

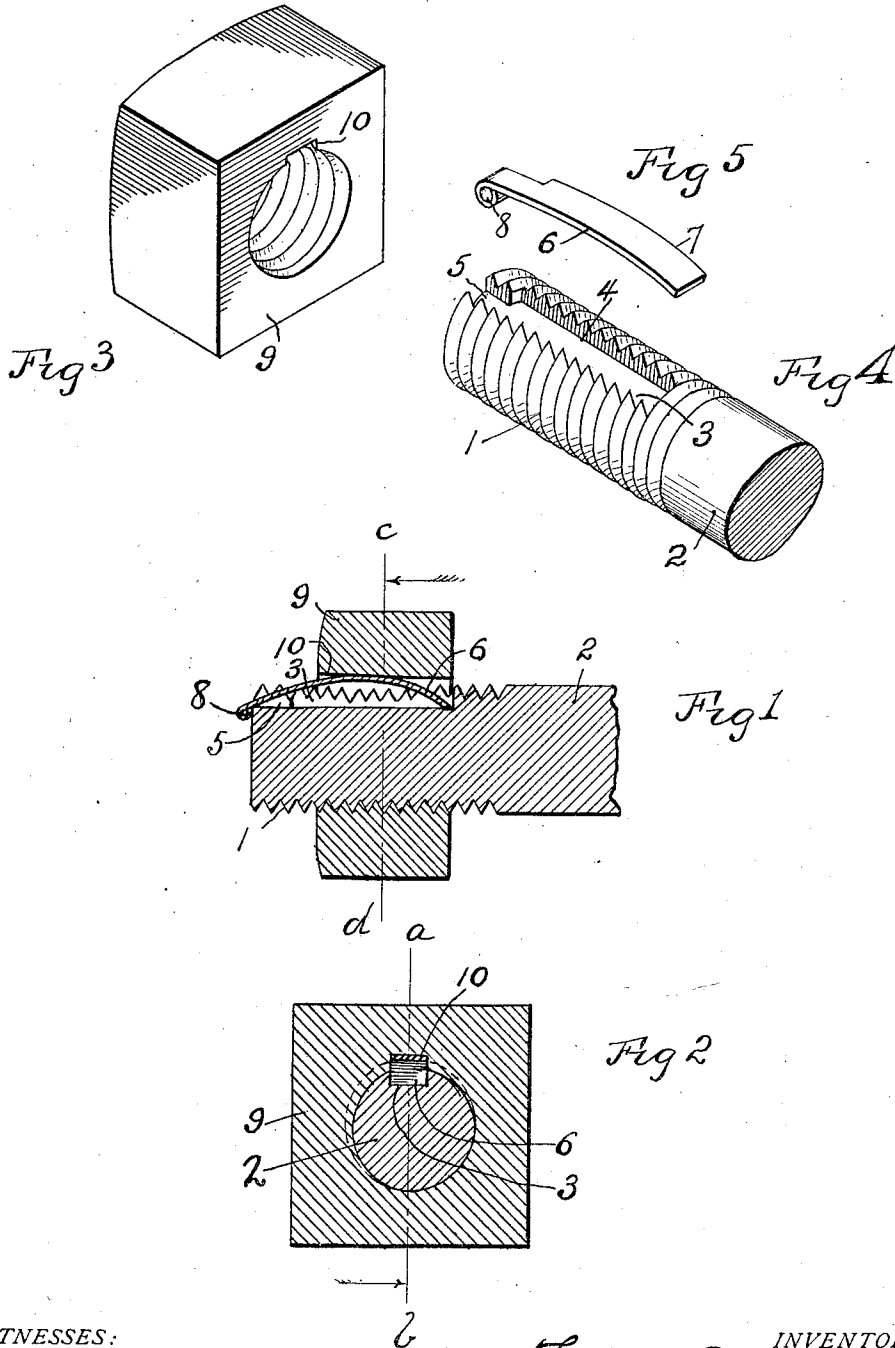
T. L. LOFLAND.

NUT LOCK.

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1,047,542.

