

(No Model.)

A. J. MOXHAM.  
RAIL JOINT.

No. 477,677.

Patented June 28, 1892.

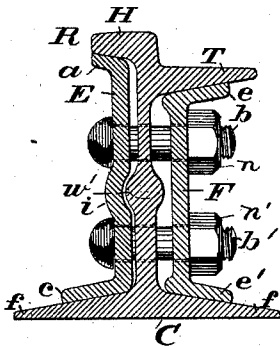


Fig. 1

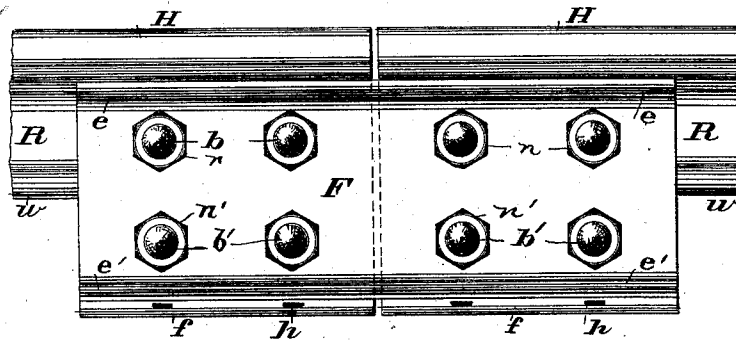


Fig. 2.

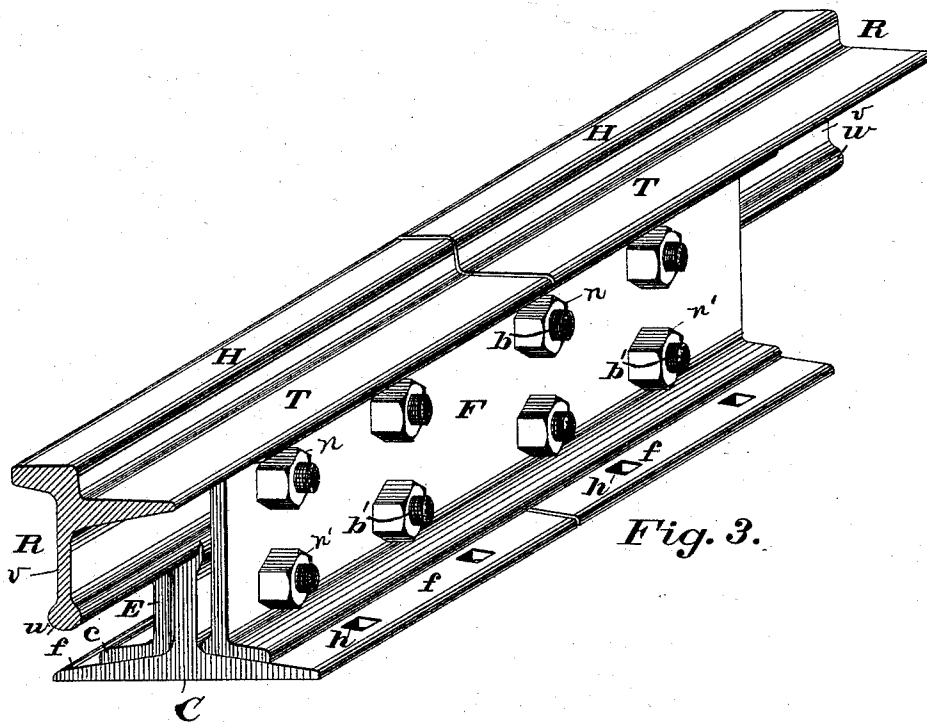


Fig. 3.

WITNESSES:

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ARTHUR J. MOXHAM, OF JOHNSTOWN, PENNSYLVANIA.

## RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 477,677, dated June 28, 1892.

Application filed September 22, 1891. Serial No. 406,490. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR J. MOXHAM, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Rail-Joint, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is sufficiently indicated by its title above given.

The invention will first be described in detail, and then particularly set forth in the claims.

In the accompanying drawings, Figure 1 shows the joint in cross-section with bolts in place. Fig. 2 shows the joint in side elevation. Fig. 3 shows the joint in perspective.

In said figures the several parts are respectively indicated by reference-letters, as follows:

The letters R indicate two contiguous rails; H, their heads; T, their side trams; V, their webs, and *w* a bead or bulb formed at the bottom of said webs. Each of said rails is provided at its end with a base or support C, having lower flanges *f*, provided with holes *h* for the reception of spikes to secure the structure in place. Said supports are preferably formed separate from the rails and then welded to the bulbs *w* on the rails, thus forming an integral structure, the letter *w'*, Fig. 1, indicating the bulb formed on the complete rail by such welding. It is obvious, however, that said supports may be secured to the rails in any other suitable manner, or that the bulb *w'* may be imparted to the complete rail in any desired manner.

The letter E indicates an outside splice-bar angled or offset, as shown at *a*, to fit under the heads H of the rails, and also angled or offset, as shown at *c*, to bear against the flanges *f* of the bases or supports C. Said bar is also offset or corrugated, as shown at *i*, to clear the bulb *w'* on the rails. On the side opposite the splice-bar E an inside bar F is provided, which bar is offset or angled, as shown at *e*, to fit under the side trams T of the rails, and also angled or offset, as shown at *e'*, to bear against the flanges *f* of the bases or supports C. The bar F is not offset or corrugated, like the bar E, to clear the bulb *w'* on the rails; but the main body of said bar F is straight throughout. The splice-bars E and F are secured in place by means of bolts *b*, passed through said bars and the webs *v* of the rails above the bulb *w'*, and by bolts *b'*, passed through said bars and the webs of

the supports C below said bulb, said bolts being provided, respectively, with nuts *n n'*.

The advantages of the rail-joint above described are as follows: By means of the offset or corrugation *i* on the outside splice-bar E clearance-room for the heads of the bolts *b b'* is provided, and said heads do not project beyond the overhanging heads of the rail or only slightly project. Thus said bolt-heads are rendered non-obstructive to the street-pavement. If the inside splice-bar F were of the same shape as the outside bar E, the offset *i* would prevent the nuts *n n'* from securing a level seat; but by making the bar F straight or flush and throwing its main body farther out a level seat is provided for said nuts and also room for them to turn.

I do not confine myself to the shapes of girder rail and support shown, as my invention is applicable to any form of girder-rail having a suitable web. Any one or all of the angle portions *a c e e'* of the splice-bars may be omitted if desired.

Having thus fully described my said invention, I claim—

1. In a rail-joint, the combination of two contiguous rails, each provided with a bulb on its web, a corrugated splice-bar, and a plain splice-bar, said splice-bars being secured at the joint, substantially as described.

2. In a rail-joint, the combination of two contiguous rails, each provided with a bulb on its web, a corrugated splice-bar, and a plain splice-bar, said bars being angled or offset at top and bottom, one or both, and secured at the joint, substantially as described.

3. In a rail-joint, the combination of two contiguous rails, each having a base or support welded thereto, a corrugated splice-bar, and a plain splice-bar, said splice-bar being secured at the joint, substantially as described.

4. In a rail-joint, the combination of two contiguous rails, each having a base or support welded thereto, a corrugated splice-bar, and a plain splice-bar, said bars being angled or offset at top and bottom to fit under the upper surfaces of the rails and over said bases or supports and secured at the joint, substantially as described.

ARTHUR J. MOXHAM.

Witnesses:

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A. J. BRYAN.