No. 841,267. PATENTED JAN. 15, 1907.

D. E. OLDS.

RAIL FASTENER.

APPLICATION FILED MAY 14, 1906.

2 SHEETS—SHEET 1.

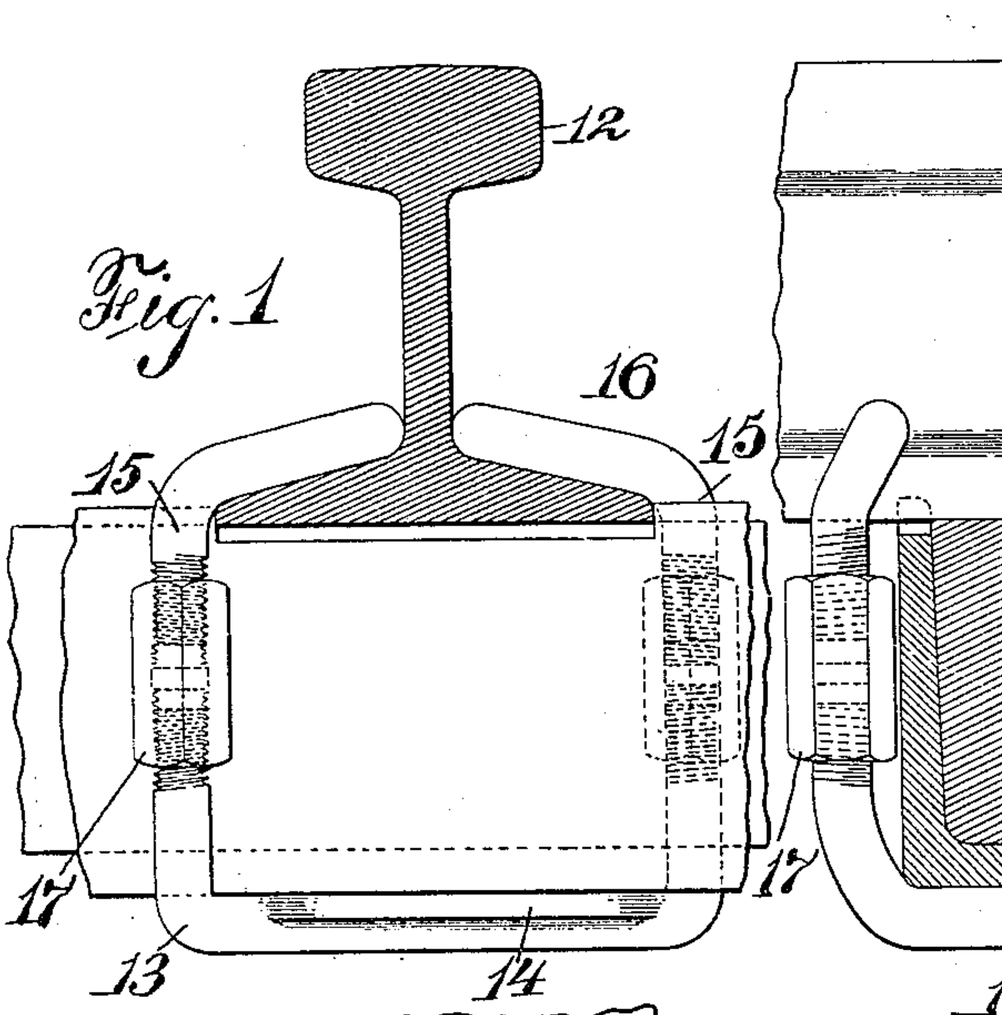

Fig. 1

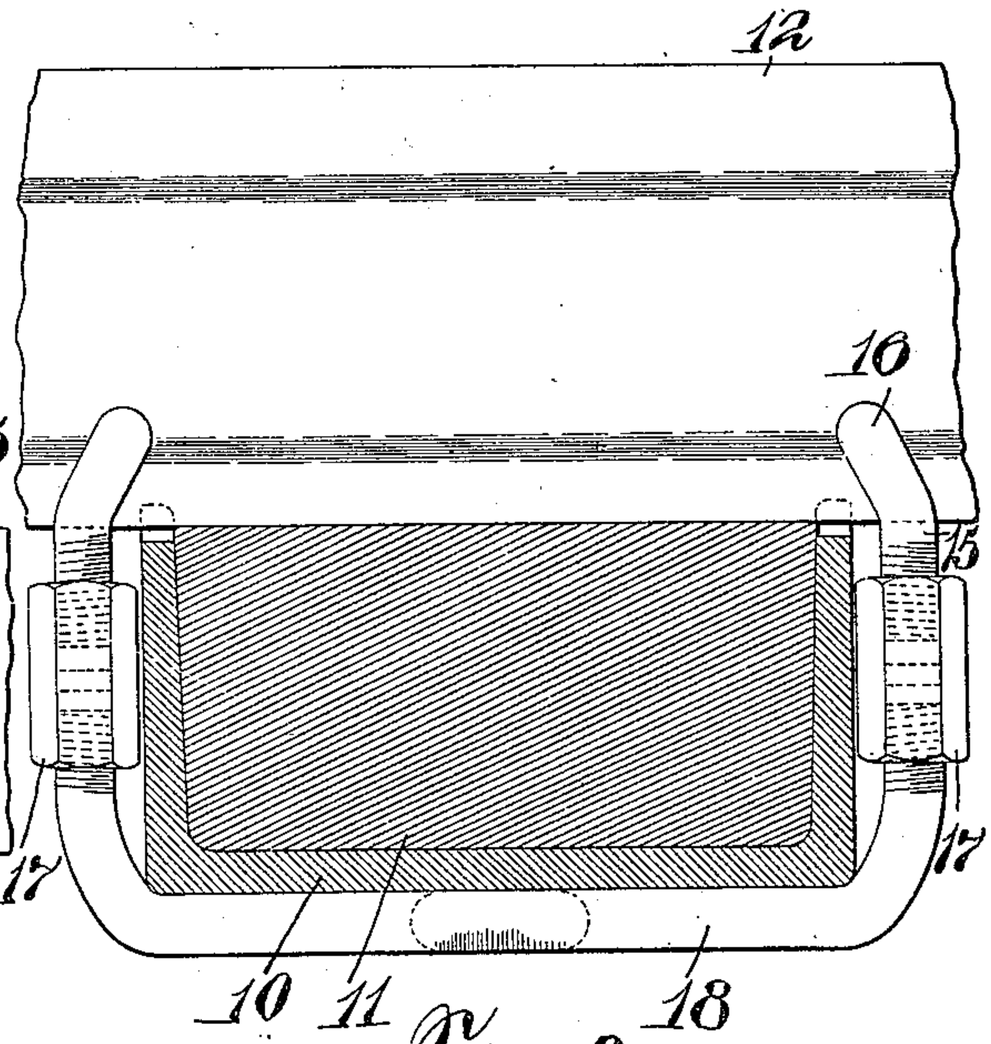

Fig. 3

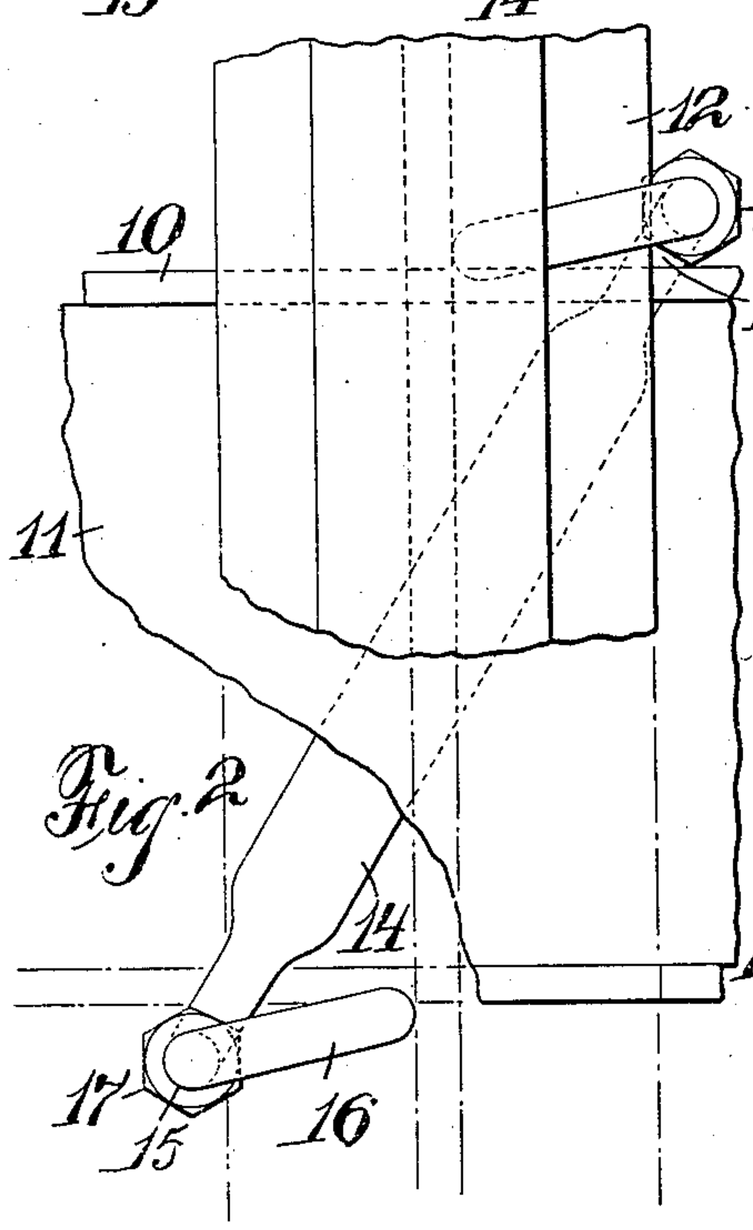

