

(No Model.)

J. H. FOWLER.  
RAIL JOINT.

No. 590,679.

Patented Sept. 28, 1897.

Fig. 1.

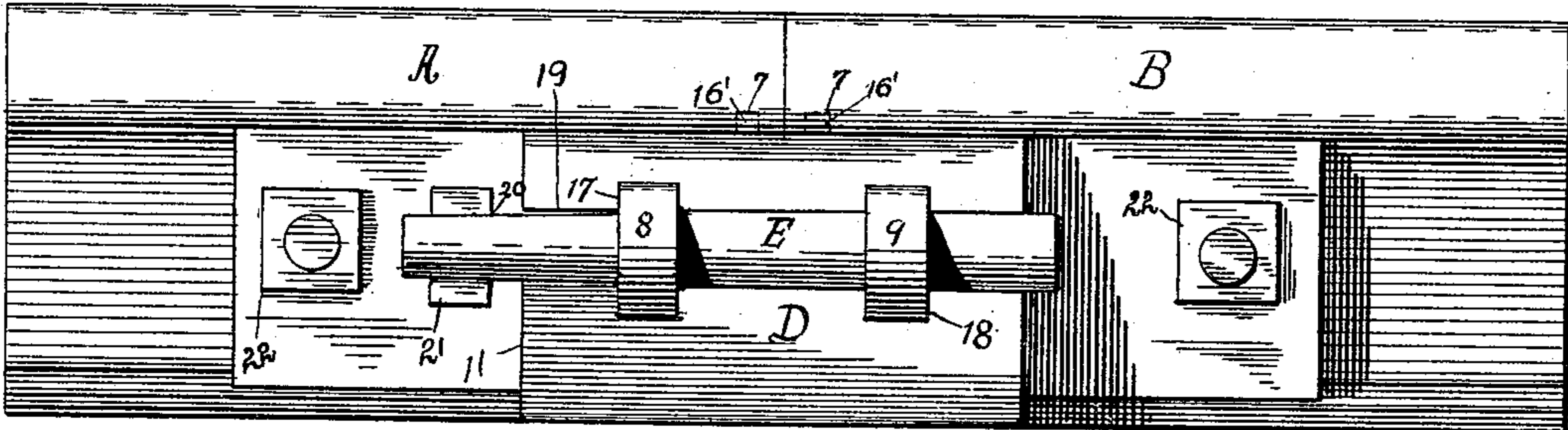


Fig. 2.

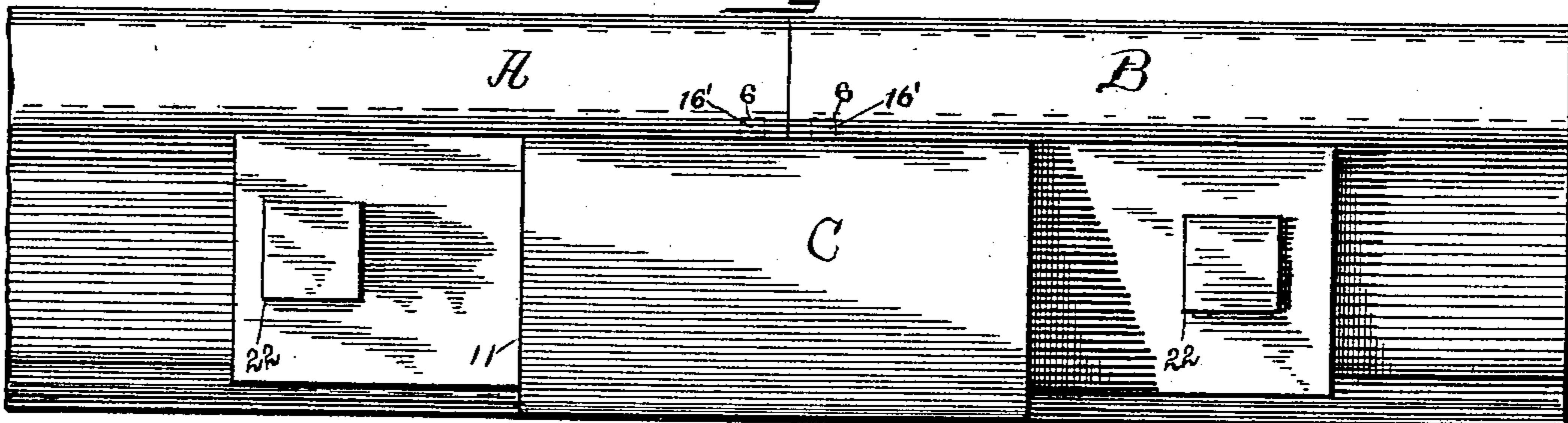


Fig. 3.

