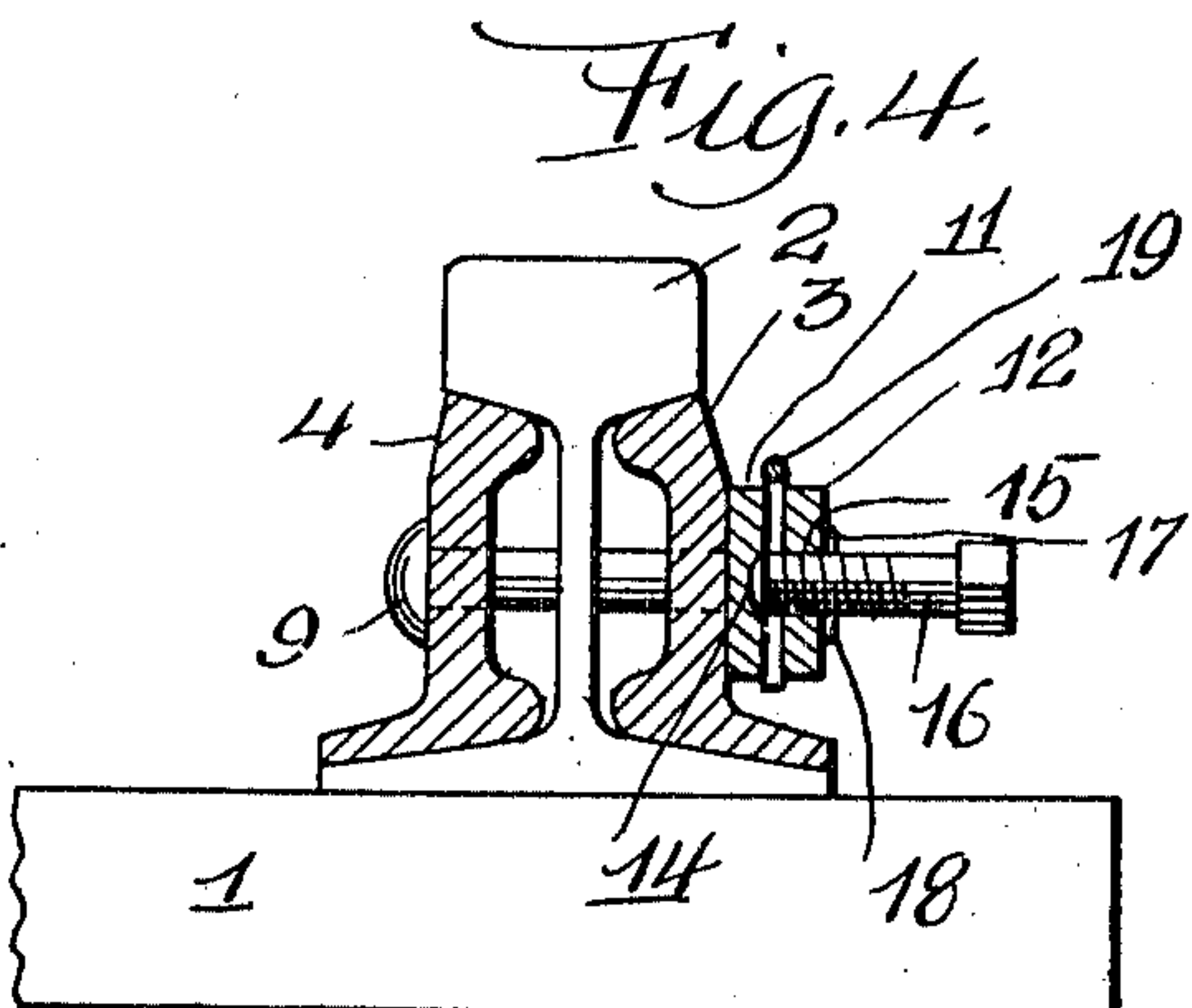
