

No. 842,581.

PATENTED JAN. 29, 1907.

F. A. POOR.  
RAIL ANCHOR.

APPLICATION FILED JAN. 8, 1906.

Fig. 1.

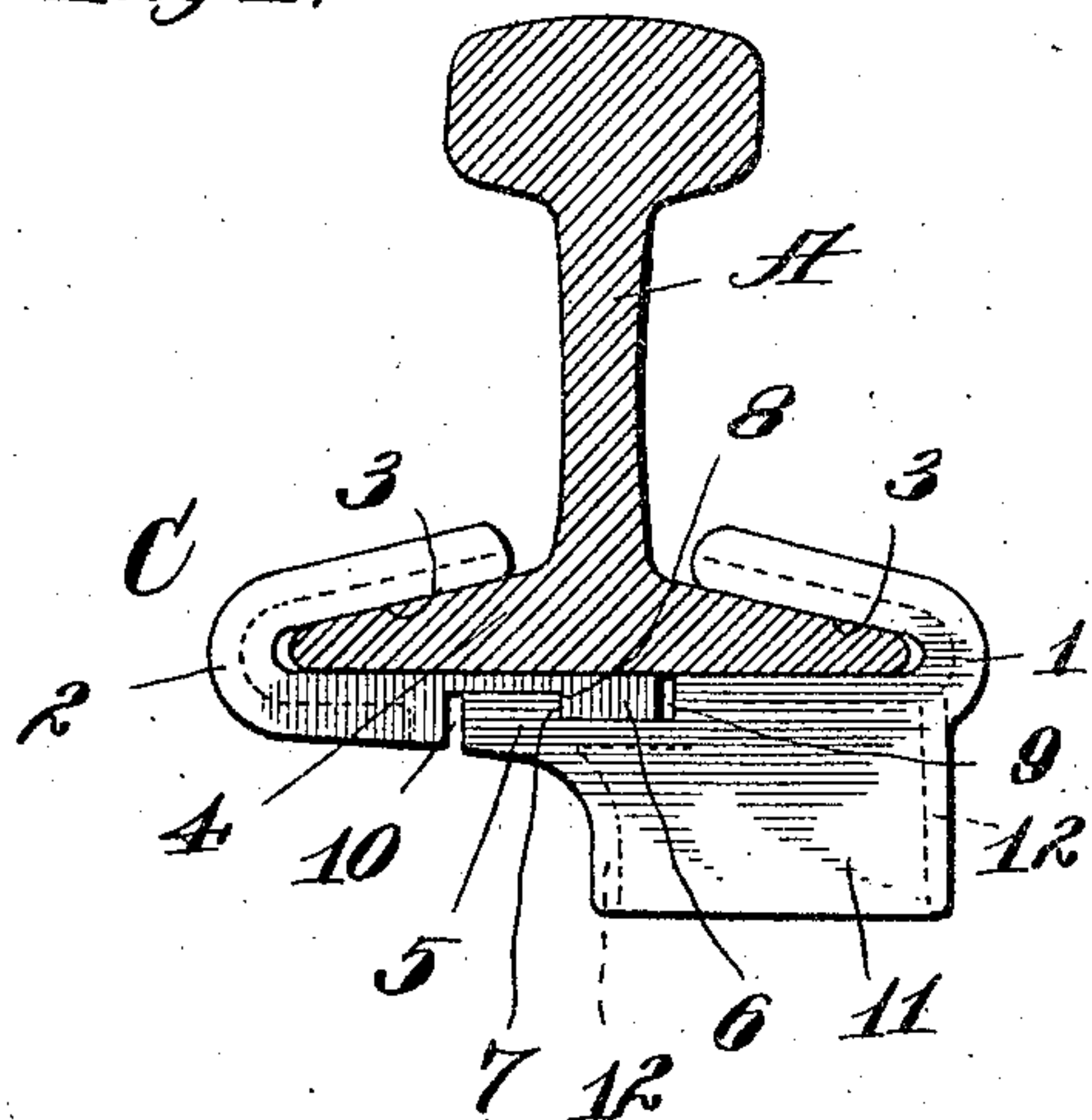


Fig. 2.