Fig. 2

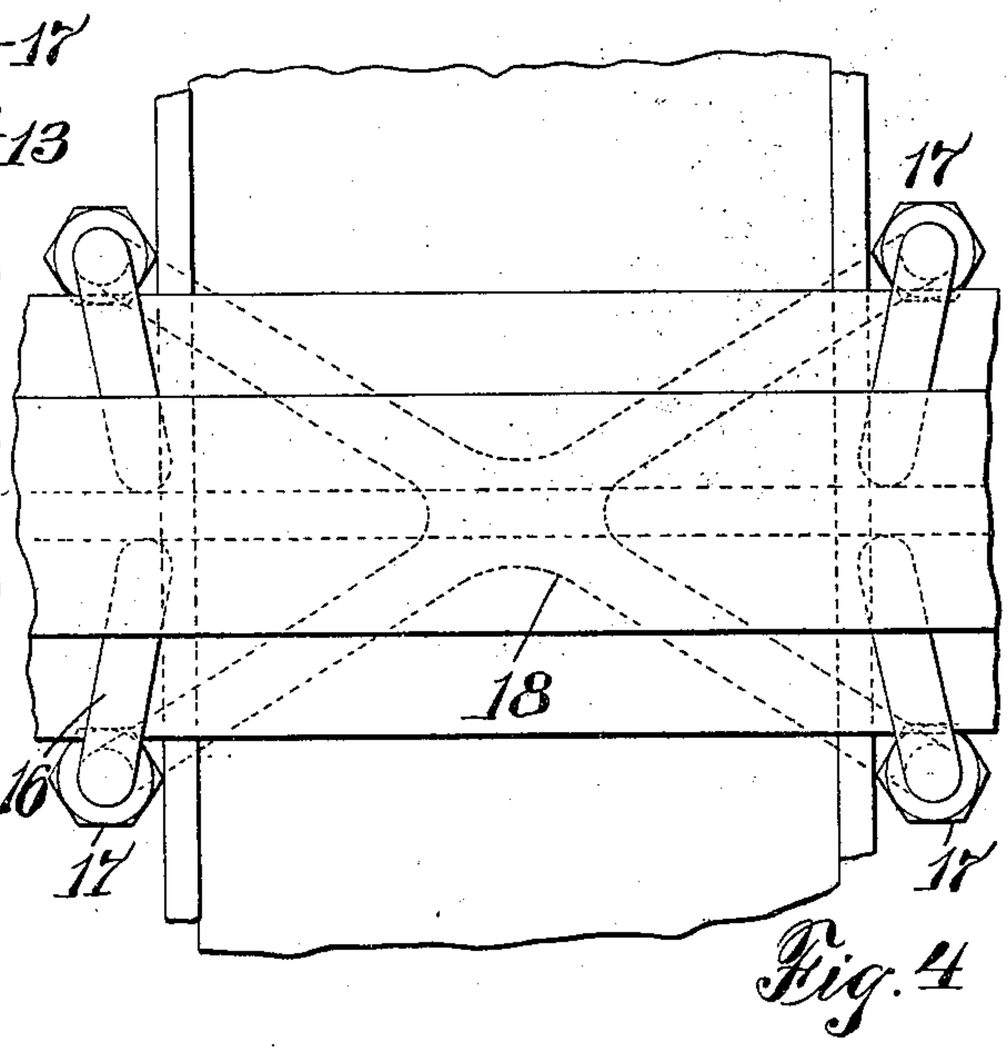

Fig. 4

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2 SHEETS—SHEET 2.

