

Nut-Lock.

Patented June 22, 1875.

A diagram showing a square frame with a circular coil inside. The coil is labeled 'A' in the center. The frame is labeled 'C' at the top, 'B' on the right, and 'C' at the bottom. A wire is connected to the coil, with a label 'C' near the connection point. The wire extends from the bottom of the frame.

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IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. **164,747**, dated June 22, 1875; application filed March 29, 1875.

To all whom it may concern :

Be it known that I, WALTER F. MARTHENS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Nut-Locks, of which the following is a specification :

My invention is an improvement in the class of nut-locks in which a dog or spring-pawl is pivoted to the nut, and engages with a rib or shoulder formed on the bolt to which the nut is applied. The arrangement is such that the spring will hold the locking-plate engaged with the bolt, or disengaged from it, as hereinafter described.

In the accompanying drawing, Figure 1 is a top view. Fig. 2 is a side view, showing the nut and lock in section.

Similar letters of reference indicate corresponding parts.

A represents the bolt; B, the nut; C, the lock-plate; and D the locking-spring. *e* is the pivot on which the plate C turns to lock and unlock the nut. *f* represents grooves (three, more or less) in the bolt, preferably of triangular form, as seen in the drawing. *g* is the lip on the inside of the plate, which catches into the grooves in the bolt. The locking-plate turns freely on its pivot *e*, sufficiently to disengage the lip from the groove for unlocking, and is held by the spring D, which is placed in the recess *h* of the nut. This spring is a simple coiled wire placed with the coil down, having two legs, one of which passes upward

through the plate, as seen in the drawing at *i*, and the other extends upward to the bottom of the plate, and is confined in a small slit in the recess *h*, so that it cannot move. By this means tension is given the other leg, which holds the plate in position to lock the bolt by allowing the lip *g* to catch into the groove, which effectually prevents the bolt from turning. The plate is readily moved on its pivot *e* to disengage the lip *g*, and the nut may be turned off at pleasure, the free leg of the spring holding the lip away from the bolt. Thus the spring holds the plate in either of two positions, *i. e.*, away from, or in contact with, the bolt. To effect this result the coil of the spring turns partly round in the cavity *h* whenever the plate C is turned on its pivot, to cause it to engage or disengage the bolt. The plate covers the spring and protects it from injury.

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

The combination of the pivoted locking-plate C, having an inner lip, *g*, with the nut B, and the coil-spring arranged in recess *h*, and having one of its legs secured to the nut and the other to the locking-plate, as shown and described, to operate as specified.

WALTER F. MARTHENS.

Witnesses:

JAMES REES,
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WILLIAM F. ROBB.