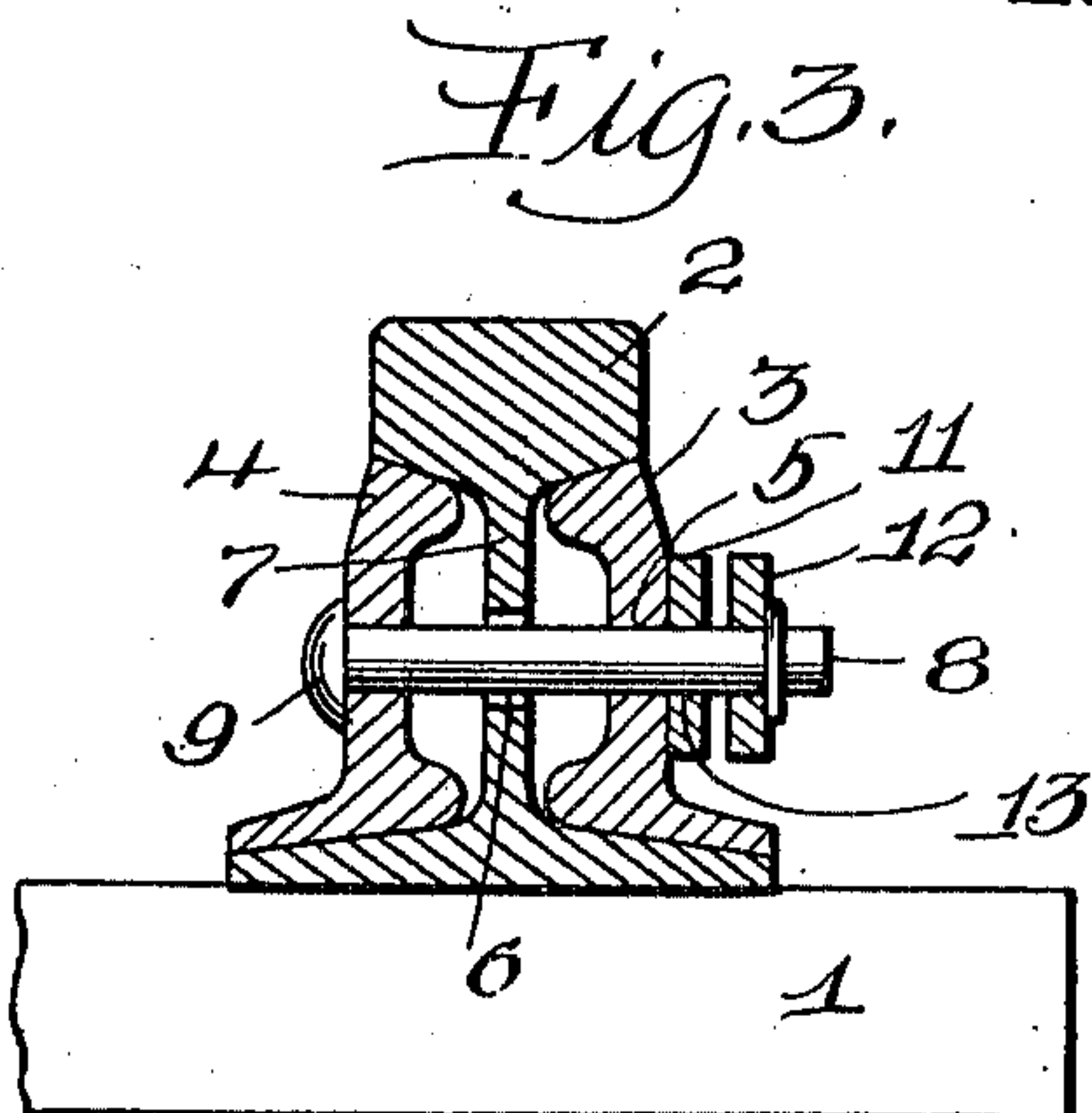
