

No. 858,045.

PATENTED JUNE 25, 1907.

H. C. WERNER.

NUT LOCK.

APPLICATION FILED OCT. 5, 1906.

Fig. 1.

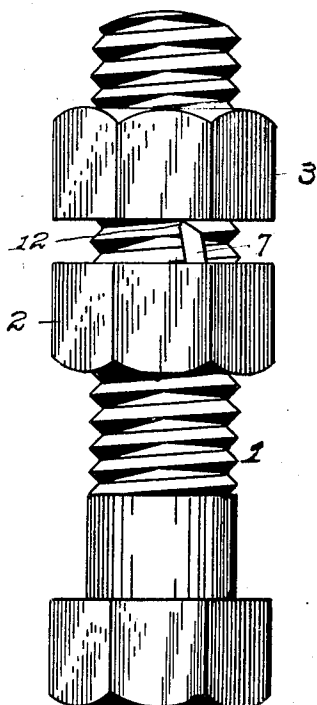


Fig. 2.

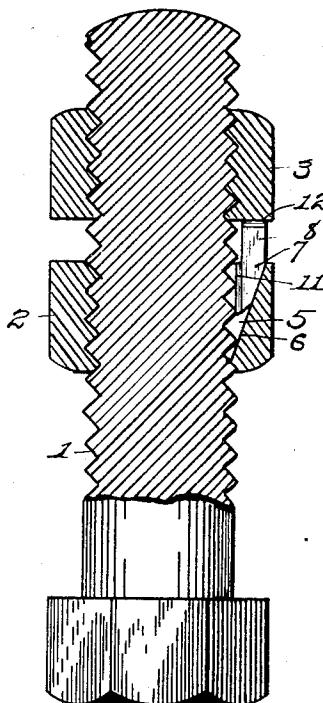


Fig. 3.

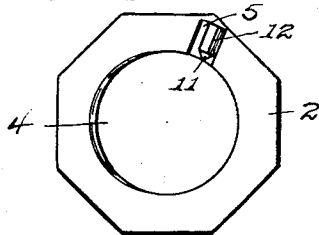
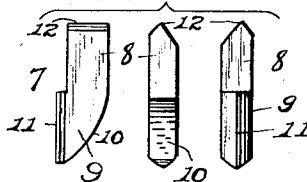


Fig. 4.



WITNESSES:

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HARRY C. WERNER, OF WHEELING, WEST VIRGINIA.

NUT-LOCK.

No. 858,045.

Specification of Letters Patent.

Patented June 25, 1907.

Application filed October 5, 1906. Serial No. 337,533.

To all whom it may concern:

Be it known that I, HARRY C. WERNER, a citizen of the United States of America, and a resident of Wheeling, county of Ohio, and State of West Virginia, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

My invention relates to new and useful improvements in nut-locks, and it has for its object to provide a simple, cheap and efficient device for preventing the retraction of nuts on their bolts.

A further object of the invention is to provide a nut-lock which is efficient for preventing the nut from working off the bolt and which admits of the convenient removal of the nut when occasion requires.

In describing the invention in detail, reference is herein had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of a bolt to which the invention is applied; Fig. 2 is a longitudinal section of the same; Fig. 3 is an outer end view of the bearing-nut; and in Fig. 4 is respectively illustrated a side view, a rear edge view, and a front edge view of the key.

Referring to said drawings, in which like reference-numerals designate like parts throughout the several views—

1 indicates a screw-bolt, 2 a bearing-nut adapted for engagement with a bearing wall from which the threaded end of said bolt projects, and 3 a follower, or jam-nut. In the outer face, or end, of the bearing-nut 2 at one side of the central threaded aperture 4 therethrough and in open communication with said aperture is an inwardly-inclined recess 5, the rear wall 6 of which is inwardly inclined, as shown. Loosely seated in said recess 5 is a key 7, preferably of hardened steel, consisting of a body-portion 8, substantially rectangular in cross-section, and an integral wedge-portion 9 adapted for fitting in said recess 5 and having an inclined rear wall 10 in engagement with the inclined wall 6 of the recess. The front edge of the wedge-portion 9 is beveled longitudinally to an edge 11 which is adapted to sink into the threads of the bolt 1 when the key is subjected to inward pressure. The body-portion 8 of the key 7 stands outside the recess 5 and has its outer end beveled to a forwardly-directed edge 12, said edge being substantially radial to the bolt 1.

When the jam-nut 3 is screwed up behind the bearing-nut 2, the front face thereof slides over said forwardly-directed beveled edge 12, forcing the key 7 inward in the recess and causing the beveled edge 11 to cut into the threads of the bolt.

The recess 5 is larger in width than the key which fits therein, hence, when the jam-nut in turning forward engages the outer beveled end 12 of the key, it causes the latter to lean over in a forwardly-inclined position. The forwardly-directed edge 12 cuts into the face of the jam-nut 3 when the latter begins to retract, thus holding it firmly in place.

When it is desired to remove the nuts 2 and 3 from the bolt, a chisel or like edge-tool is inserted in the angle formed by the jam-nut 3 and the beveled edge 12 of the key; then, upon striking said tool a sharp blow, the key will be further sprung inward in said recess, disengaging said jam-nut therefrom. Upon the removal of the jam-nut, the key may be easily removed after striking it lightly on its opposite sides to loosen its hold on the threads of the bolt.

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

1. In a nut-lock, the combination with a screw-bolt, of a bearing-nut having an inwardly-inclined recess therein at one side of the central threaded aperture thereof and in open communication with said aperture, a tapered key seated in said recess, said key having a longitudinally beveled inner edge adapted to cut into the threads of the bolt upon the application of pressure to the outer end of the key, and having a beveled end projecting outwardly from said recess, said beveled end being adapted to be engaged by a jam-nut screwed upon said bolt and to cut into said jam-nut when the latter begins to retract.

2. In a nut-lock, the combination with a screw-bolt, of a bearing-nut having a recess therein, said recess being directed inwardly from the outer face of said nut and having its rear wall inwardly inclined, a tapered key of less width than said recess seated therein with its outer end projecting therefrom and having a beveled edge disposed in opposing relation to the threads of the bolt, said projecting outer end of the key being forwardly beveled to admit of a jam-nut sliding thereover in a forward direction exerting a wedging pressure on said key and adapted for in-

terlocking engagement with said jam-nut when the latter is screwed up firmly therebehind to prevent the retraction of the jam-nut.

5 3. In a nut-lock, the combination with a screw-bolt, of a bearing-nut having a recess therein, said recess being directed inwardly from the outer face of said nut and having its rear wall inwardly inclined, a key seated in
10 said recess with its outer end projecting therefrom, said key having a tapered inner end and having a beveled edge in opposing relation to the threads of the bolt, the outer end of said key having a forwardly beveled
15 edge over which a jam-nut is adapted to slide in a forward direction to wedge said key in said recess and adapted to bite into and prevent the retraction of said jam-nut.

20 4. In a nut-lock, the combination with a screw-bolt, of a bearing-nut having a recess therein, said recess being directed inwardly

from the outer face of said nut and having its rear wall inwardly inclined, a key seated in said recess with its outer end projecting therefrom, said key being of less width than 25 said recess and adapted to lie in a forwardly inclined position therein, the inner edge of said key being beveled and disposed in opposing relation to the threads of the bolt, and the outer end of said key being provided with 30 a bevel against which the pressure of a jam-nut screwed up therebehind is applied to drive said key inward, said bevel being adapted to bite into said jam-nut to prevent the retraction thereof. 35

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

HARRY C. WERNER.

Witnesses:

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R. F. DILWORTH.