

(No Model.)

J. M. MARTIN, Jr.
NUT LOCK.

No. 546,173.

Patented Sept. 10, 1895.

Fig. 1.

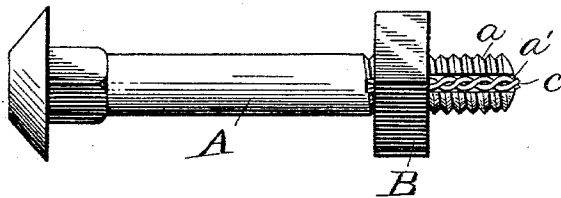


Fig. 2.

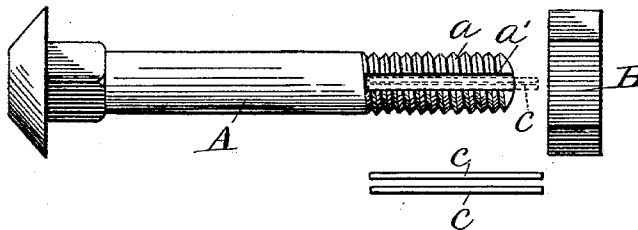


Fig. 3.

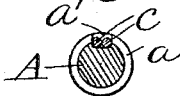


Fig. 4.

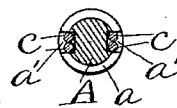


Fig. 5.

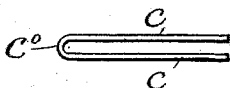
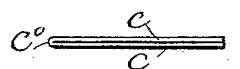


Fig. 6.



Witnesses

Joseph Blackwood
Robert B. Blackwood.

Inventor,

John M. Martin, Jr.,
by Whitman & Wilkinson,
Attorneys.

UNITED STATES PATENT OFFICE.

JOHN M. MARTIN, JR., OF MARTIN, FLORIDA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 546,173, dated September 10, 1895.

Application filed April 16, 1895. Serial No. 545,932. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. MARTIN, JR., a citizen of the United States, residing at Martin P. O., in the county of Marion and State of Florida, have invented certain new and useful Improvements in Nut-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in nut-locks; and it consists of certain novel features hereinafter described and claimed. Reference is had to the accompanying drawings, in which the same parts are indicated by the same letters throughout the several views.

Figure 1 represents a side elevation of a bolt of ordinary construction having a nut thereon locked by my improved nut-lock. Fig. 2 represents a view of a bolt and nut together with the nut-lock all ready for assembling, the nut shown being of the hexagonal type, but any other form of nut may be used. Fig. 3 represents a transverse section through the threaded portion of the bolt, showing the nut-lock in the proper position therein when but one lock is used. Fig. 4 represents a transverse section of a similar bolt when two locks are used. Fig. 5 represents a wire loop shaped like a hair-pin and adapted for use in the bolt; and Fig. 6 represents a similar wire loop having the parts hammered together, so as to fit snugly in the groove in the bolt, as will be hereinafter described.

A represents the bolt, which is of ordinary construction and is provided with the ordinary screw-thread *a* and also with a longitudinal groove *a'*, cut transversely through the screw-threads, as shown in Figs. 1 and 2.

B represents a nut of any ordinary or desired type. Thus in Fig. 1 the said nut is represented as quadrangular, and in Fig. 2 as hexagonal, but the exterior shape of the nut has nothing to do with my invention.

The nut-lock proper consists of one or more pairs of wires *c*, which may be either made separately, as shown in Fig. 2, or connected together to form the loop, as shown in Figs. 5 and 6. These wires are made of such a size relative to the groove *a'* that they will lie parallel in said groove, but will project up above the base of the screw-threads *a*. Thus as the nut is screwed home it will cut parts of male threads on these wires, which threads will register with the threads on the bolt. For facility in starting the nut on the bolt the groove *a'* is preferably made somewhat deeper near the outer end, so as to let the nut be readily screwed onto the first two or three threads, and thus take a firm hold before it begins to cut the threads on the wires *c*. These wires *c* are preferably ordinary soft-iron wires, such as are used for binding up hay, but wires of copper or brass or any other metal softer than steel may be used, if desired. In practice it will be only necessary to use one pair of the said wires, but two or more pairs may be used, if desired. Thus in Fig. 4 I have shown two pairs of the said wires mounted in corresponding grooves in the bolt.

The invention is used as follows: The wires *c*, whether made separate, as in Fig. 2, or connected together, as in Fig. 6, are laid in the groove *a'*, as indicated in dotted lines in Fig. 2. Then the nut is screwed home, cutting as it is screwed down male threads on the wires, and thus firmly holding the said wires against being pulled out longitudinally from the said groove. Now when the nut is screwed home the protruding ends of the wires (shown most clearly in Fig. 2) are seized with a pair of pinchers or other tool, and the two wires are twisted together, as shown in Fig. 1. The twist in the said wires will prevent the nut from turning backward thereon, while the threads cut in the wire by the said nut will prevent the said wires from being withdrawn longitudinally, and thus a safe, cheap, and simple nut-lock is obtained. In order to unlock the bolt, raise the free ends of the wires sufficiently to grasp them with the pinchers, untwist the same, and then unscrew the nut, which may be readily done without injury either to the bolt or to the nut. Thus it will be seen that the herein described nut-lock is not only a safe lock, but may also be readily unlocked.

The herein-described nut-lock is especially adapted for use on vehicles, plows, or farm implements generally, where wires can ordinarily be found suitable in every way for the purpose, and where it is of especial importance.

tance to have cheap, simple, and safe locks for the nuts.

It will be obvious that three or more wires or even a strand of wire rope may be used in place of the two wires herein referred to.

The various advantages of the herein described construction will readily suggest themselves to any practical mind.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

In a nut-lock, the combination with a screw-

threaded bolt and a groove or grooves therein across the screwthreads, of a nut screwed on to said screw-threads, and a plurality of wires lying in said groove or grooves and cut into by said nut and twisted together in rear of said nut, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. MARTIN, JR.

Witnesses:

JOHN C. WILSON,

MAURICE J. SIOUSSA.