

THOMAS W. KIRKWOOD.

Improvement in Devices for Locking Nuts.

No. 125,309

Patented April 2, 1872.

Fig. 1.

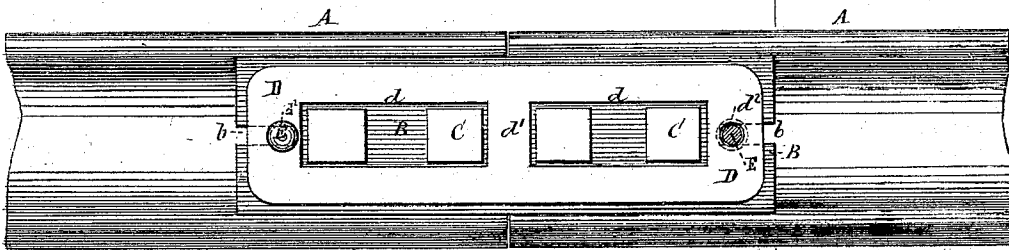
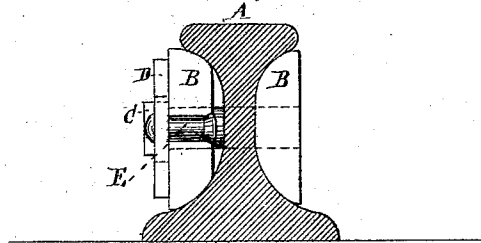


Fig. 2.



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IMPROVEMENT IN DEVICES FOR LOCKING-NUTS.

Specification forming part of Letters Patent No. 125,309, dated April 2, 1872.

Specification describing a Bolt-Fastener for Fish-Plates, invented by THOMAS W. KIRKWOOD, of McKeesport, in the county of Allegheny and State of Pennsylvania.

The invention will first be fully described, and then clearly pointed out in the claim.

In the drawing, Figure 1 is a side elevation, Fig. 2 a cross-section of the rail.

A A represent the two rails which are to be jointed together in line; B, one of the fish-plates; C, the bolt-head; and D, the lock-plate. This plate D has two long slots, *d d*, each of which is intended to receive the pair of bolt-heads which fasten to one rail; has a middle piece, *d'*, which covers the junction of rails and strengthens the plate, and has a small perforation, *d''*, at each end. The fish-plate B is provided with end slots *b b*, through which pass the rivets E E. By this construction the rivets are placed with their heads against the rail, while their shanks pass up through end slots *b b* of the fish-plate and the perforations *d'' d''* of the bolt-lock. The protruding ends of these rivets are then upset and turned down on the face of the lock-plate. This fastens the lock-plate D and fish-plate B rigidly together. The bolt-heads, (after they

have been screwed up,) being inclosed on two sides by the lock-plate, cannot turn. These bolts are preferably end-threaded, passed through the rails, and screwed into the opposite fish-plate. When it is found upon examination that the nuts require tightening up, the workman simply cuts off the rivet-head, removes the lock-plate, tightens the bolts, pushes out the old rivets through the end slots *b b*, replaces the latter with new ones, and passes on.

It will be perceived that there is no necessity whatever for removing the fish-plate in order to get out the old rivet. Of course this device is equally as applicable to nuts as to bolt-heads.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of lock-plate D having end perforations *d'' d''*, and the fish-plate B having end slots *b b*, with rails A A, as and for the purpose described.

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