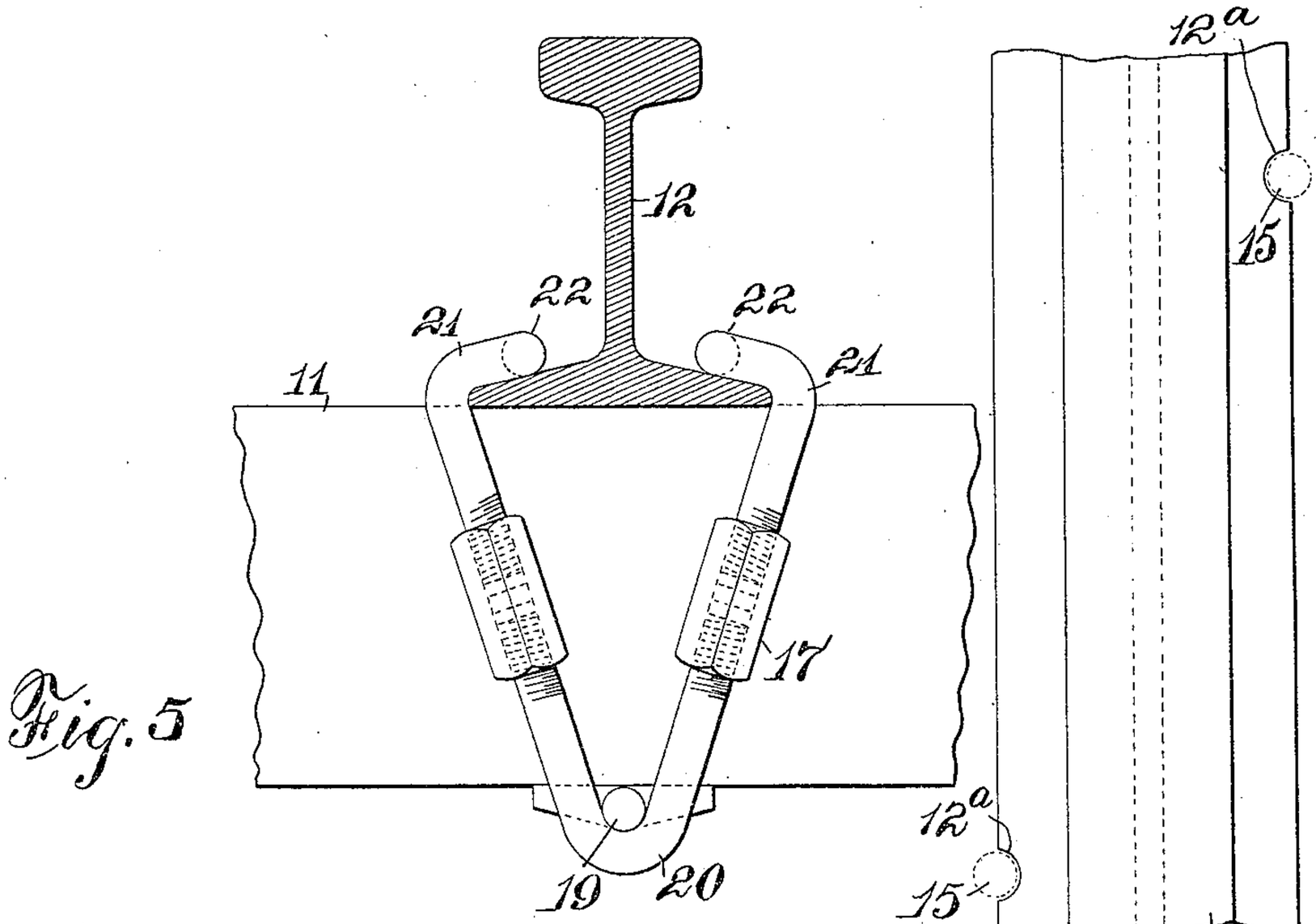

Fig. 5

Fig. 7

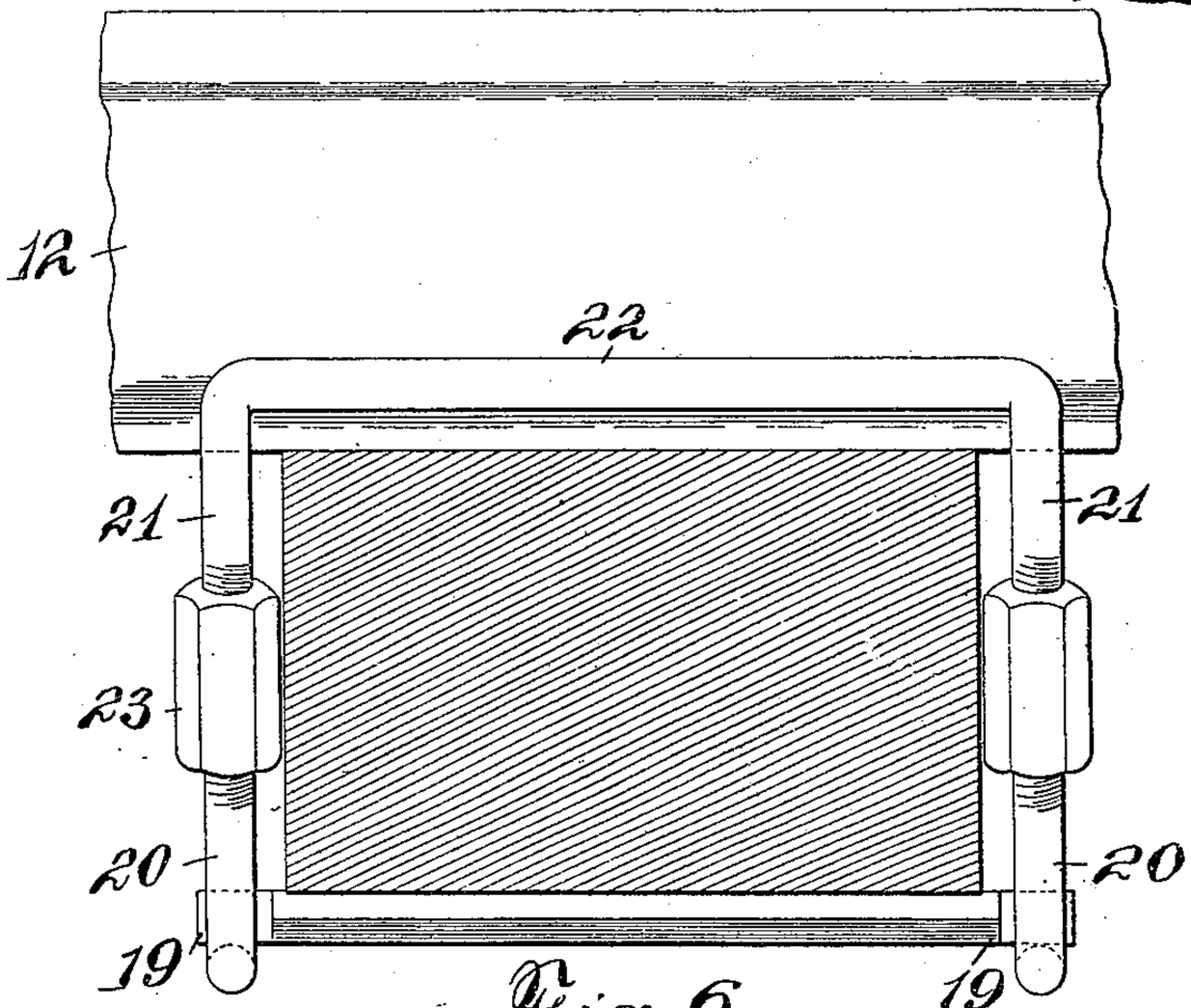

Fig. 6

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DAVID E. OLDS, OF NEWARK, NEW JERSEY.

RAIL-FASTENER.

