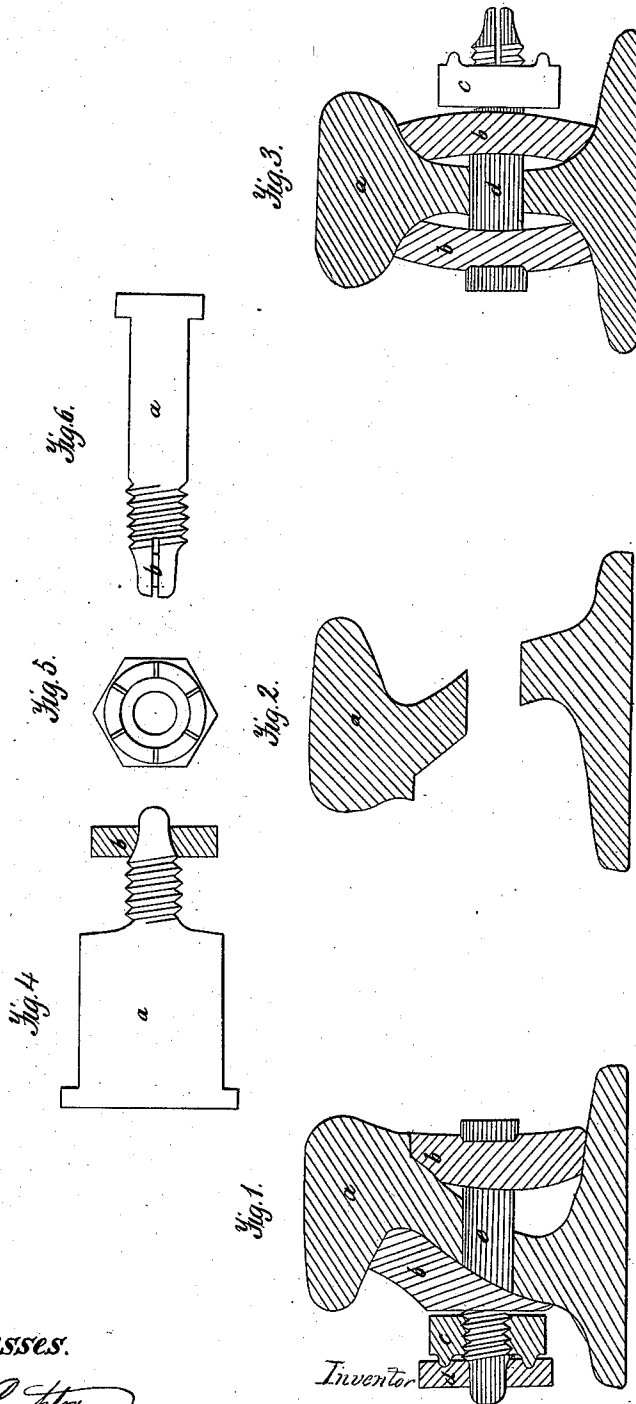


S. A. Beers,
R.R. Rail Joint,

No 83,446.

Patented Oct. 27. 1868.



Witnesses.

John Crompton.
Joshua Oakes.

Inventor

Sidney A. Beers.

United States Patent Office.

SIDNEY A. BEERS, OF BROOKLYN, NEW YORK.

Letters Patent No. 83,446, dated October 27, 1868.

IMPROVED SPLICE FOR RAILROAD-RAILS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SIDNEY A. BEERS, of the city of Brooklyn, State of New York, have invented a new and improved Method of Securing and Maintaining a More Perfect Joint at the Connection of Railroad-Rails, when placed in position for use in the track; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings, making part of this specification, and to the letters marked thereon.

The nature of my invention consists in the adaptation of fishing-plates to any form of railroad-rails, in such a manner as to secure a lock-joint, by introducing a flat bolt directly across the joint, and occupying a mortise, formed by a slot in each end of the rails. The residue of the bolts may be of the usual form, while the nut attached to such bolts is prevented from working loose by a key, resting in a slot in the point of the bolt, and corresponding slots across the face of the nut.

To enable others to apply and use my invention, I will proceed to describe the form and application of the different parts embraced in the arrangement.

Figure 1 is a transverse view of the lock-joint, as applied to the vibratory rail.

Figure 2 is a transverse view of the rail, showing the slot in the end.

Figure 3 is a transverse view of the lock-joint, when applied to the common T-rail.

Figure 4 is a horizontal view of the flat bolt and key.

Figure 5 is a horizontal view of the face of the nut and slots.

Figure 6 is a vertical view of the slot and key, as applied to the common form of bolt.

Letter *a*, fig. 1, is a transverse view of the rail-head at the joint.

Letters *b b*, fishing-plates.

Letter *c*, the nut, showing a rim or projection on the

face, and which rim is slotted, to receive the edge of the key.

Letter *d*, a side view of the key, resting in the slot in the head of the bolt.

Letter *e* shows the edge of the flat bolt, passing through a mortise in the fishing-plate, and a corresponding mortise formed by a slot in the end of both rails, at the point.

Letter *a*, fig. 3, is a transverse view of the common T-rail.

Letters *b b*, fishing-plates.

Letter *c*, a side view of the nut.

Letter *d*, the flat bolt, resting in mortises, the same as in fig. 1, and showing the slot in the head of the bolt, to receive the key.

Letter *a*, fig. 4, a horizontal view of the flat bolt, with slot, to receive the wedge.

Letter *b*, a side view of the key, resting in the slot.

Fig. 5 represents the face of the nut, with slots cut across the rim or projection on the face of the nut, and intended to receive the edge of the key, when driven into place.

Fig. 6 represents the key, as applied to the slot in the bolt *a*.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement of the flat bolt and nut with fishing-plates, as illustrated by letter *c*, fig. 1", and letter *c*, fig. 3, when applied to any form of rail.

Also, the device for preventing the nut from working loose, as illustrated by letters *c* and *d*, in fig. 1", whether used separately or in combination, for the purposes above set forth.

SIDNEY A. BEERS.

Witnesses:

MILO HATCH,
JOHN CROMPTON.