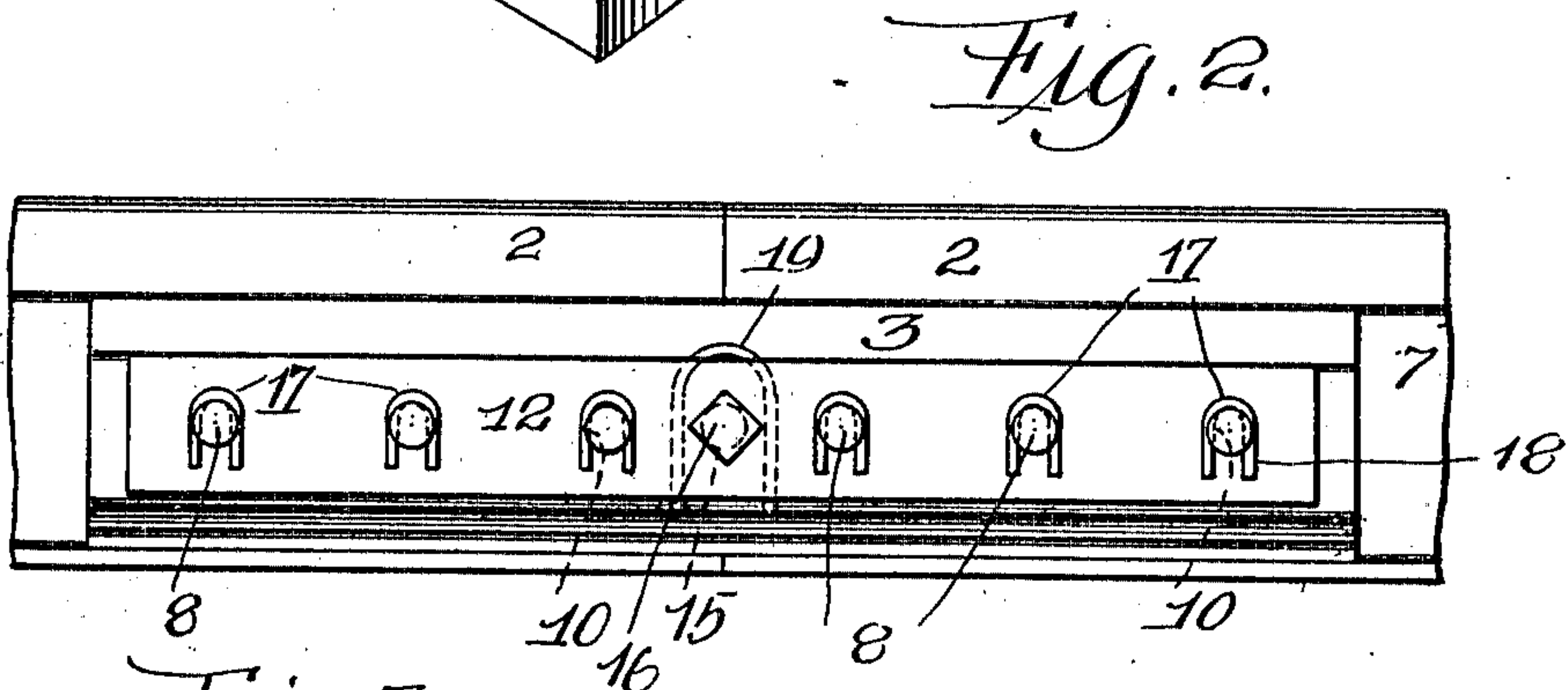