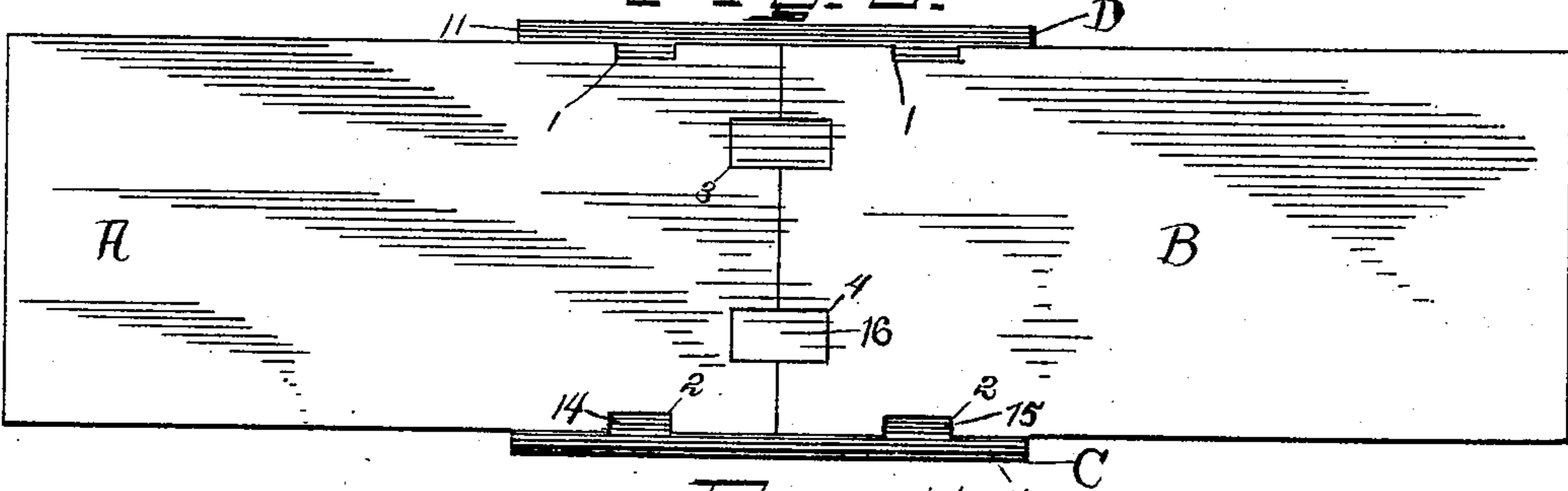
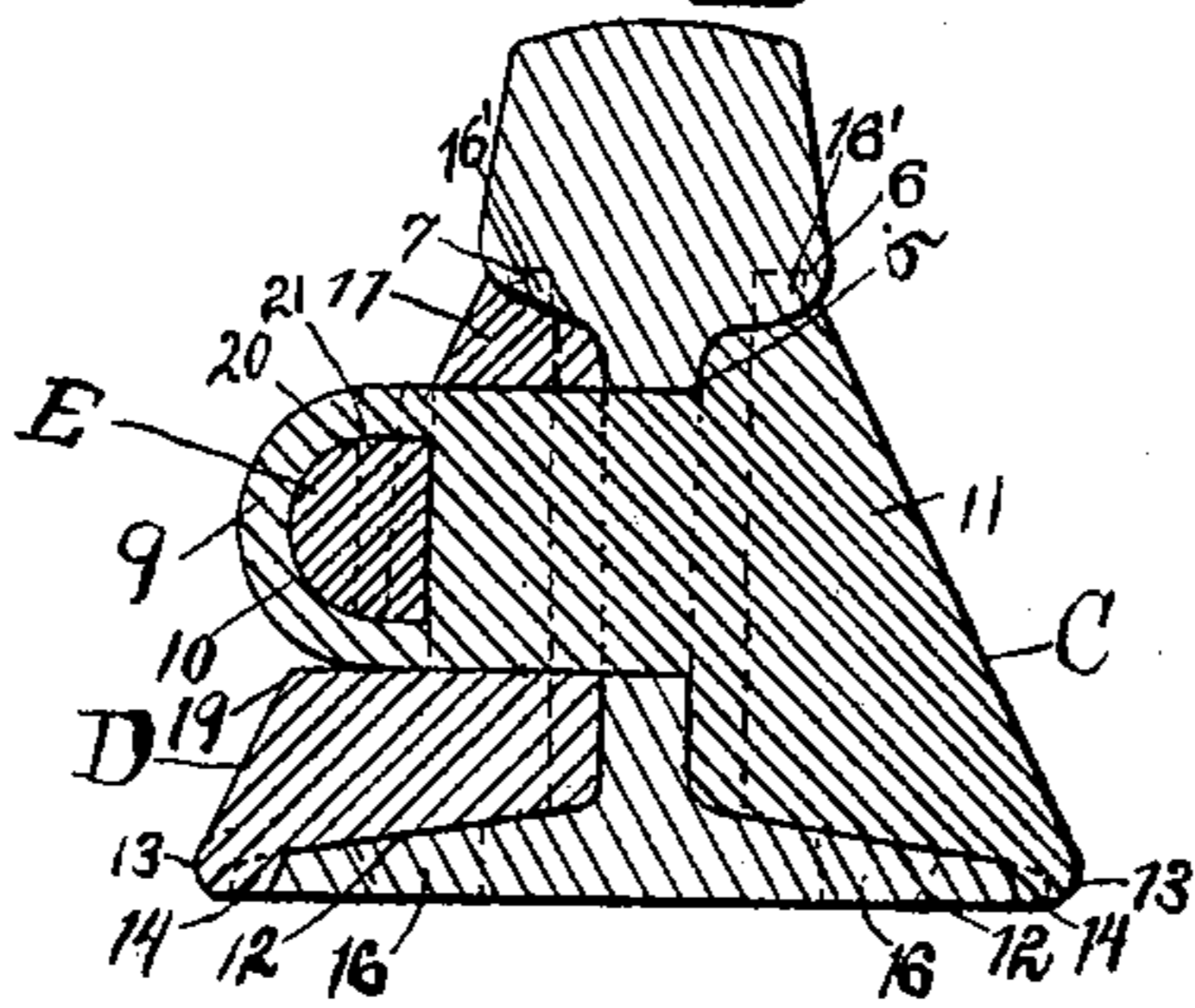


