

(No Model.)

P. DAVEY.

RAILROAD CHAIR, TIE, AND BREAK JOINT.

No. 322,261.

Patented July 14, 1885.

Fig. 1.

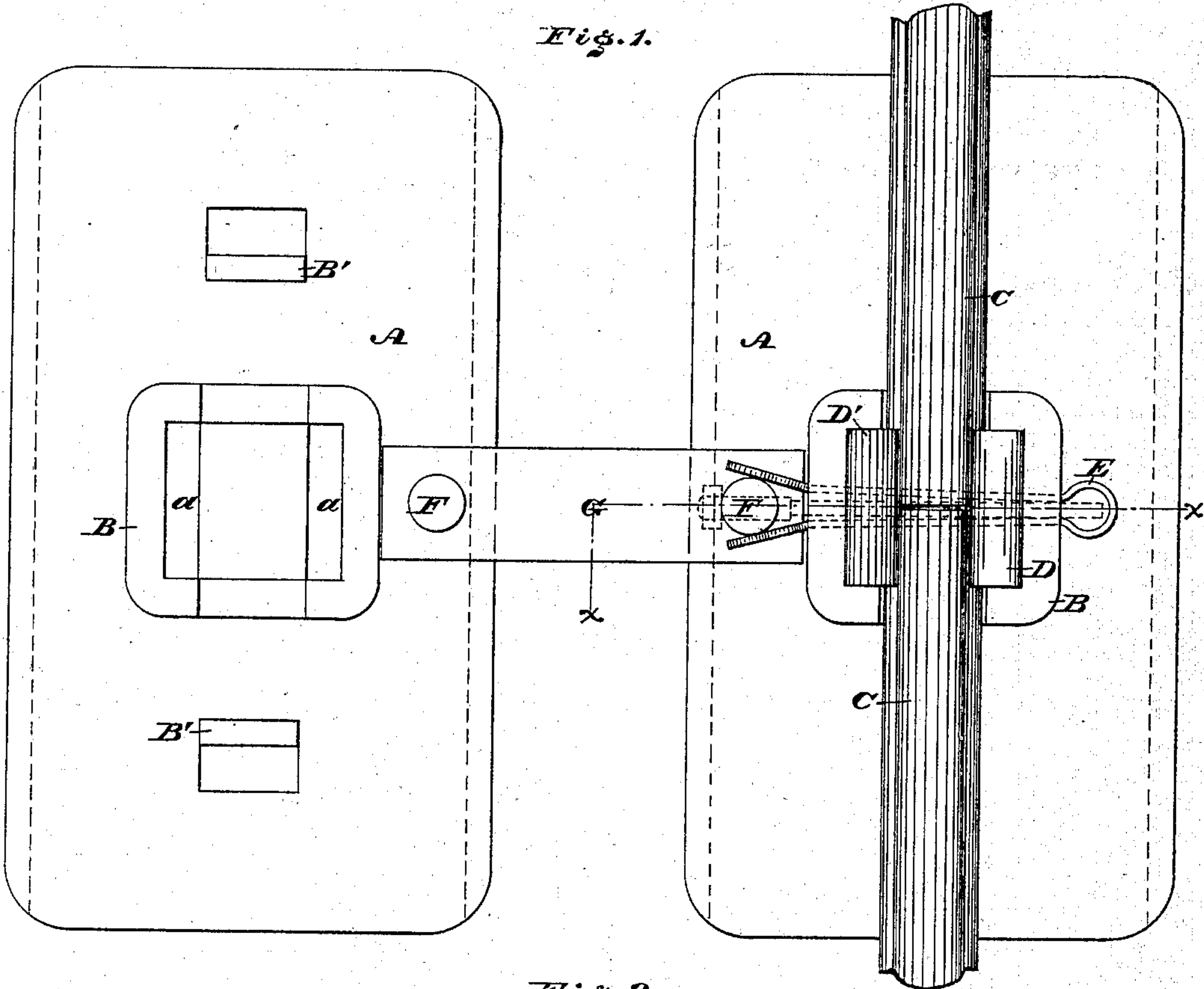


Fig. 2.

