

(No Model.)

A. J. MOXHAM.
RAILROAD RAIL JOINT.

No. 513,711.

Patented Jan. 30, 1894.

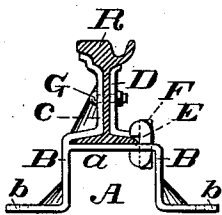


Fig. 1.

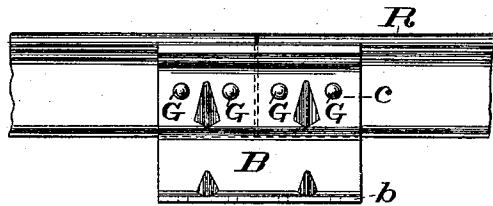


Fig. 2.

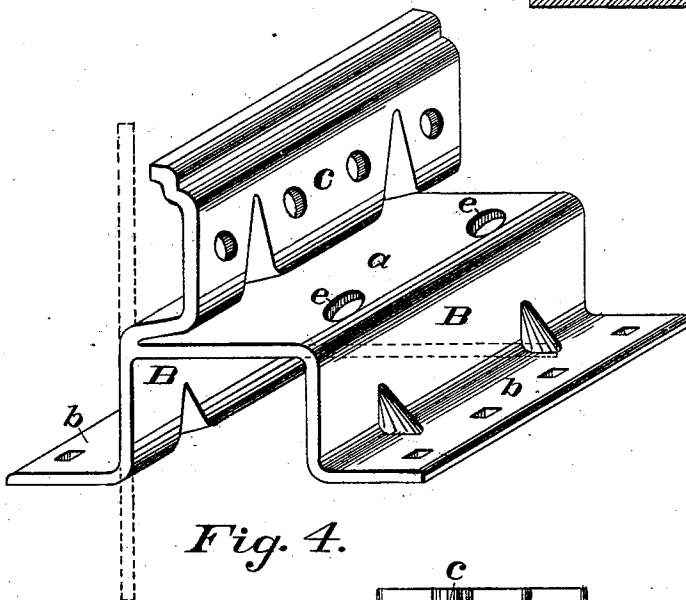


Fig. 4.

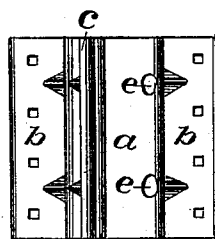


Fig. 3.

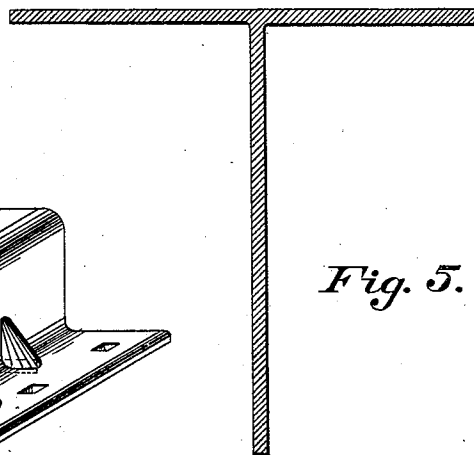


Fig. 5.

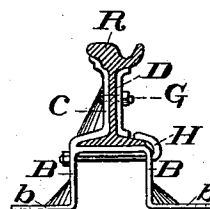


Fig. 6.

WITNESSES:

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ARTHUR J. MOXHAM, OF JOHNSTOWN, PENNSYLVANIA.

RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 513,711, dated January 30, 1894.

Application filed February 20, 1890. Serial No. 341,206. (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 Improvement in Railroad-Rail Joints, which invention or improvement is fully set forth and illustrated in the following specification and accompanying drawings.

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

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 end-elevation as applied to the rail which is shown in cross-section. Fig. 2 is a side-elevation of Fig. 1, looking to the right. Fig. 3 is a view in plan of the chair portion of the joint only. Fig. 4 is a perspective view of the chair portion of the joint only. Fig. 5 is a sectional view of a shape of metal or T-blank preferably used for the construction of the chair-portion of the joint. Fig. 6 is an end-elevation of the joint, showing another form of clip or holding-down bolt for attaching the rail to the chair, the rail being shown in cross-section.

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

The letter A, indicates the chair portion of the joint; *a*, the base or floor on which the rails rest; B, the two sides of the chair; *b*, *b*, the feet of the chair; C, a brace formed integral with the chair-structure A, and which comes up against one side of the rail R; D, a splice-bar; E, F, clips and keys for holding the rail down to the chair; and G, bolts for uniting the brace and splice-bars together through the webs of the rails.

The manner of constructing this joint is as follows:—The two abutting ends of the rails being properly placed upon the chair against the brace thereof the splice-bar D is put in place and the whole firmly united by the bolts G, as clearly shown in Fig. 2. The clips E, which hold the rails down to the chair and which are themselves held in place by the keys F, are then inserted in the elongated

holes, *e*, and turned so that the jaws of the clip clamp the lower flanges of the rails when the key F is driven in, and the joint is complete. Instead of the clips and keys E, F, a hook-head bolt such as shown at H, in Fig. 6, passing through the body of the chair, may be substituted therefor, and it is evident that the brace C may be sufficiently cut away in the center if it is desired to use a separate splice-bar to effect the splice made by the brace.

By means of the rail-joint above described the splice-bar bearing of the ordinary joint is reinforced with a bearing-plate at the bottom firmly clamped to the lower flange of the rail.

I do not confine myself to the particular forms of clip shown as any other well-known suitable device may be substituted therefor; nor do I confine myself to the construction of the chair out of the shape of metal or T-blank shown in Fig. 5.

The invention is applicable to all girder forms of chair whether a box-girder or not, and the brace portion may be upon either side of the chair, the splice-bar being upon the other side.

It is obvious that the shapes of the rails are not essential to the application of this device, but may vary to suit varying circumstances.

Having thus fully described my said improvement as of my invention, I claim—

1. A rail-joint consisting of the following named elements in combination; a base-plate supported by two vertical sides provided with two angular feet; a brace on one side attached to the ends of abutting rails; and a separate splice-bar acting as a washer for said bolts.

2. A rail-joint consisting of the following named elements in combination: a base-plate supported by two vertical sides provided with two angular feet; a brace on one side attached to the ends of abutting rails by bolts; a separate splice-bar acting as a washer for said bolts; and clips attaching the flanges of the rails directly to the base-plate of the chair.

ARTHUR J. MOXHAM.

Witnesses:

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