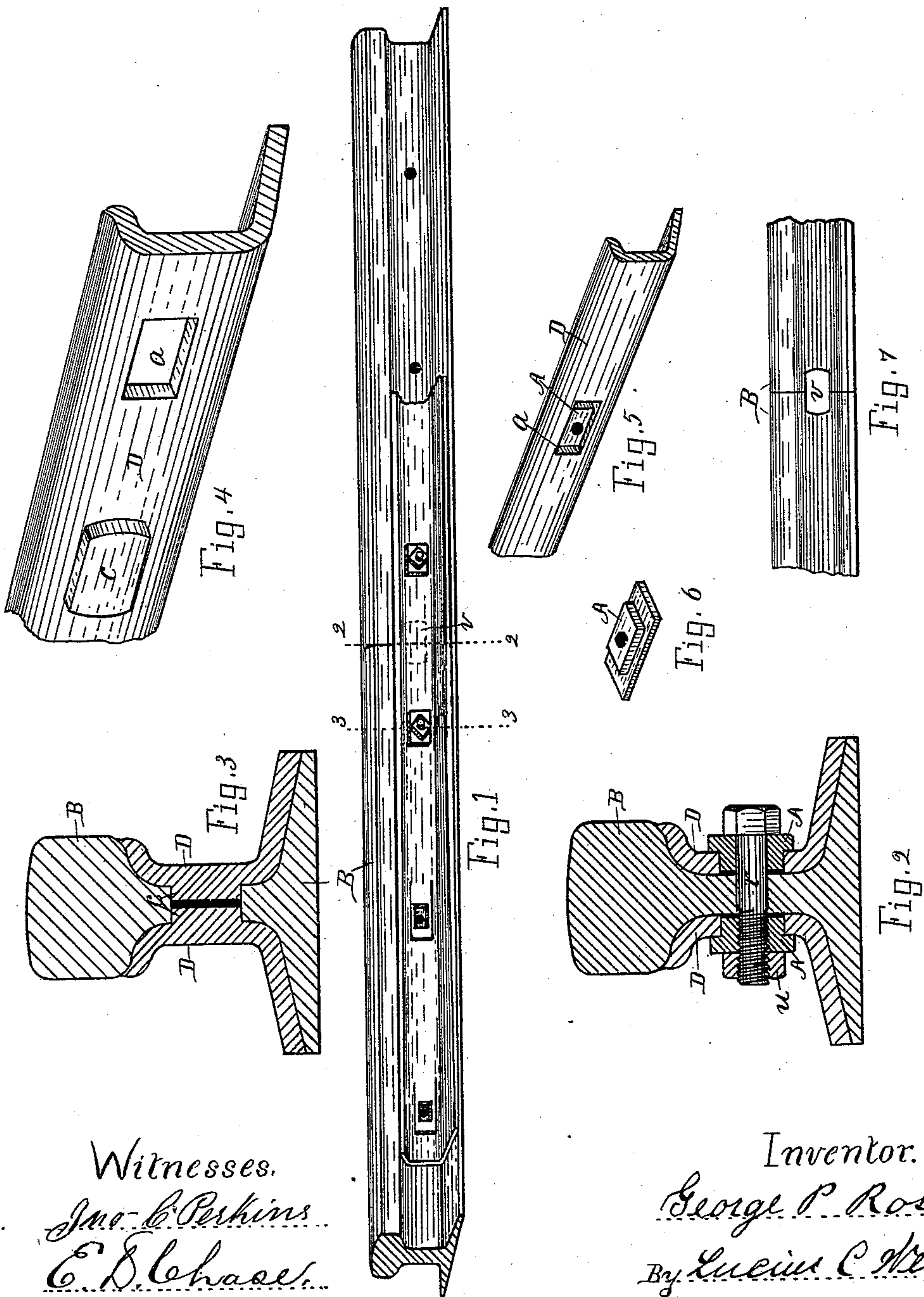


(No Model.)

G. P. ROSE.
RAILWAY SPLICE BAR.

No. 395,924.

Patented Jan. 8, 1889.



