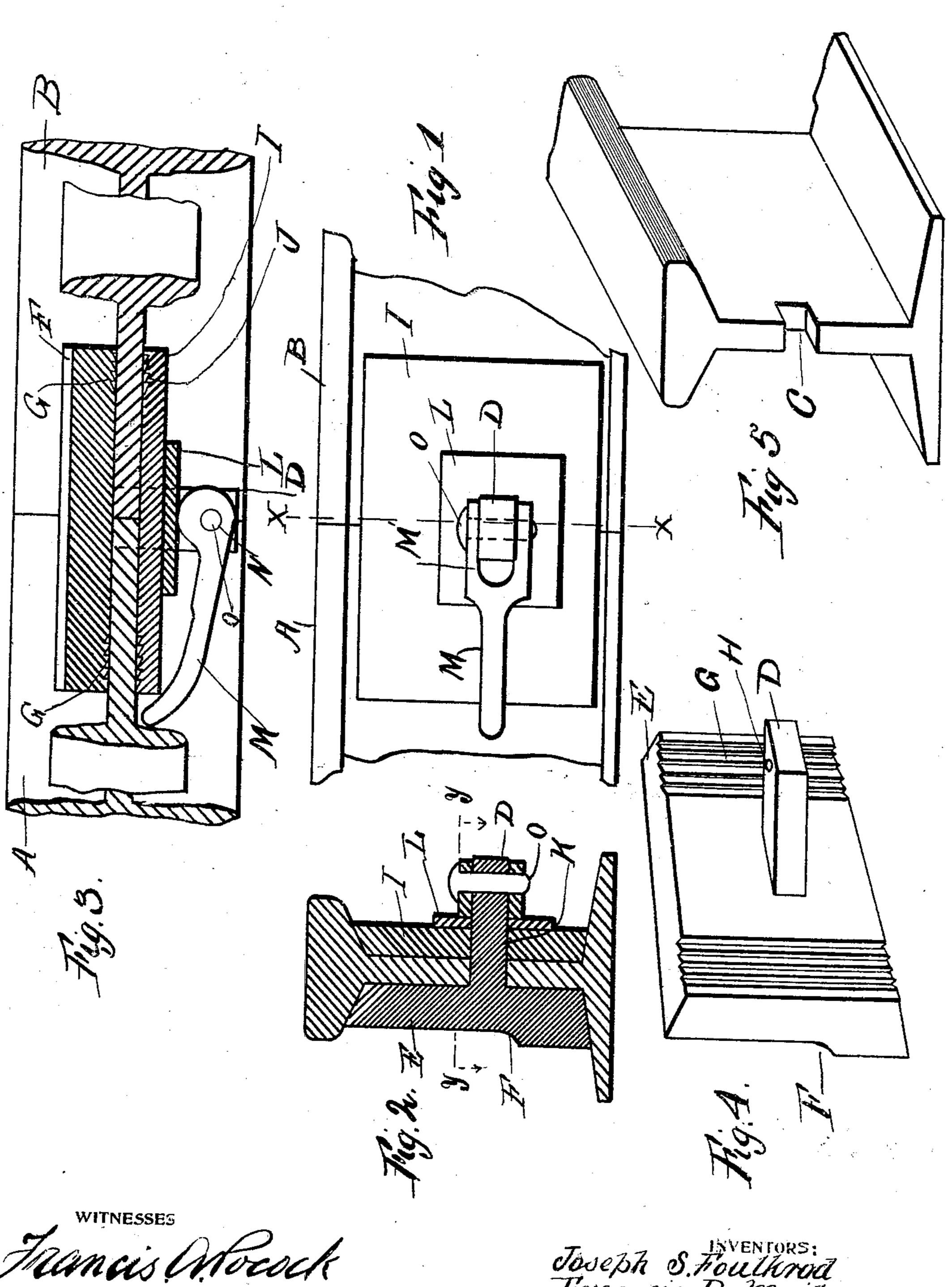
J. S. FOULKROD & F. P. MOITZ. RAIL JOINT.

APPLICATION FILED JUNE 4, 1908.

921,689.

Patented May 18, 1909.



UNITED STATES PATENT OFFICE.

JOSEPH S. FOULKROD AND FRANCIS P. MOITZ, OF FRANKFORD, PENNSYLVANIA.