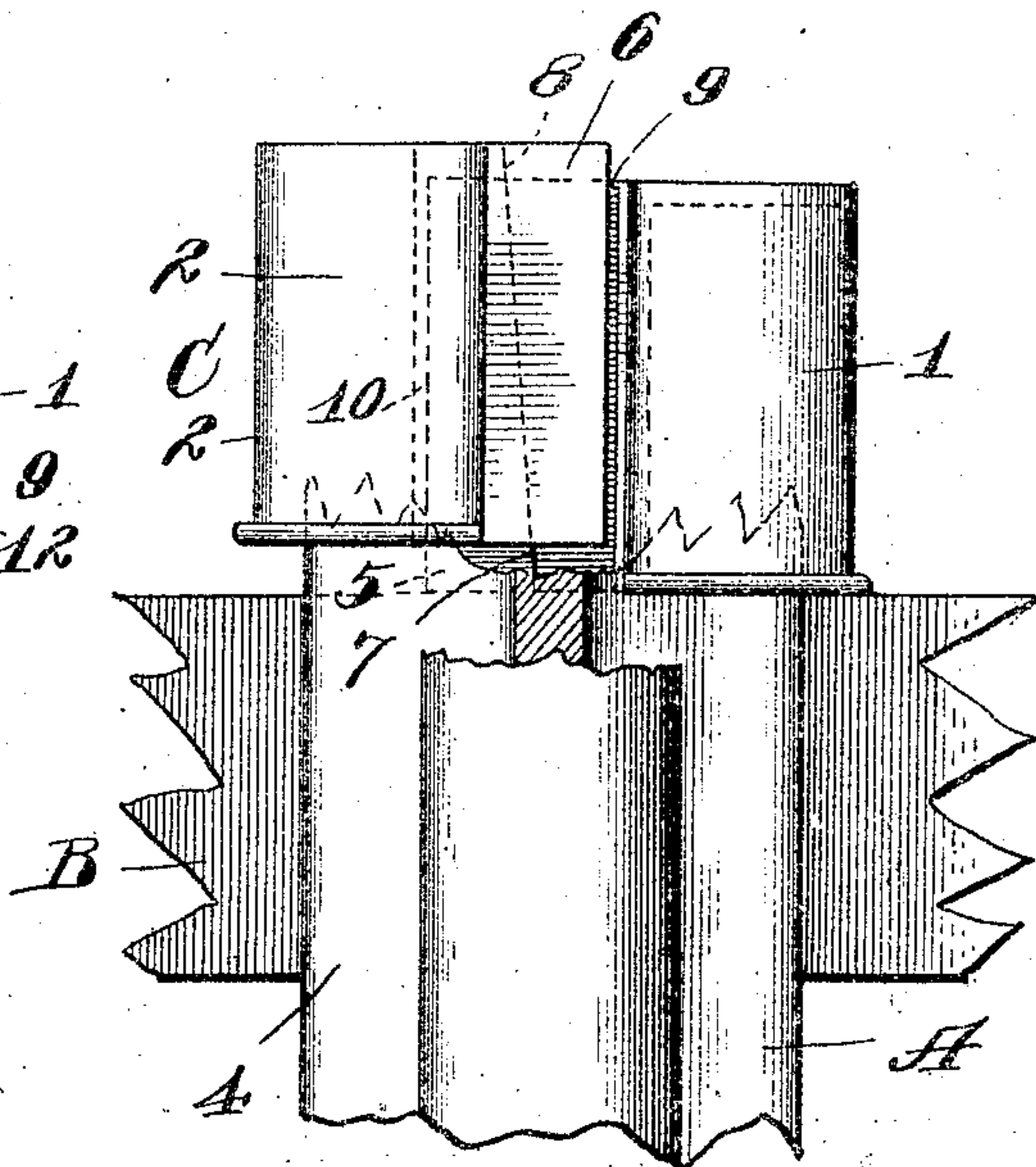


Fig. 3.