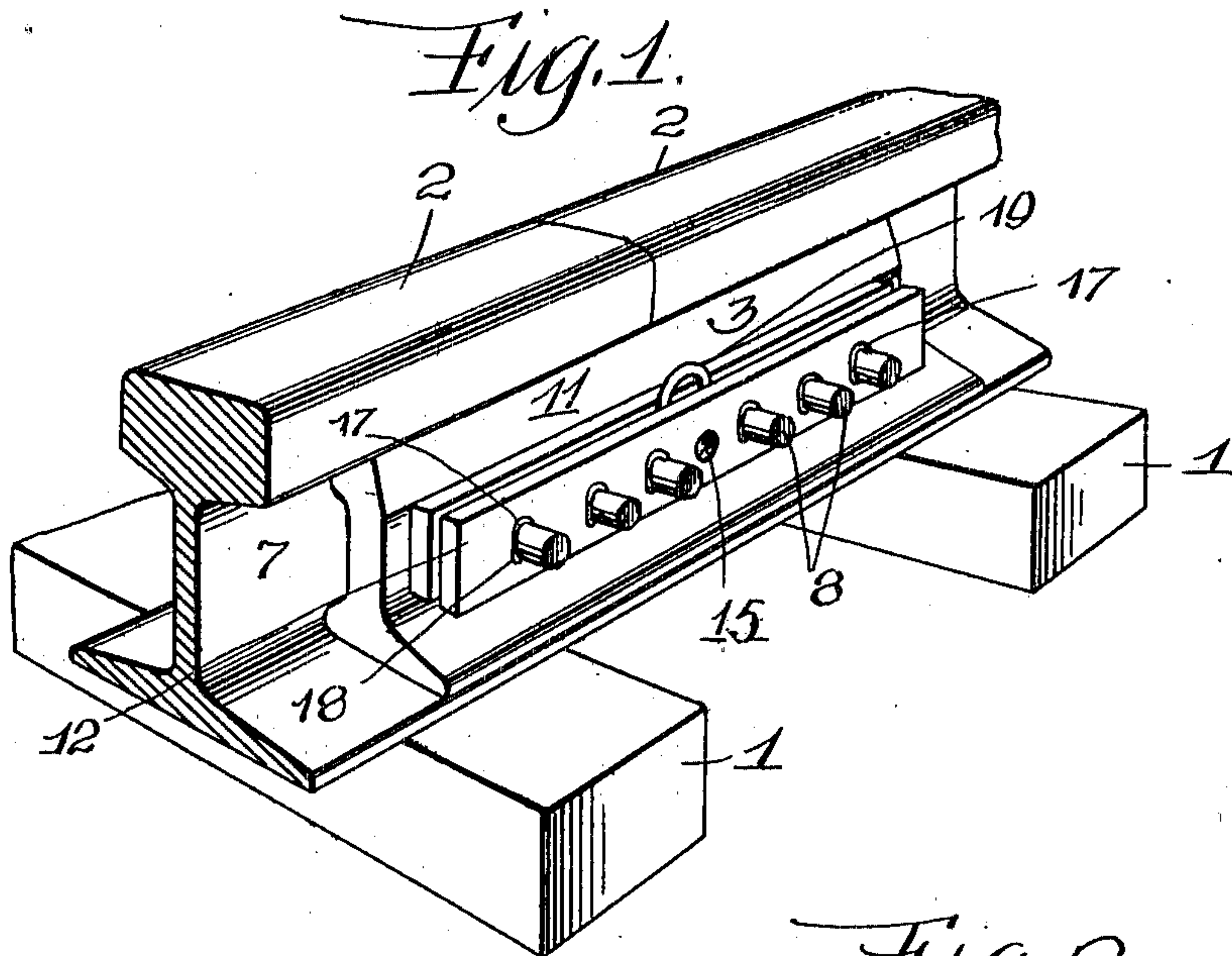