RAIL-JOINT.

No. 921,689.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed June 4, 1908. Serial No. 436,632.

To all whom it may concern:

Be it known that we, Joseph S. Foulkrod and Francis P. Moitz, citizens of the United States, residing at Frankford, county of Phil-5 adelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Rail-Joints, of which the following is

a specification.

Our invention relates to a new and useful 10 improvement in rail joints, and has for its object to provide an exceedingly simple and effective means for connecting the meeting ends of railway rail sections in such a manner that the rails may be readily taken apart 15 but will be held securely together against any amount of friction or jar brought to bear thereon by the train passing over the rails.

A further object of our invention is to provide a rail joint whereby the rails may be se-20 curely connected without the use of nuts and without weakening the web portions of the rails and a still further object of our invention is to provide a rail joint which may be used in connection with rails of ordinary con-25 struction.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same we will describe its construction in detail referring by letter to the accompanying drawing 35 forming a part of this specification, in which—

Figure 1, is a side elevation of our improved rail joint showing it tied on the meeting ends of two rails. Fig. 2, is a section at the line X—X of Fig. 1. Fig. 3, a section at the line 40 Y—Y of Fig. 2 looking in the direction of the arrow. Fig. 4, a perspective view of the inner side plate, and Fig. 5, a perspective view

of one of the rails.

In carrying out our invention as here em-45 bodied, A and B represent the meeting ends of two rails each of which has the opening C cut in the web thereof through which is adapted to pass the extension D formed in the inner plate E which has a portion of the 50 outer surface cut away as indicated at F, thus allowing it to fit beneath the rail head so that the flange of the wheel when passing over the rail will not come into contact with this inner plate E. The inner surface of this 55 inner plate E is roughened and has the corrugations G formed thereon so that it will be

prevented from slipping when drawn tight

against the surface of the rails.

On the outer end of the extension D is formed the pin receiving opening H, the in- 60 ner plate E is placed against the inner surface of the web of the rails, the extension passing through the opening C formed in the ends of the rails. The outer plate I, which also has the corrugations J is then placed 65 against the rails, the extensions D passing through the opening K formed in said outer plate. On the extension D outside of the outer plate I is then placed the friction washer L.

The friction lever M has the arms M' formed therewith, through which passes a suitable opening N and which are adapted to pass upon either side of the extension D and through this opening N and the pin receiving 75 opening H formed on the extension D passes a pin O for holding said lever in place.

The arms of the friction lever are so formed as to produce an eccentric the widest point of which will rest against the friction 80 washer L when the friction lever M is forced into the position shown in Fig. 3 which posi-

tion we term as the "locked".

In practice the openings C are made in the web of the rails and the ends of said rails 85 brought together until these openings are brought into alinement, then the inner plate E is placed against the rails, the extension D passed through the opening C, the outer plate I is then placed against the rails, the 90 extensions passed through the opening K, the friction washer L is then placed over the extension D, against the outer plate I, the arms of the friction lever placed upon the upper or lower sides of the extension D in its 95 open position, the pin O is then placed into openings formed in the arms of the friction lever to the extension, the friction lever is then drawn over which will draw the plates together and securely hold them in that posi- 100 tion.

Of course we do not wish to be limited to the exact details of construction here shown as these may be varied within certain limits without departing from the spirit of our in- 105 vention.

Having thus fully described our invention what we claim as new and useful is—

The combination of two railway rails, having openings formed in the webs thereof, an 110 inner plate having an extension formed therewith, corrugations formed on its inner

surface, and a portion of its outer surface cut away, said extension having a pin receiving opening formed therein, an outer plate having an opening formed therein, into which the extension is adapted to be placed, the inner face of this plate having corrugations formed thereon, a friction washer placed upon the extension and resting against the outer plate, a friction lever having arms formed therewith which rest upon the upper and lower sides of the extension, said arms having suitable openings formed therein and a pin adapted to pass

through the openings formed in the arms of the friction lever and said pin receiving 15 opening formed in the extension, substantially as shown and described.

In testimony whereof we have hereunto affixed our signatures in the presence of two

subscribing witnesses.

JOSEPH S. FOULKROD FRANCIS P. MOITZ.

Witnesses:
Jos. R. Embery,
Paul Winicoff.