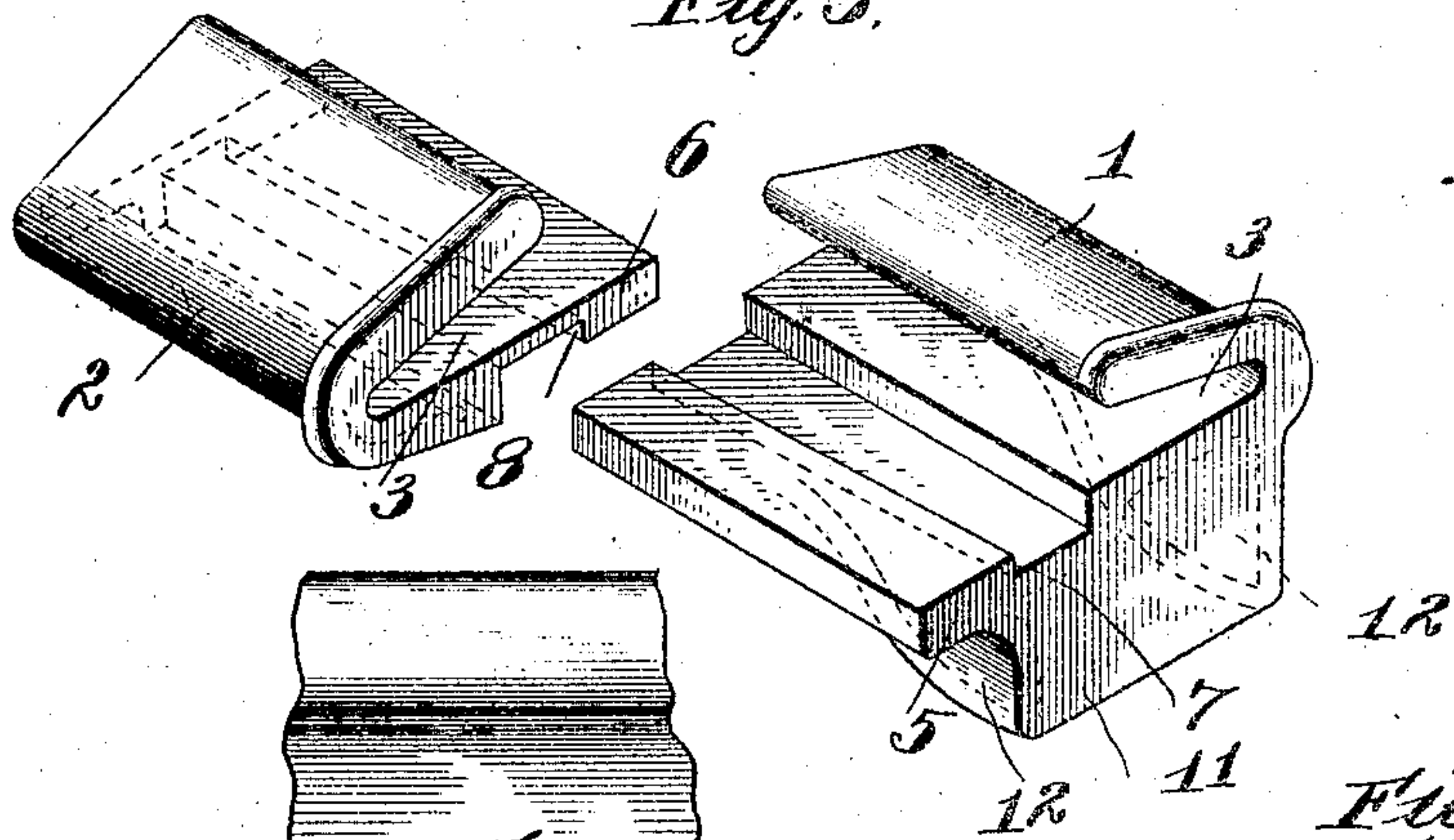
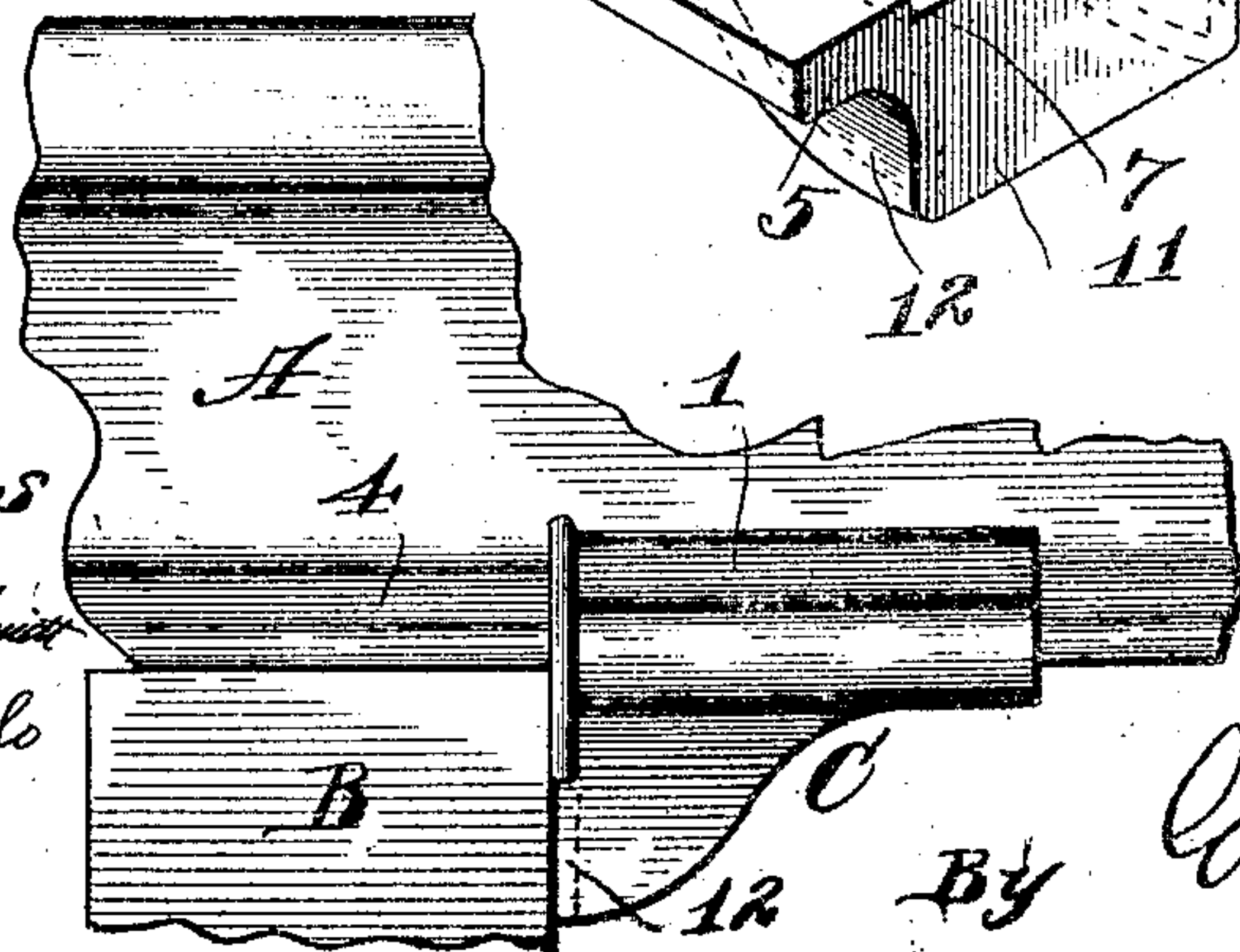