No. 841,267. Specification of Letters Patent. Patented Jan. 15, 1907.

Application filed May 14, 1906. Serial No. 316,706.

To all whom it may concern:

Be it known that I, DAVID E. OLDS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Rail-Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to a rail-fastening that can be quickly applied or taken away and one that is cheap to make and simple to operate.

A further object of the invention is to provide a means for regulating the amount of grip between the rail and the tie and also one that can regulate the tension on either side of the flange of the rail.

A still further object of the invention is to provide a fastener of this kind that is composed of separable elements that go on to the top of the flange of the rail and also underneath the tie, and means are employed to draw together or spread apart these elements in relation to one another to either secure or release the rail.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a section of a rail, showing my device in elevation. Fig. 2 is a top view of the same with the tie and rail partly broken away. Fig. 3 is a section of a tie with the rail in elevation, showing a modified form of fastener; and Fig. 4 is a top view of Fig. 3. Fig. 5 is still another elevation of a modified form of device. Fig. 6 is a side view of the same; and Fig. 7 is a view of a rail, showing cut-away portions to receive the rail-fastener.

I have illustrated in Figs. 1 to 4, inclusive, a composite tie consisting of a metallic channel-piece 10 and the wooden block 11, although any ordinary tie can be used. Arranged in the usual way on the ties are the rails 12.

My fastening in its preferred form consists of the U-shaped piece or stirrup 13, which can be provided with the flattened portion 14 to provide a better bearing, and on top of the flange of the rail is the portion 16 of the rods 15. The ends of the rods 15 and the ends of the stirrup 13 are screw-threaded with opposed right and left threads, and encompassing these ends and working on the threads are the right and left threaded nuts 17.

It will be seen from this structure that any wear on the tie can be taken up by tightening the nuts 17. The portion 16 of each rod 15 is made long enough to touch the web of the rail as the portion lies at an angle thereto. This portion 16 is thus prevented from turning on account of its abutting on the web, and if it turns the other way the screw-threads are so arranged that it will tighten up. In this way I secure a fastening that cannot very well come loose accidentally.

In Figs. 3 and 4 I modify the structure by making a claw-shaped piece 18 that has four upwardly-turned ends, each of these ends in turn being screw-threaded to receive the nuts 17 to bind down the four rods 15.

Still another modification is shown in Figs. 5 and 6, where I show a saddle 19 underneath the tie, and on either end of this saddle I fix the V-shaped members 20. On the top of the flanges of the rail rest the rods 21, which are connected by a transverse piece 22, the nuts 23 serving to bind the parts together, as hereinbefore described.

If desirable, the flange of the rail can be cut out or notched, preferably in a curved shape, as at 12^a in Fig. 7. In this cut-away portion can be fitted the rods 15, and the rail will then be prevented from "creeping."

This device embodies a light, simple, and cheap rail-fastening that is easily regulated on both sides of the rail and one in which the tension on the rail can be regulated to a nicety and also all possible pressure can be utilized.

Having thus described my invention, what I claim is—

1. A rail-fastening comprising a member to extend beneath the tie and upward on either side thereof, members to embrace the flange of the rail and extend downward therefrom, and right and left threaded nuts to engage the ends of the member.

2. A fastening for rails, comprising a member to extend beneath a tie and upward on either side thereof, members to engage the flange of a rail and extend downward therefrom, and means on the ends of the members to regulate the tension on them.

3. A rail-fastening comprising a member to go underneath and extend upon either side of a tie, the extending portions being provided with screw-threads, members to fit

on each flange of the rail and extend downward in line with the upward-projecting portions of the first member, and being provided with a screw-thread, and right and left threaded nuts to join the projecting portions of the members to regulate the distance between them.

4. A rail-fastening comprising a U-shaped piece having its ends threaded, rods arranged in line with the ends of the U-shaped piece and having portions bent to engage the flanges of the rail, and right and left threaded nuts to connect the ends of the U-shaped piece and the rods.

5. A rail-fastening comprising a U-shaped piece having a flattened straight portion and round projecting ends, the projecting ends being screw-threaded, rods having their ends screw-threaded and having portions bent at an angle thereto, and right and left threaded nuts to engage the ends of the U-shaped portions and the rods.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of May, 1906.

DAVID E. OLDS.

Witnesses:
E. A. PELL,
WM. H. CAMFIELD.