

(No Model.)

P. BRASNAHAN, L. RICHARDSON & A. FRITSCHL.
NUT LOCK.

No. 466,014.

Patented Dec. 29, 1891.

FIG. 1.

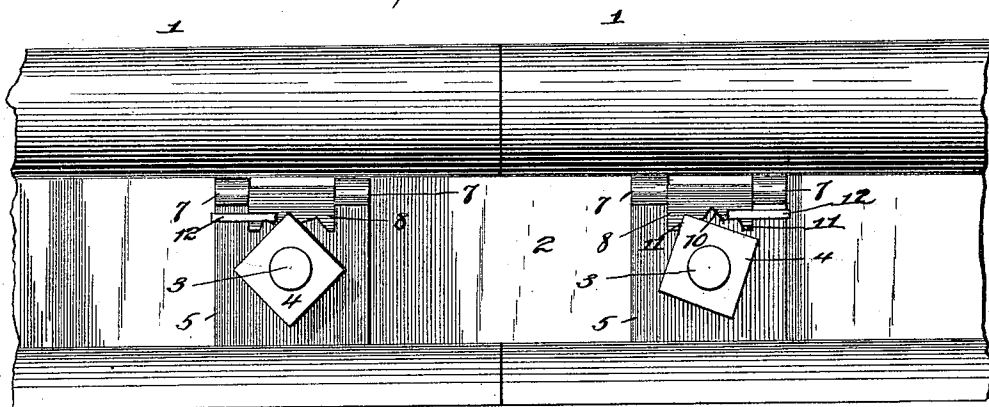


FIG. 2.

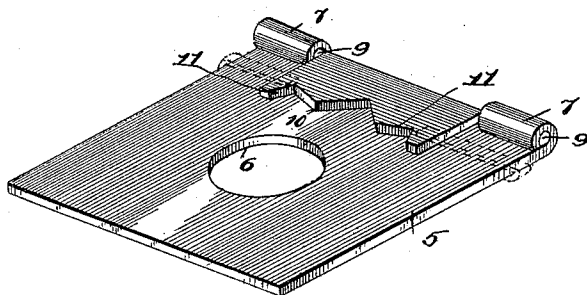
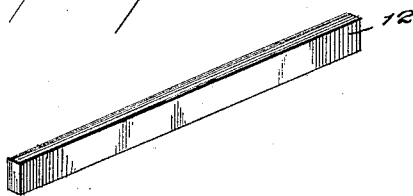


FIG. 3.



Witnesses

Loac Belmont.

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UNITED STATES PATENT OFFICE.

PATRICK BRASNAHAN, LANCELOT RICHARDSON, AND ADOLF FRITSCHI, OF
SUISUN CITY, CALIFORNIA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 466,014, dated December 29, 1891.

Application filed April 11, 1891. Serial No. 388,604. (No model.)

To all whom it may concern:

Be it known that we, PATRICK BRASNAHAN, LANCELOT RICHARDSON, and ADOLF FRITSCHI, citizens of the United States, residing at Suisun City, in the county of Solano and State of California, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention relates to improvements in nut-locks, and the objects in view are to provide a lock of cheap and simple construction adapted to be mounted upon a bolt in such position as to in some cases answer for a washer and to lock the nut in any of its positions upon the bolt and in such manner that the former may be readily removed, when occasion may require, without destroying the efficiency of the lock.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a side elevation of a portion of a railway-joint the nuts of which are locked in accordance with our invention. Fig. 2 is a detail in perspective of the lock-plate and lock. Fig. 3 is a detail of the locking strip or pin.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the rails, 2 the fish-plates, 3 the bolts, and 4 the nuts, of an ordinary railway-joint; or said bolts may be passed through any other object desired.

5 designates a rectangular metal plate, which serves as a washer and also as a base-plate for the lock. This plate is provided with a central perforation 6, which receives the bolt and has its upper edge cut away, leaving projections at the upper corners, which latter are outwardly turned to form bearing-ears 7.

The locking-plate 8 terminates at its opposite ends in reduced bearings 9, which loosely fit into the bearing-ears, so that the plate is capable of swinging in said ears. The lower edge of the locking-plate is provided at its center with a substantially right-angular

notch or recess 10 vertically above the center of the bolt-opening, and at each side of said recess there is formed in the lower edge of the locking-plate angular recesses 11, which are concentric with the center of the bolt-opening 6.

In operation, the bolt having been placed in position, the combined washer and base-plate is next mounted in position, and the locking-plate being swung up the nut is then applied, and after having been screwed securely in the bolt the locking-plate is released and one of its notches 10 or 11 engages and receives an adjacent corner of the nut in accordance with the position of the same. The above forms a comparatively secure lock for nuts, but is liable to become disengaged with the edge of the nut, and for the purpose of more securely locking the nut, or, what would be more properly speaking, locking the locking-plate, we employ the malleable-iron strips or keys 12. The strip or key, when employed, has its inner end inserted between the washer and the fish-plate or other object through which the bolt is passed, and after the nut is in position the outer end of the strip or key is bent up and over the free end of the locking-plate, whereby the latter is prevented from any possible accidental disengagement with the nut. By inserting a suitable tool under the free end of the key 13 the same may be pried from over the locking-plate, the latter released and elevated out of disengagement with the nut, and the nut removed.

From the above it will be apparent that the nuts of bolts may be successfully and securely locked in such manner as will prevent their accidental displacement, and yet at the same time may be readily removed when occasion requires, and this, too, without the destruction of the lock or any impairment whatever.

Having described our invention, what we claim is—

The combination, with the bolt and its nut, of the washer having a perforation to receive the bolt and mounted thereon in rear of the nut, said washer being provided at its upper edge with opposite eyes, a locking-plate re-

duced at its ends to form bearings taking in the eyes and provided at the center of its lower edge and at each side thereof with recesses concentric with the center of the bolt, and a removable locking-pin inserted in rear of the plate and having its outer end bent out and over the lower edge of the locking-plate, substantially as specified.

In testimony that we claim the foregoing as

our own we have hereto affixed our signatures in presence of two witnesses.

PATRICK BRASNAHAN.
LANCELOT RICHARDSON.
ADOLF FRITSCHI.

Witnesses:

WM. NELSON BOWEN,
OSWALD RICHARD SHEPPA.