

R. COOPER.
NUT LOCK.
APPLICATION FILED SEPT. 7, 1910.

975,605.

Patented Nov. 15, 1910.

Fig. 1.

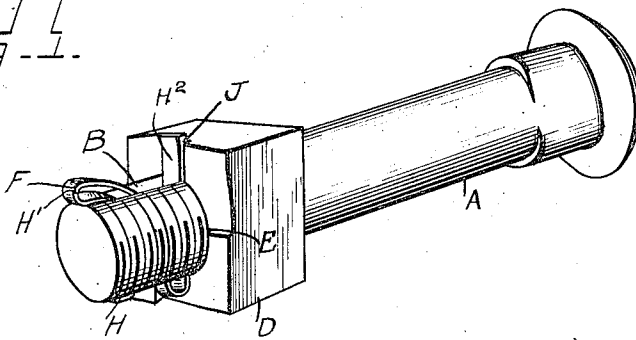


Fig. 2.

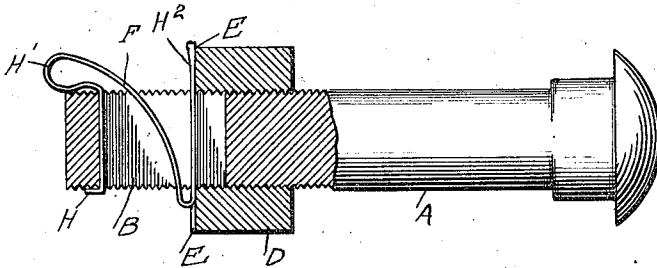
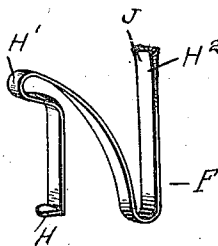


Fig. 3.



WITNESSES:

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NUT-LOCK.

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To all whom it may concern:

Be it known that I, ROBERT COOPER, a subject of the King of England, residing at Chicago, in the county of Cook and State of Illinois, 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in nut and bolt locks and comprises a simple and efficient device of this nature consisting of a slotted bolt with a resilient member passing through the slot of the bolt and adapted to engage ratchet teeth upon a nut.

The invention comprises various details of construction and combinations and arrangements of parts which will be herein-after fully described and then specifically defined in the appended claim.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a perspective view of the device showing the nut and bolt locked together. Fig. 2 is a longitudinal sectional view, and Fig. 3 is a detailed view of the resilient locking member.

Reference now being had to the details of the drawings by letter, A designates a bolt having a longitudinal slot B therein and is threaded in the usual manner. A nut D is interiorly threaded and fits the bolt and has a series of ratchet teeth E upon its outer face. A resilient member or spring, designated by letter F, a detail of which is shown in the drawings, has one end H bent at an angle and is adapted to engage over the marginal edge of the slot, as shown in the sectional view of the drawings, while another portion H' is bowed and engages the edge of the opposite slit, while the shank

portion of the spring is diagonally disposed and has a flat end H² adapted to engage one or another of the ratchet teeth. The inner end of the spring is preferably enlarged, as shown at J.

In applying the device, the nut is screwed on until the ratchet is several threads below the end of the slot F in the bolt, after which the spring is contracted so that the portion having an angled end is contracted and the hooked end engaged over the slot. Afterward, by pressing down upon the bowed portion, the device may be pushed in place and the spring, when it contracts, assuming the position shown in the drawings. The marginal edge of the spring engaging the ratchet teeth will serve to hold the same from loosening. When it is desired to move the nut, the spring may be held out of the path of the ratchet teeth and the nut allowed to turn.

While I have shown my device as made of a flat spring material, it will be understood that wire may be used equally as well.

By having the end of the spring widened or tapering as shown, means is provided for preventing the spring from pulling through the slot in the bolt.

What I claim to be new is:—

A nut lock comprising a bolt having a longitudinal slot therein, a nut mounted upon the threaded bolt and having ratchet teeth in the face thereof, a spring having one end bent at an angle engaging over one marginal edge of the slot and bent to form a bowed portion engaging the other marginal edge of the slot, a portion of the spring extending diagonally through the slot and bent upon itself forming a flat portion engaging the ratchet teeth.

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

ROBERT COOPER.

Witnesses:

HENRY J. HENN,
G. H. KNOPP.