

M. J. REILLY.

NUT LOCK.

APPLICATION FILED AUG. 31, 1912.

1,131,085.

Patented Mar. 9, 1915.

Fig. 1.

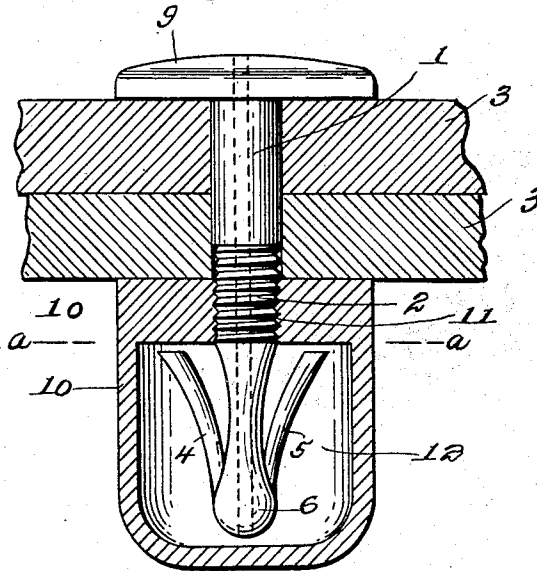


Fig. 2.

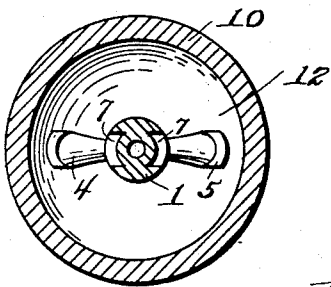


Fig. 3.

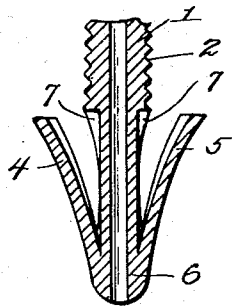
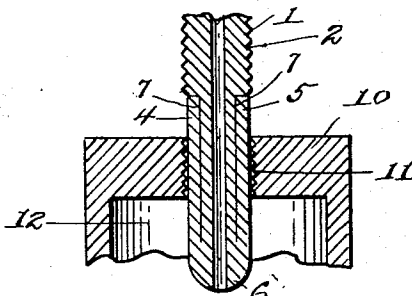


Fig. 4.



WITNESSES

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NUT-LOCK.

1,131,085.

Specification of Letters Patent.

Patented Mar. 9, 1915.

Application filed August 31, 1912. Serial No. 718,090.

To all whom it may concern:

Be it known that I, MATTHEW J. REILLY, a citizen of the United States, residing at West New Brighton, in the county of Richmond and State of New York, have invented new and useful Improvements in Nut-Locks, of which the following is a specification.

My invention relates to the class of nut locks and more specifically to a nut lock which is characterized by elements of strength and lightness to a marked degree and yet can be manufactured and placed upon the market at a minimum cost.

With the above and other objects in view, my invention relates to such details of construction and in the arrangement and combination of parts as will be hereinafter fully described and specifically set forth in the appended claims.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a vertical sectional view of my invention showing parts thereof in elevation. Fig. 2 is a sectional view taken on line *a—*a** of Fig. 1. Fig. 3 is a detail view of a portion of the locking mechanism. Fig. 4 is a fragmentary view of a portion of the locking mechanism showing the manner in which the nut is inserted over the end of the bolt.

In the accompanying drawings wherein is illustrated the proper form of my invention the numeral 1 designates the shank of a bolt which has a portion thereof provided with screw threads as shown at 2, this part being formed in the ordinary manner and similar to the bolt now extensively used. While the members 3 are of the ordinary joist type they are merely shown in order to illustrate the advantages of my invention, and it should be recognized that I am not limited to the provisions of these parts and that my invention can be advantageously employed in connection with any other suitable structure desired.

The portion of the bolt which projects beyond the screw threaded portion 2 is provided as is shown with a pair of diametrically opposite members 4 and 5. These members are struck from the lower portion

6 of the bolt, and when moved into the position shown in Fig. 1 of the drawings provide the recesses 7 therein. It is obvious that the parts 4 and 5 can be moved to lie flush with the outer surface of the bolt, that is, when the nut is desired to be inserted thereover.

The nut which I have provided sets forth a body portion 10, the said body portion and screw threaded opening 11 provided therein for engagement with the screw threaded portion 2 of the bolt, and which has a portion thereof hollowed away as shown at 12 for the reception of the portion 6 and members 4 and 5.

The operation of my invention may be as follows: When it is desired to dispose the nut upon the bolt, the nut is forced onto the end of the bolt and contracts the members 4 and 5 said members being caused to move into the recesses 7 and flush with the outer surface of the bolt. As soon as the nut has passed over the members, however, they will again spring into the position shown in Fig. 1. The nut is then secured upon the bolt in the usual manner and with the usual instruments until it is tightly jammed against the members 3 or whatever structure is adjacent thereof. Now if a transverse motion is applied to the nut, it will be apparent that the members 4 and 5 will engage the base of the hollowed portion 12 of the nut and thereby prevent any further rotation thereof in relation to the head portion 9 of the bolt.

It will be seen that I have provided a bolt with nut retaining means which is adapted to be inclosed by and to lock the hollow nut against reverse rotation.

From the foregoing, it is thought it will be recognized that the nut lock which I have provided forms a permanent seal which provides a very simple and effective means for securing a nut on a bolt.

I desire it to be understood that I may make slight changes in the construction and in the arrangement and combination of parts without departing from the spirit of my invention, provided, however, such changes fall within the scope of the subjoined claims.

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

1. In a nut lock, a bolt having an uninterrupted threaded portion between its head

and its nut ends, and provided beyond its threaded portion adjacent its nut end with a spring tongue struck up from the body of the bolt and normally projecting outwardly therefrom with its free end extending toward the head end of the bolt, and a hollow nut inclosing the tongue and nut end of the bolt and having one wall provided with a threaded aperture adapted to be turned onto the threaded portion of the bolt and serving to engage the free end of said tongue, thereby preventing loosening of the nut, substantially as described.

2. In a nut lock, a bolt having a threaded portion and provided with one or more tongues struck up from the body of the bolt adjacent its nut end and having free ends projecting toward the head end of the bolt, and a hollow nut inclosing said tongues and nut end of the bolt and provided in one of its walls with a threaded aperture for engagement with the threaded portion of the bolt, the apertured wall of the nut being adapted for engagement with the free ends

of the tongues to prevent loosening of the nut, substantially as described.

3. In a nut lock, a bolt having a threaded portion and a nut retaining means on its end comprising a resilient portion struck up from the body of the bolt and normally disposed outwardly from the periphery of the bolt but shaped to be forced into at least flush relation with the periphery of the bolt, and a hollow nut having only one opening therein provided with threads and adapted to be forced over said end of the bolt and resilient portion to collapse the latter and thereafter release it and permit of expansion of said resilient portion abreast of one interior wall portion of the nut upon turning movement of the threaded opening of the nut onto the threaded portion of the bolt, substantially as described.

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Witnesses:

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RICHARD REDDY.