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## RAIL-ANCHOR.

No. 842,581.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed January 8, 1906. Serial No. 294,984.

*To all whom it may concern:*

Be it known that I, FRED A. POOR, a citizen of the United States, and a resident of Chicago, Cook county, Illinois, have invented certain new and useful Improvements in Rail-Anchors, of which the following is a specification.

This invention relates to rail-anchors designed and adapted for preventing creeping of rails.

The object of the invention is to provide a rail-anchor which will comprise a minimum of parts and which will be simple, strong and durable, and relatively cheap of construction.

To this end a rail-anchor of my invention consists of the various features, combinations of features, and details of construction hereinafter described and claimed.

In the accompanying drawings, in which a rail-anchor of my invention is fully illustrated. Figure 1 is an end view of a rail-anchor of my invention applied to a rail shown in section. Fig. 2 is a top plan view thereof in connection with a rail and tie, the rail being partly broken away. Fig. 3 is a perspective view of the clip members of my improved rail-anchor in position for engagement, and Fig. 4 is a side view thereof in connection with a rail and tie and as applied in use.

Referring now to the drawings, A designates a rail of a railroad-track, B a tie on which said rail is supported, and C as a whole my improved rail-anchor.

In the preferable form thereof now known to me, my improved rail-anchor consists of two clip members 1 and 2, provided on their adjacent faces with openings 3, which conform to the shape of the edges of the base 4 of the rail A, said openings, however, being slightly narrower than the thickness of said rail-base 4, but larger transversely, thus providing for drawing said clips into strong frictional engagement with the upper and lower surfaces of said rail-base.