Witnesses.
Geo. C. Perkins
E. D. Chase

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UNITED STATES PATENT OFFICE.

GEORGE P. ROSE, OF FENTON, MICHIGAN.

RAILWAY SPLICE-BAR.

SPECIFICATION forming part of Letters Patent No. 395,924, dated January 8, 1889.

Application filed May 31, 1888. Serial No. 275,557. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. ROSE, a citizen of the United States, residing at Fenton, county of Genesee, State of Michigan, have invented a new and useful Railway Splice-Bar, of which the following is a specification.

This invention relates to the joints and splice-bars of railways; and it has for its object a novel construction of the splice-bars, whereby greater strength is secured and the bolts which secure the splice-bars to the rails are carried with the rails in their contraction and expansion, the bolt-holes through the rails being the size of the bolts instead of elongated, as heretofore.

In the drawings forming a part of this specification, Figure 1 is a perspective view; Fig. 2, a cross-section, enlarged, on line 3 3 in Fig. 1; Fig. 3, a cross-section on line 2 2 in Fig. 1, enlarged; Fig. 4, an enlarged perspective of a part of the splice-bar; Fig. 5, a perspective of a portion of the splice-bar; Fig. 6, a perspective of a lettered detail, hereinafter described; and Fig. 7 is a side elevation of the rails at the joint.

Referring to the lettered parts of the drawings, B are the rails with square ends at the joint. Each rail has a slot, *v*, in the end, so that when the rails are together end to end, as in Fig. 7, there is an elongated hole between, and partially in each rail, as at *v* in Fig. 7. The splice-plates are provided on the inside with a boss, *c*, Fig. 4, of a size to fit the slot *v*. Fig. 3 shows these parts *c* fitting in the slot *v* from both sides. Thus by means of the boss on each splice-bar the rails are greatly strengthened at the joint, and less strain comes on the flanges of the splice-bars, and less dependence need be placed upon the bolts.

The holes through the rails are the size of the bolts. All the holes through the splice-bars are as shown at *a*, Fig. 4. The boss of the washer A fits into the holes *a*, but are less in size longitudinally than the holes *a*, and the bolt-hole through the washers is the size of the bolt, for which reasons when the rails contract and expand the washers slide in the holes *a*, because the bolts are carried with the rails and the washers with the bolts.

The washers A on one side are screw-threaded in their bolt-hole, and the threaded ends of the bolts *r*, Fig. 2, are screwed

through them, and a lock-nut, *u*, is screwed onto said threaded end of the bolt and against the washer A, Fig. 2.

Having thus described the invention, what I claim as new, and desire to secure, is—

1. The combination of the rails having the holes the size of the bolts, the washers provided with the boss, the splice-bars having the slots longer than the boss on the washer, and the securing-bolts, substantially as set forth.

2. The combination of the rails having the end slot and bolt-holes the size of the bolts, the splice-bars having the central boss, and the slots to receive the washers, the washers having the boss of a length less than said washer-slots, and the securing-bolts, substantially as set forth.

3. The combination of the rails having the bolt-holes of a size to just receive the bolts, the splice-bars having the washer-slots, the washers having the boss of a length less than said slots, the holes in the washers on one side of the rail being screw-threaded, and the bolts having the screw-threaded ends in said screw-threaded holes, substantially as set forth.

4. The combination of the rails having the bolt-holes of a size to receive the bolts, the splice-bars having the washer-slots, the washers provided with the boss of a length less than said slots, the holes in the washers on one side of the rail being screw-threaded, the bolts having the screw-threaded ends in said holes, and the lock-nuts on the extended ends of the bolts, substantially as set forth.

5. The combination of the rails having the end slots and bolt-holes, the splice-bars provided with the central boss and having the washer-slots, the washers provided with the boss of a length less than the washer-slots, the washers on one side of the rail having their bolt-holes screw-threaded, the bolts having the screw-threaded ends in said holes, and the lock-nuts, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

GEORGE P. ROSE.

Witnesses:

GEO. W. LOCKE,
E. D. CHASE.