(14.)

JOHN MAITLAND.

Improvement in Devices for Locking Nuts.

No. 121,724. Patented Dec. 12, 1871.

Fig. 1.

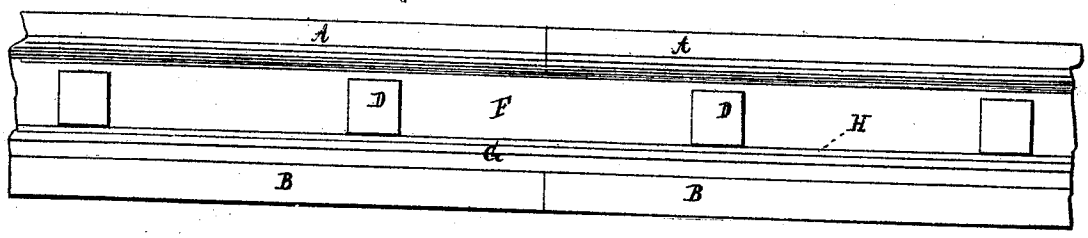


Fig. 2.

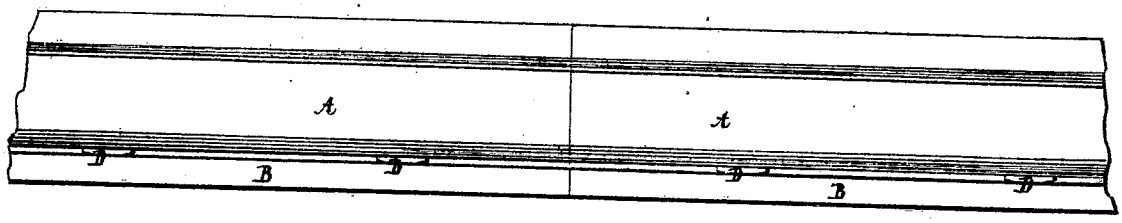
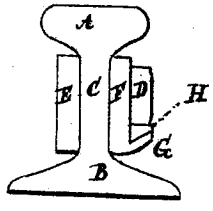


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN MAITLAND, OF NEWBURG, OHIO.

IMPROVEMENT IN DEVICES FOR LOCKING NUTS.

Specification forming part of Letters Patent No. 121,724, dated December 12, 1871.

To all whom it may concern:

Be it known that I, JOHN MAITLAND, of Newburg, in the county of Cuyahoga and State of Ohio, have invented a new and Improved Railway-Rail Splice, of which the following is a specification, reference being had to the accompanying drawing making part of this specification:

Figure 1 is a side view of the rail-splice. Fig. 2 is a top view. Fig. 3 is an end view.

Like letters of reference refer to like parts in the different views.

This invention relates to a railway-rail splice or fish-bars; and the object sought for is to prevent the nuts of the bolts, whereby said bars are secured to the rails, from working off, or screw-bolts used for the same purpose from turning and coming out.

The device for the above said purpose is as follows: In the drawing, Fig. 1, is represented a section of two rails, of which A is the head; B, the base; and C, Fig. 3, the neck; all of which are or may be like those in ordinary use. To the sides of the neck are fitted and secured thereto, by bolts D, splice-bars or plates E F, Fig. 3. It will be observed that the bar or plate E is a plain flat bar, whereas the plate F is provided with a projecting flange-like rib, G, along its lower outer edge, as shown in Fig. 3, in which it will be seen that the upper side of the rib or flange forms an acute angle with the side of the plate.

The application and use of the two plates are as follows: The plates on being applied to the rails and secured thereto by the bolts, or in the event nutted bolts are used the nuts are then turned square with the flange or rib G, which is sufficiently below the bolt to allow the head or nut to turn round for being screwed up for tightening the bars or plates to the rail. This being done, a long slender key, H, is then inserted under the heads or nuts of the bolts, thereby filling up the space or acute angle formed by the rib G and side of the plate aforesaid, as shown in Fig. 3, in which figure it will be seen that the heads of the bolts are in contact with the upper side of the key H, which forms a right-angle with the side of the plate. By the use of this key the head or the nut of the bolt cannot turn round, as the corners strike and press upon the key, thereby keeping them tight as when first screwed up, and, at the same time, the pressure of the nuts upon the key prevents it from coming out endwise from under the nuts or heads of the bolts, and which cannot come out sidewise, as the acute angle of the rib in which the key is fitted prevents it.

By this simple and easily-made and applied device the splicing together of the ends of the rails is made permanently secure, and at but little expense either in material or labor, and which can be easily and readily disconnected by simply driving out the key endwise.

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

The splice-plate or fish-bar F when constructed with a rib or flange, G, as described, and key H, all arranged in relation to the rails and bolts substantially as set forth, and for the purpose specified.

JOHN MAITLAND.

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