and the base, the said pockets being closed at their ends by upstanding webs 4. The distance between the webs at each end of the chair is substantially equal to the width of the base of a rail 5.

The pockets 3 are adapted to receive the rounder lower edge portions of rail gripping plates 6 each of which is formed, along one edge, with a longitudinally extending head 7 so proportioned as to fit snugly against the web of the rail 5 and to bear upwardly against the head of the rail and

downwardly against the base flange thereof. Each of these plates 6 extends close to the webs 4 at the two ends of the pocket in which the plate is located and it will be apparent therefore that the said webs 4 will hold the plates 6 against longitudinal movement within the pockets 3.

When it is desired to connect two rails by means of the joint constituting the present invention, the meeting end portions of the rails are placed upon the base 1 and between the webs 4 and flanges 2 after which the plates 6 are inserted between the rail and each of the flanges 2 so as to bring their rounded lower edges into the innermost portions of the pockets 3. The said plates are then swung toward the rail so as to bring their heads 7 into contact with the web of the rail and in position between the head and base flanges thereof. With the parts thus located a space is formed between each of the plates 6 and the adjoining flange 2 and this space is adapted to receive a wedging strip 8 extending throughout the length of the plate 6 and which is adapted to be driven into the space referred to so as to bind the plate 6 tightly against the base 1 and against the rail 5.

Each of the plates 8 has one or more apertures 9 therein and these apertures are adapted to register with recesses 10 formed in the upper edges of the flanges 2. It will be seen therefore, that should it be desired to remove either or both of the wedge strips 8, it is merely necessary to insert the end of a crow-bar or the like into one of the notches 10 and the aperture 9 and to pry the strip 8 out of the space in which it is seated. Obviously should the parts work loose as a result of the jarring to which they are subjected, the wedging strip 8 will automatically move downwardly by gravity so as to take up all lost motion.

By utilizing wedging strips 8 in connection with rail clamping heads 7, it becomes unnecessary to utilize bolts for the purpose of fastening the rails in place and the expense of drilling bolt holes in the rails and using bolts in connection with the rails is thus eliminated.

It will be understood of course that the fastening device which has been described does not interfere with the expansion and contraction of the rails.

Various changes can of course be made in



the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

5 What is claimed is:—

1. A rail joint including a rail supporting base having upstanding portions forming pockets therein having closed ends, rail gripping members mounted within and extending upwardly from the pockets, and  
10 wedging devices mounted upon said members and within the pockets, said members and devices being held against longitudinal displacement by the ends of the pockets.

15 2. A device of the class described including a rail supporting base having upstanding portions forming pockets above the base, the ends of the pockets being closed, rail gripping members movably mounted within  
20 the pockets and converging upwardly toward each other, and means insertible between each of said members and one wall of the pocket for binding the member upon an inserted rail, said means and members being  
25 held against longitudinal displacement by the closed ends of the pockets.

3. A device of the class described including a rail supporting base having upstanding portions forming pockets, rail gripping  
30 members movably mounted within the pockets and held against longitudinal movement by the walls thereof, and means insertible between said members and the upper walls of the pockets for binding the  
35 members upon opposite faces of an inserted rail.

4. A device of the class described including a base constituting a rail support, there being upstanding portions upon the base and  
40 forming longitudinally extending parallel pockets closed at their ends, rail gripping members mounted to swing within the pockets and held against longitudinal movement by the walls of said pockets, and wedging de-  
45 vices insertible between said members and the upper walls of the pockets for binding the members upon a rail inserted therebetween.

5. A device of the class described including a rail supporting base having upstanding  
50 portions forming pockets, oppositely disposed rail engaging members mounted for swinging movement within the pockets and wedging strips insertible between said members and the upper walls of the pockets, each  
55 strip having apertures for the reception of

means for withdrawing the strips from the pockets.

6. A device of the class described including a rail supporting base having upstanding  
60 portions forming pockets, rail engaging members mounted for swinging movement within the pockets and converging upwardly, and wedging strips extending longitudinally of said members and insertible  
65 between the members and the upper walls of the pockets, said strips having apertures adapted to register with notches within the upstanding portions.

7. A device of the class described including a rail supporting base having upstanding  
70 portions forming pockets closed at their ends, said pockets being parallel, plates extending longitudinally within the pockets and mounted for swinging movement therein, each plate having a rail gripping head  
75 and the said plates converging upwardly, and means insertible between each plate and the upper wall of the pocket for shifting said plate to bind its head upon an inserted rail,  
80 said plates and means being held against longitudinal displacement by the closed ends of the pockets.

8. A device of the class described including a base having upstanding portions forming  
85 parallel pockets, plates mounted for swinging movement within the pockets, said plates being held against longitudinal movement by the end walls of the pockets, each plate having a rail gripping head along one  
90 edge and the two plates converging upwardly.

9. A device of the class described including a base having upstanding portions forming  
95 parallel pockets, plates mounted for swinging movement within the pockets, each plate having a rail gripping head and the two plates converging upwardly, apertured wedging strips insertible between the plates  
100 and the upper walls of the pockets to bind the heads upon a rail inserted therebetween the said upstanding portions having notches adapted to register with the apertures in the wedging strips.

In testimony that I claim the foregoing  
105 as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLEY C. ROSS.

Witnesses:

FRANK S. CROSSON,  
JNO. W. POE.