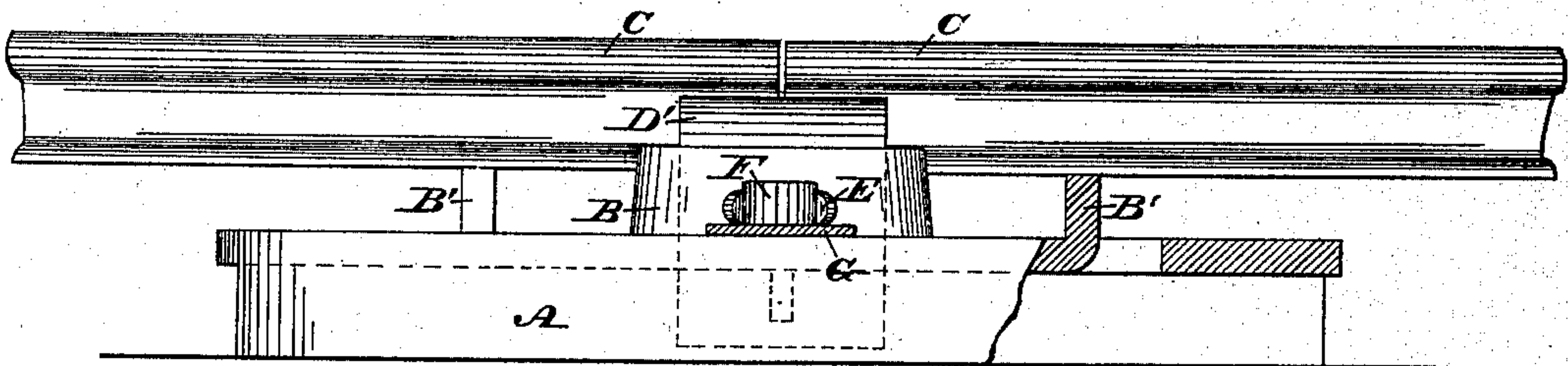
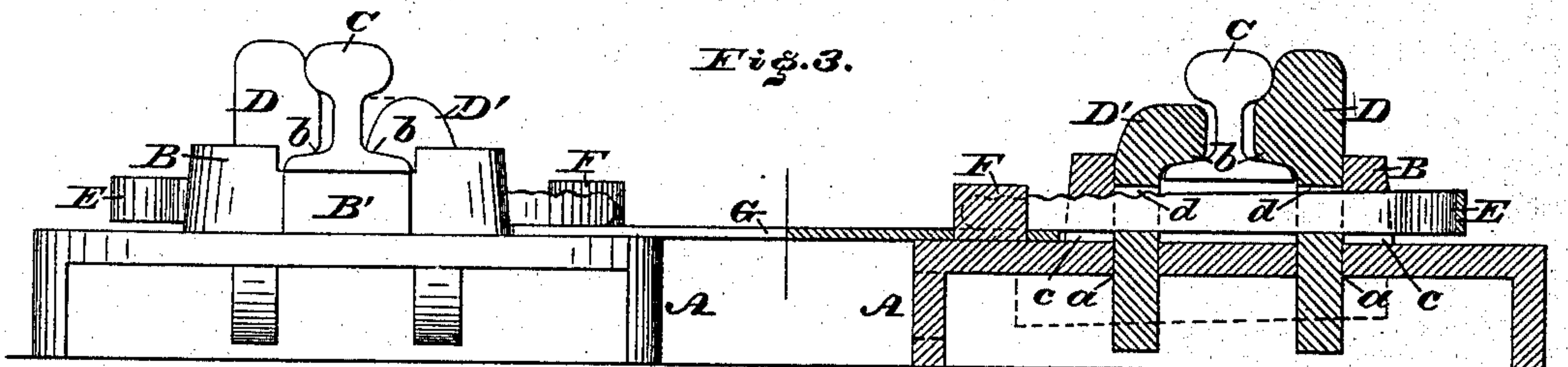


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

PETHERICK DAVEY, OF PHILADELPHIA, PENNSYLVANIA.

## RAILROAD CHAIR, TIE, AND BREAK-JOINT.

SPECIFICATION forming part of Letters Patent No. 322,261, dated July 14, 1885.