Patented Dec. 17, 1912.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS L. LOFLAND, OF KANSAS CITY, KANSAS.

## NUT-LOCK.

1,047,542.

Specification of Letters Patent.

Patented Dec. 17, 1912.

Application filed August 12, 1912. Serial No. 714,520.

*To all whom it may concern:*

Be it known that I, THOMAS L. LOFLAND, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented a certain new and useful Improvement in Nut-Locks, of which the following is a specification.

My invention relates to improvements in nut locks.

The object of my invention is to provide a simple and efficient nut lock, which may be locked and unlocked without mutilation of any of the parts and which is not liable to be accidentally unlocked in use.

In the accompanying drawings which illustrate my invention—Figure 1 is a longitudinal, central sectional view showing the bolt, nut and key in the locked positions, the view being taken on the line *a—b* of Fig. 2. Fig. 2 is a cross section on the line *c—d* of Fig. 1. Figs. 3, 4 and 5 are respectively perspective views of the bolt, key and nut.

Similar characters of reference designate similar parts in the different views.

The threaded portion 1 of the bolt 2, is provided with a longitudinal peripheral groove 3, having an off-set 4 and a contracted portion 5.

The key 6 is preferably of spring material, such as spring steel, is of an arcuate shape, and is adapted to be fitted in the groove 3, one edge of the key having an off-set portion 7, adapted to enter the off-set portion 4 of the groove 3, to prevent the endwise accidental withdrawal of the key from the groove. The outer or contracted end of the key 6 is preferably provided with an eye 8, by means of which the key may be seized and withdrawn in the manner hereinafter described.

The nut 9, which is fitted to the threaded portion 1 of the bolt, is provided through its threaded portion with a longitudinal groove 10, which is adapted to register with the groove 3, and is preferably of a depth such that the key 6 may be inserted endwise into the groove and upon the threads of the bolt.

In the operation of my invention, the nut 9 is turned to the position which it is to occupy on the bolt and in a position in which the grooves 10 and 3 will register. The key 6 is then slipped over the threads of the contracted portion 5 of the groove 3, the key

being forced inwardly to a position in which the off-set portion 7 will pass wholly into the off-set portion 4 of the groove, upon which the contracted outer end of the key will slip down into the contracted portion 5 of the groove. The arch or curve of the key 6 must be such that when the key is in the locking position just referred to, it will still be disposed in the groove 10 of the nut to prevent the nut from turning.

To remove the key, it is but necessary to insert a nail or wire in the eye 8 and swing the outer end laterally so as to bring the outer end of the off-set portion 7 above the threads of the bolt, upon which the key may then be easily removed by endwise withdrawal.

I do not limit my invention to the structure shown and described, as various modifications, within the scope of the appended claims, may be made without departing from the spirit of my invention.

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

1. In a nut lock, a bolt having a longitudinal groove with a lateral off-set, a nut having in its threaded portion a longitudinal groove adapted to register with the bolt groove, and a resilient arcuate key adapted to be disposed in said grooves for locking the bolt and nut together and having an off-set portion for entering the off-set portion of the bolt groove for preventing the longitudinal withdrawal of the key.

2. In a nut lock, a bolt having a longitudinal peripheral groove having an off-set and contracted at its outer end, an arcuate resilient key adapted to be mounted in said groove, and having an off-set portion adapted to enter the off-set of said groove, and a nut fitted to the bolt and having through its threaded portion a longitudinal groove of sufficient depth to permit the endwise insertion of the key into said grooves and between the threaded portion of the bolt and the nut.

3. In a nut lock, a bolt having a longitudinal peripheral groove with an off-set and contracted at its outer end, an arcuate resilient key having an off-set portion adapted to enter the off-set in the groove and provided at its outer end with an eye and with a contracted portion for extending through the contracted portion of said groove, and

a nut fitted to the bolt and having through its threaded portion a longitudinal groove adapted to register with the groove in the bolt, the groove in the nut extending outside the threads sufficiently to admit the endwise insertion into said groove over the threads of the bolt.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

THOMAS L. LOFLAND.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."