

No. 644,097.

Patented Feb. 27, 1900.

P. F. RICH.

SAFETY BRACE FOR JOINTS OF RAILWAY RAILS.

(Application filed Mar. 18, 1899.)

(No Model.)

Fig. 1.

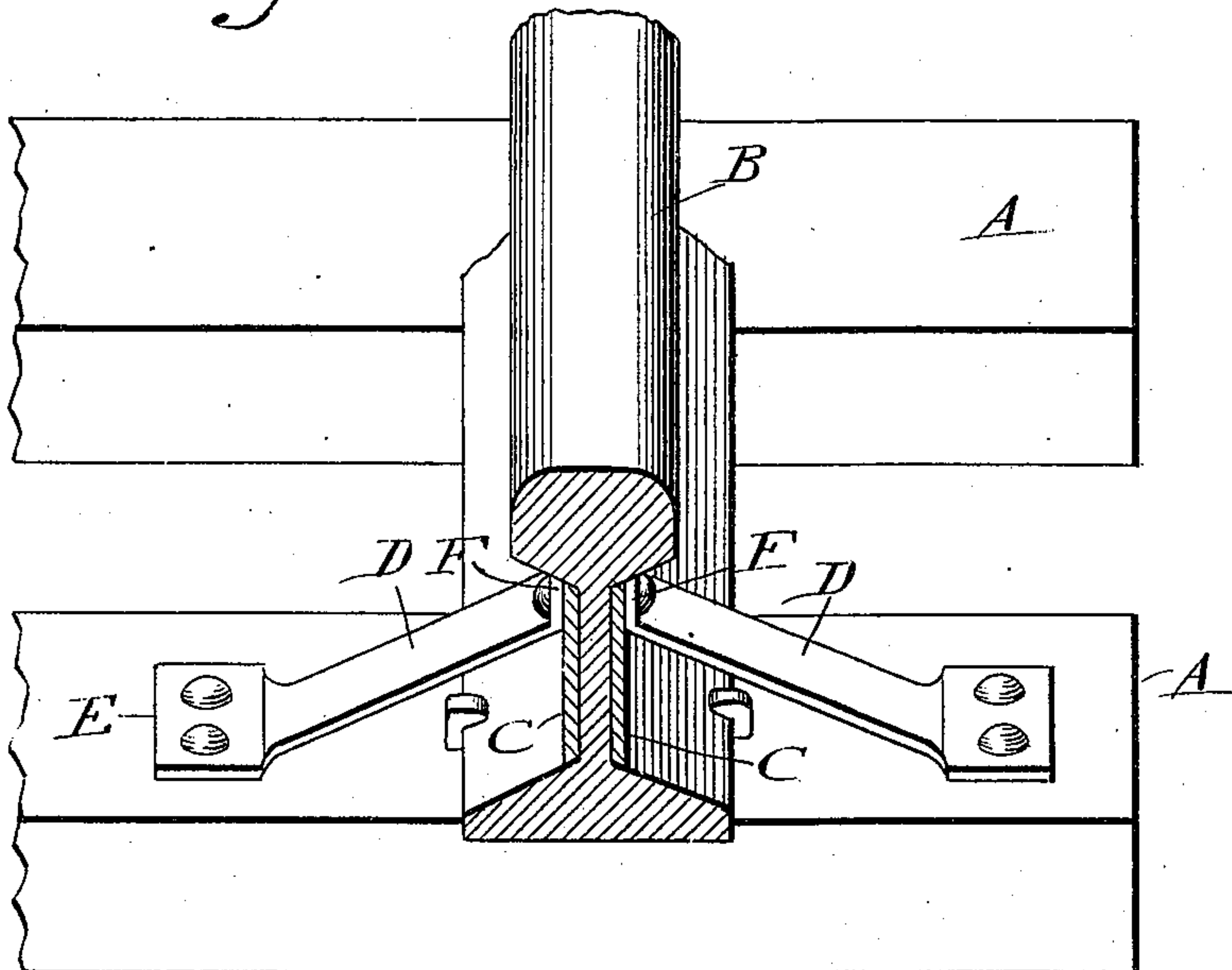
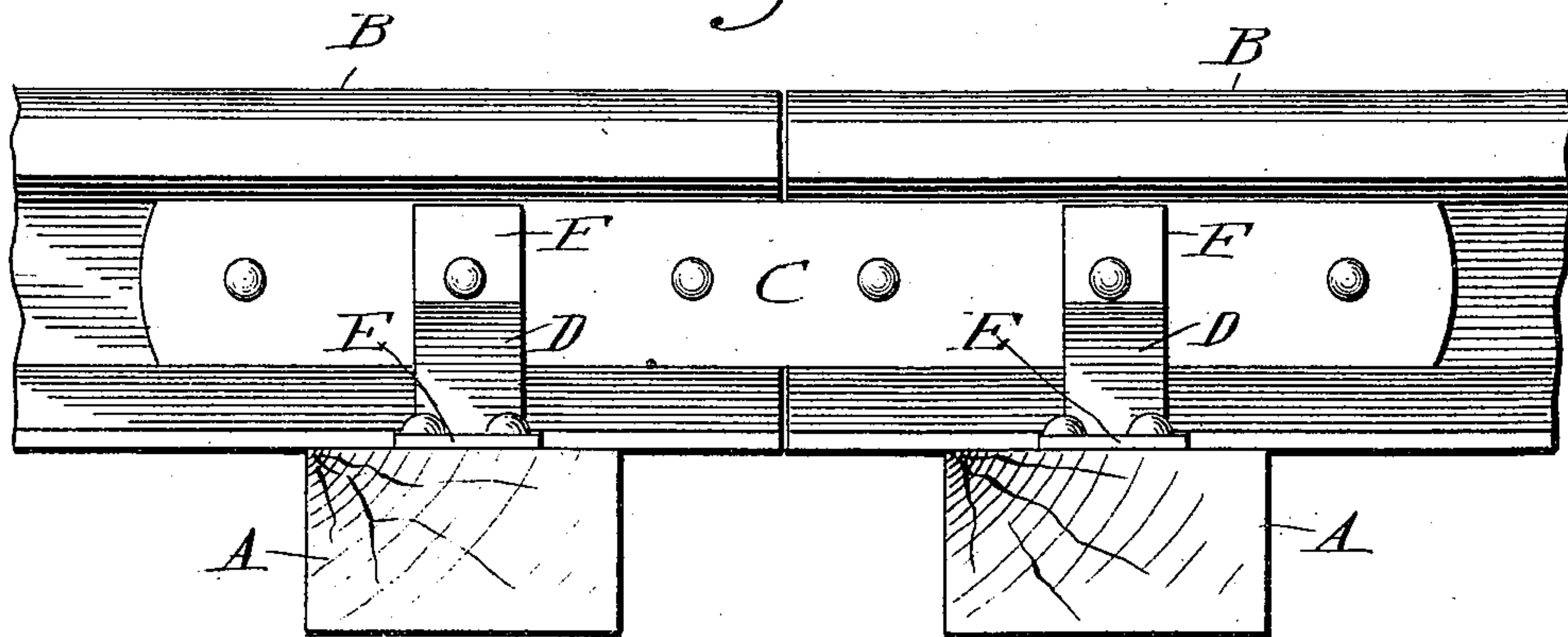