J. T. ASHTON.
RAIL JOINT AND FASTENER.
APPLICATION FILED JAN. 16, 1911.

986,891.

Patented Mar. 14, 1911.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN T. ASHTON, OF LOWELLVILLE, OHIO.

RAIL JOINT AND FASTENER.

986,891.

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

Application filed January 16, 1911. Serial No. 602,870.

To all whom it may concern:

Be it known that I, JOHN T. ASHTON, a citizen of the United States of America, residing at Lowellville, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Rail Joints and Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to rail joints and fasteners, and the objects of my invention are to provide positive and reliable means in a manner as will be hereinafter set forth for connecting the confronting ends of two rails whereby they can not become laterally or vertically displaced, and to obviate the necessity of using bolts and nuts as a fastening medium for connecting the splice bars used in connection with rail joints.

20 Other objects of the invention are to provide a rail joint that can be easily and quickly installed without the use of skilled labor, and to provide a rail joint that will compensate for the expansion and contraction of the connected rails.

25 Further objects of the invention are to furnish a rail joint with a novel fastener that will positively hold the splice bars of the joint, and to accomplish the above results by a fastener that is strong and durable, inexpensive to manufacture and highly efficient for the purposes for which it is intended.

35 These and such other objects as may hereinafter appear are attained by the novel construction, combination and arrangement of parts to be presently described and then claimed, and reference will now be had to the drawing wherein like numerals of reference designate corresponding parts throughout the several views, in which:—

40 Figure 1 is a perspective view of the rail joint, Fig. 2 is a side elevation of the same, Fig. 3 is a cross sectional view of the joint, and Fig. 4 is a similar view showing the adjusting bolt in position.

45 The reference numeral 1 denotes ties or sleepers adapted to support the confronting ends of rails 2, and bracing the sides of said rails are ordinary splice bars 3 and 4 provided with a plurality of openings 5 adapted to aline with openings 6 in the web 7 of the rail 2. Extending through the openings 5 and 6 are a plurality of bolts 8 having the heads 9 thereof engaging the outer side of

the splice bar 4. The bolts 8 protrude through the openings 5 of the splice bar 3 and have the outer ends thereof provided with diametrically opposed vertically disposed grooves 10, the object of which will presently appear. Arranged upon the protruding ends of the bolts 8 are two plates 11 and 12 provided with openings 13 to receive the ends of the bolts 8. The plate 11 intermediate the ends thereof has the outer side provided with a socket 14 and the plate 12 is provided with an opening 15 alining with the socket 14, said opening having the walls thereof threaded to receive an adjusting bolt 16.

70 After the plates 11 and 12 have been assembled upon the ends of the bolts 8, inverted U-shaped locking members or staples 17 are mounted upon the ends of the bolts, said members having the vertical portions 18 thereof engaging in the vertical grooves 10 of said bolts. The adjusting screw 16 is then rotated to engage in the socket 14 and this movement of the screw shifts the outer plate 12 outwardly until it binds against the members or staples 17. A large inverted U-shaped member or staple 19 is then driven downwardly between the inner and outer plates 11 and 12, spanning the bolt 16, the member or staple 19 wedging the plates 11 and 12 apart and thereby securely holding the bolts 8 in the splice bars 3 and 4 bracing the rails 2. The adjusting bolt 16 can then be removed. To disassemble the parts of the rail joint, it is only necessary to remove the large member or staple 19, then the small members or staples 17 and the parts of the joint can be taken apart.

The invention is not limited to the number of bolts 8 employed, to the metal used or to the size and shape, and any other changes that fall within the scope of the appended claims can be resorted to without departing from the spirit of the invention.

What I claim is:—

100 1. In a rail joint and fastener, the combination with rails having the webs thereof provided with openings, splice bars bracing the sides of said rails and having openings alining with the openings of the webs of said rails, of bolts extending through the openings of said splice bars, and said rails having the protruding ends thereof provided with vertically disposed grooves, plates arranged upon the protruding ends 110

of said bolts, staples mounted in the grooves of said bolts, and a large staple arranged between said plates, substantially as described.

2. In a rail joint and fastener, the combination with rails having the webs thereof provided with openings, splice bars bracing the sides of said rails and having openings alining with the openings of the webs of said rails, of bolts extending through the
10 openings of said splice bars, and said rails having the protruding ends thereof provided with vertically disposed grooves,

plates arranged upon the protruding ends of said bolts, staples mounted in the grooves of said bolts, a large staple arranged between said plates, and means including an adjustable bolt adapted to force said plates apart to receive said large staples. 15

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

JOHN T. ASHTON.

Witnesses:

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R. L. HILDEBRAND.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