Application filed August 20, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, PETHERICK DAVEY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Railroad Chairs, Ties, and Break-Joints, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top or plan view of a railroad chair or tie embodying my invention. Fig. 2 is a side elevation thereof. Fig. 3 is a partial end view and partial vertical section in line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a railroad tie and break-joint made of iron, steel, or other material, which reliably holds the rails and breaks the joint thereof, and may be readily applied and removed, the same being constructed of a bed-plate having a boss and clamps fitted therein on opposite sides of the rails, and a securing key or pin, with means for fastening the latter.

Referring to the drawings, A represents a bed-plate, in which, at the center thereof, are parallel slots *a a*, and rising from said plate around the slots is a boss, B, on which the ends of the rails C C are seated.

Formed with or secured to the bed A, near each end B, are upright lugs B', which serve to support the rails in connection and prevent bending or giving of the same at relative places.

D D' represent clamps, which are passed through the slots *a a*, and are formed with shoulders *b*, each of which conforms to the shape of the neck and base of the rail, and is adapted to bear against the base, it being seen that said clamps are on opposite sides of rails at the joint of adjacent rails, and as a tie on the lengths of the rail.

Transverse openings *c* are made in opposite walls of the boss B, and corresponding openings, *d*, in the clamps D D', and through the same is passed a fastening wedge, key, or pin, E, whereby, when the latter is driven through the openings to full extent, the clamps D D' are depressed and forced against the bases of the rails, and caused to hold the same in a firm and reliable manner, it being seen

that as the clamps are detachable from the boss and bed they are readily removed when the key or pin E is withdrawn, and as easily applied in position. The clamp D is extended above the shoulder *b*, so as to form in a measure a lateral continuity of the heads of the rails for breaking the joint between the rails, some of the weight of the cars or train being imposed on said clamps. When used as a chair, the long clamp is substituted by a shorter one.

In order to secure the key or pin and prevent its displacement, there is formed with or secured to the bed A a post or upright stud, F, which occupies a position coincident with the openings *c d*, whereby when the key E employed is split its legs ride against opposite sides of the stud, and are thus spread apart, so that the accidental return motion of the key is prevented. Said split or solid key is cut on the top surface with serrations, so as to aid in holding all in position.

If deemed expedient, two or more studs can be set at an angle sufficient to clinch the pin or key around the stud F.

In lieu of the split key, I may employ a wedge, pin, or bolt, (shown in dotted lines, Fig. 1,) the same having its end threaded and passed through the stud F, a nut being fitted to said end and tightening against said stud, thus reliably holding the pin in place, and consequently forcibly tightening the cheeks against the rails.

G represents a bar, which connects opposite bed-plates or ties A, the same having its ends secured to or by the studs F, the keys or pins E being above said bar, whereby it is prevented from rising and vertical displacement, said bar assisting to retain the bed-plates in position and render the same practical and serviceable.

In some cases it may be desirable to pass the key or pin through the lower part of the clamps, beneath the bed-plate, and provide a stud or studs below said plate. If desired, a piece of wood, paper, or other material may be laid between the base-plate and rails, in order to prevent the dead-thrust of the weight of the train or cars on the lugs and bed-plate.

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



1. A bed-plate having a boss and clamps fitted therein on opposite sides of the rails, a securing pin or key passed through said clamps and the bed-plates or boss, and a fast-  
5 ening for said key or pin, substantially as and for the purpose set forth.

2. A bed-plate having a boss, clamps, and a key or pin, in combination with a stud or post on the bed for securing said key or pin,  
10 substantially as and for the purpose set forth.

3. A bed-plate having a boss with clamps therein on opposite sides of the rails, and lugs on the sides of the boss, said boss and lugs

sustaining the rails, substantially as and for the purpose set forth.

4. A bed-plate, a post or stud rising there-  
15 from, clamps for holding the rail, and a fast-  
ening key or pin, in combination with a con-  
necting-bar joined to said post, and secured  
by said key or pin, substantially as and for 20  
the purpose set forth.

PETHERICK DAVEY.

Witnesses:

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