Fig. 2.



Witnesses:

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PAUL F. RICH, OF TOMAH, WISCONSIN.

SAFETY-BRACE FOR JOINTS OF RAILWAY-RAILS.

SPECIFICATION forming part of Letters Patent No. 644,097, dated February 27, 1900.

Application filed March 18, 1899. Serial No. 709,680. (No model.)

To all whom it may concern:

Be it known that I, PAUL F. RICH, a citizen of the United States, residing at Tomah, in the county of Monroe and State of Wisconsin, have invented a new and improved means for bracing and supporting railway-rails at and near their abutting ends as laid in a continuous railway-track, of which the following is a correct and full description, reference being had to the accompanying drawings, forming a part of this specification.

In the drawings, Figure 1 is a view in perspective of the end of a railway-rail resting on ties with my improved devices applied thereto. Fig. 2 is a view in perspective at the side of two rails, the ends of which abut against and are secured to each other, the rails resting on ties and to which my improved devices are applied.

In the drawings, A A represent railway-ties on which the rails B B rest and are supported. These ties are commonly of wood and are embedded in the earth or are supported on a permanent structure, and the railway-rails are so laid in a continuous track that their ends abut against each other, as shown in Fig. 2. The abutting ends of the rails are connected to each other by plates C C, commonly known as "fish-plates," and these plates are secured to the rails and to each other by being placed in pairs one opposite the other against the webs of the rails, on the two sides thereof, the pair of fish-plates extending along near the ends of the rails past their junction and being secured thereto by bolts that are put through the two plates and the intermediate webs of the rails. The bolts are commonly secured in place by nuts thereon.

My improved rail bracing and supporting device consists of a strap or bar of metal D, preferably flat, which bar at its lower end is provided with an enlarged foot E, disposed at an oblique angle to the bar D and provided with spike-holes. The bar D is also provided with a head F, also at an oblique angle to the

bar D, and which is provided with a bolt-hole. The under faces of the foot E and the head F are at such an angle to the bar D as adapts them, respectively, to fit the foot on the top surface of the tie A and the head F against the surface of a fish-plate C. The bar D is of such length as to adapt it to reach from the upper portion of the web of the rail near the tread outwardly in a vertical plane at substantially a right angle to the length of the rail to the surface of the tie on which its foot rests at a distance from the bottom flange of the rail. These bracing and supporting devices are placed one opposite the other on the two sides of the rail near its end and are secured thereto by a bolt or bolts through their heads and at their other extremities are secured to the tie by bolts or spikes, spikes being preferably used where the tie is of wood. These devices are capable of being produced at a minimum of expense of rolled metal, if preferred, and being secured in place in the manner described support and hold the rails in place firmly and enduringly.

What I claim as my invention is—

The combination with a railway-rail and a transverse tie on which the rail rests, of a plurality of oppositely-disposed supporting devices each consisting of a substantially-straight bar having an obliquely-disposed head and foot, the feet of the devices resting on the surface of the tie at a distance from the rail and being spiked to the tie, the heads of the supporting devices bearing opposite each other against opposite sides of the web of the rail and being secured thereto by bolts through said heads and through the intermediate web of the rail, the supporting devices extending from the rail at right angles thereto.

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Witnesses:

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