The clip members 1 and 2 are adapted to be thus drawn into frictional engagement with the rail-base in the following manner. At the under side of the rail said clips 1 and 2 are provided with overlapping portions 5 and 6, which engage suitable rabbets formed therein, respectively. Formed on said overlapping parts 5 and 6 are opposed interlock-

ing shoulders 7 and 8, disposed at similar but oppositely inclined angles lengthwise of said clip members, thereby forming wedging-surfaces adapted to draw said clip members into strong frictional engagement with the rail-base 4 by forcing said wedging-surfaces 7 and 8 into engagement with each other. These shoulders will preferably be formed at right angles, or approximately so, as shown in the drawings, ample clearance-spaces 9 and 10 being provided between the edges of the overlapping portions 5 and 6 of said clip members and the shoulders at the inner sides of the rabbets therein which receive said overlapping parts 5 and 6, so that the wedging action of the shoulders 7 and 8 will not be prevented by contact of said clips at the clearance-spaces 9 and 10. Formed at one end of one of said clip members—as shown, the clip member 1—is a depending flange 11, which is adapted to bear against any suitable rigid support, as the side of the tie B, thus preventing movement of said clip member 1 in the direction of said tie. The flange 11 is preferably reinforced and strengthened by a web or webs 12, connecting the same with the under side of said clip member.

The relation of the wedging shoulders or surfaces 7 and 8 is such that having loosely engaged said wedging-surfaces the wedging action thereof will be effected by movement of the clip member 2 toward the end of the clip 1, on which the flange 11 is formed, and the relation is preferably such also that desired engagement of said clip members with the rail will be effected before the end of the clip member 2 is flush with the end of the clip member 1, on which the flange 11 is formed.

The method of applying my improved rail-anchor in use is as follows: The clip members 1 and 2 are engaged with the edges of the rail-base 4 in such position that when the wedging-surfaces 7 and 8 are in loose engagement with each other the flange 11 will contact with the side of the tie B or other support. The clip member 2 is then driven lengthwise to bring the wedging-surfaces 7 and 8 into powerful engagement with each other, which will operate in an obvious manner to draw the sides of the openings 3 into strong frictional engagement with the rail-base 4 and at the same time to force the clip



member 1 toward the tie B, thus causing the flange 11 thereon to bear firmly against the tie B. Thus the more firmly the clip members are caused to engage the base of the rail the more firmly will the flange 11 on the clip member 1 bear against the tie B. The object of the flange 11 is merely for the purpose of giving the rail-anchor a bearing of larger area against the tie or other support, and the size of said flange may be varied as desired or it may be entirely dispensed with. Obviously, also, the clip member 2 may be provided with a flange similar to the flange 11 on the clip member 1 on its end opposite to the end of the clip member 1, on which said flange 11 is formed. In either case it is obvious that the anchor is reversible—that is, that either member may be caused to engage the rail or other support and that force exerted on the opposite member in the proper direction will operate to effect engagement of the wedging-surfaces on said members and to draw said clip members into strong frictional engagement with the base of the rail and will also tend to impart movement to said clip members bodily lengthwise of the rail to effect a firm bearing of the clip member other than that to which the force is applied against the tie or other support.

I claim as my invention—

1. A rail-anchor consisting of clip members adapted to engage the base of a rail provided with interlocking wedging-surfaces so disposed that force exerted on one thereof to

effect engagement of said wedging-surfaces will draw said clip members into frictional engagement with the base of the rail and will impart movement to said clip members bodily lengthwise of the rail to provide for effecting a firm bearing of the clip member other than that to which the force is applied against a tie or other support.

2. A rail-anchor consisting of clip members provided with suitable openings for engagement with the base of a rail, a flange or projection on one thereof adapted to bear against a tie or other support, and means for simultaneously and by a single operation drawing said clip members into frictional engagement with the rail-base and said flange into firm bearing against its support, said means comprising interlocking wedging-surfaces on said clip members extending at similar but oppositely-disposed angles lengthwise of said clip members and the relation being such that the wedging-surface on the flanged clip member will converge toward the outer edge of said clip member in the direction of its flanged end.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two subscribing witnesses, this 3d day of January, A. D. 1906.

FRED A. POOR.

Witnesses:

K. A. COSTELLO,  
E. M. KLATCHER.