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 590,679, dated September 28, 1897.

Application filed November 7, 1896. Serial No. 611,390. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. FOWLER, a citizen of the United States, residing at Huntingdon, in the county of Huntingdon and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints; 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.

My invention relates to rail-joints.

My object is to provide a rail-joint which will comprise but few parts and will be of simple and strong construction, being adapted for easy application to and removal from the rail; and I further aim to provide a rail-joint which will lock the rail-sections together in such a manner that it will be impossible for them to become loosened in any way.

Having these and other minor objects in view the invention consists of a rail-joint comprising certain novel features and combinations appearing more fully hereinafter.

In the accompanying drawings, Figures 1 and 2 are opposite side elevations; Fig. 3, a bottom view, and Fig. 4 a view in cross-section.

A and B designate rail-sections. The opposite edges of the base-flange of each section are provided with notches 1 and 2, and the end of the base-flange is provided with notches 3 and 4, located on opposite sides of the web.

The numerals 5 designate vertical rectangular openings made through the web. These openings should be large enough to permit expansion and contraction of the rails. The under portion of the head of the rail is provided with pockets or recesses 6 and 7.

One of the locking-plates is designated by C. This plate is provided with two arms 8 and 9, which project at right angles to it, and have openings 10. These arms are adapted to be passed through the openings 5 in the webs of the rail-sections and to project through another locking-plate D, which will be described later. The locking-plate C is provided with a backing 11, having a lower face 12, which conforms to the slant of the rail-flange and is formed into a flange 13 at its outer edge, which flange abuts on the edge of the base-flange. I provide two lugs 14 and 15, projecting from the face 12, which lugs are adapted for reception in the notches 2. There is also another lug 16, which projects from said face 12 and is adapted for reception in the

notches 4 of the two rail-sections. Lugs 16' project upwardly from the locking-plate and are adapted for reception in the pockets 6.

The locking-plate D has two openings 17 and 18, which receive the arms 8 and 9. Said plate is provided with a backing 11, that has a longitudinally-extending groove 19 made in it, said groove intersecting the openings 17 and 18. This locking-plate is provided with lugs similar to those located on the locking-plate C, and they are received in the notches and recesses at the other side of the rail-sections. There are also lugs 16', and these are adapted for reception in the pockets 7.

The letter E designates a key or wedge, which is tapering in form and provided with a slot 20. This key is passed through the openings 10 in the arms 8 and 9 and lies in the groove 19. A key 21 is passed in the opening 20 after the wedge has been placed in position. It is preferable if the end of the wedge could be screw-threaded and a nut placed thereon.

Many slight changes could be resorted to in constructing the invention, and I sometimes prefer to employ bolts 22, which pass through the webs of the rails and the locking-plates, but this is not necessary, although it adds strength to the joint.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a rail-joint, the combination with rail-sections, of locking-plates located on opposite sides of the rails, one of said plates being provided with arms having openings, which arms pass through the rail-sections and the other locking-plate, and the other locking-plate being provided with a longitudinally-extending groove, and a wedge lying in the groove and passed through the openings in the arms.

2. In a rail-joint, the combination with rail-sections notched at their ends and also at their outer edges, of locking-plates located on opposite sides of the sections and provided with lugs which are received in the notches, and means for securing the locking-plates.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN H. FOWLER.

Witnesses:

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R. A. ORBISON.