

(No Model.)

A. S. WRIGHT.
NUT LOCK.

No. 602,120.

Patented Apr. 12, 1898.

Fig. 1.

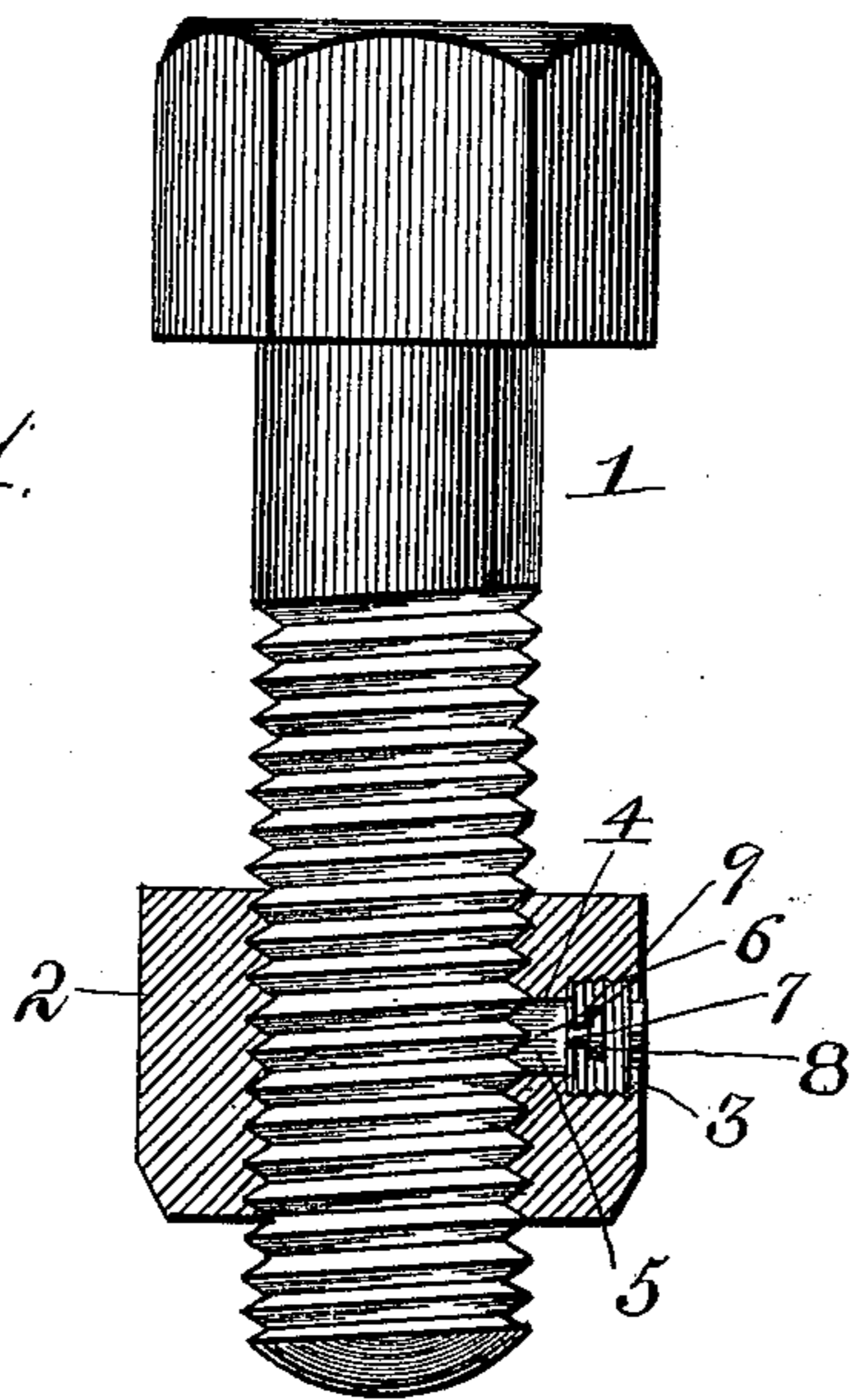


Fig. 2.

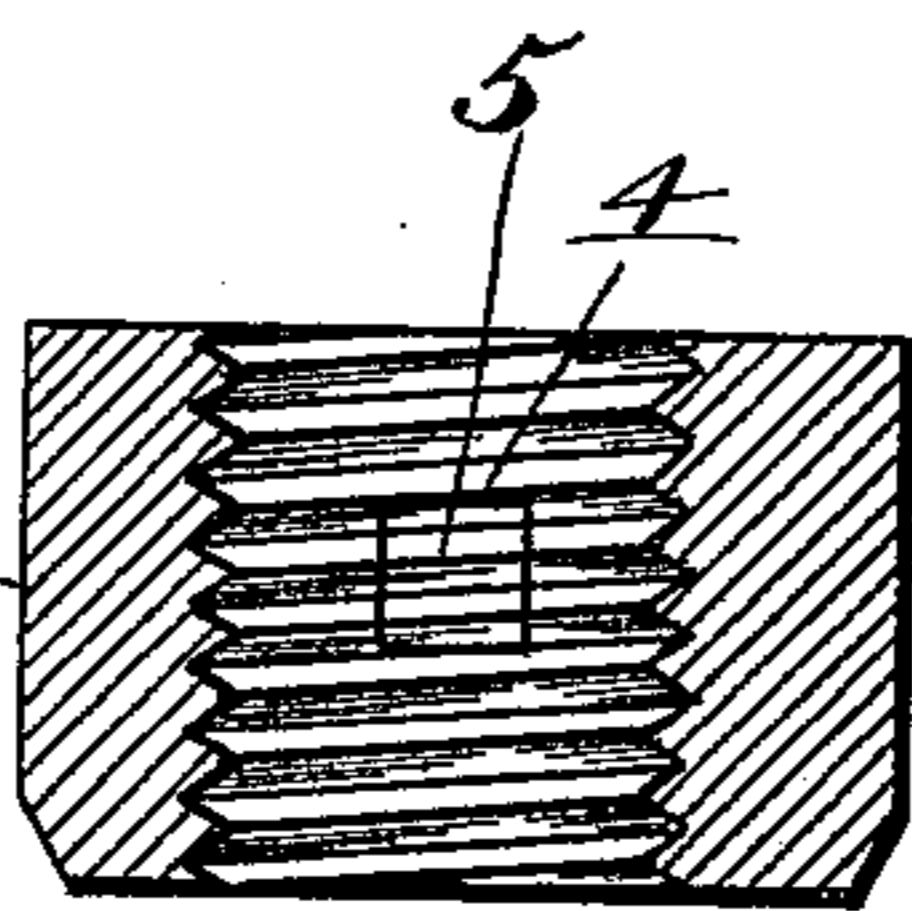
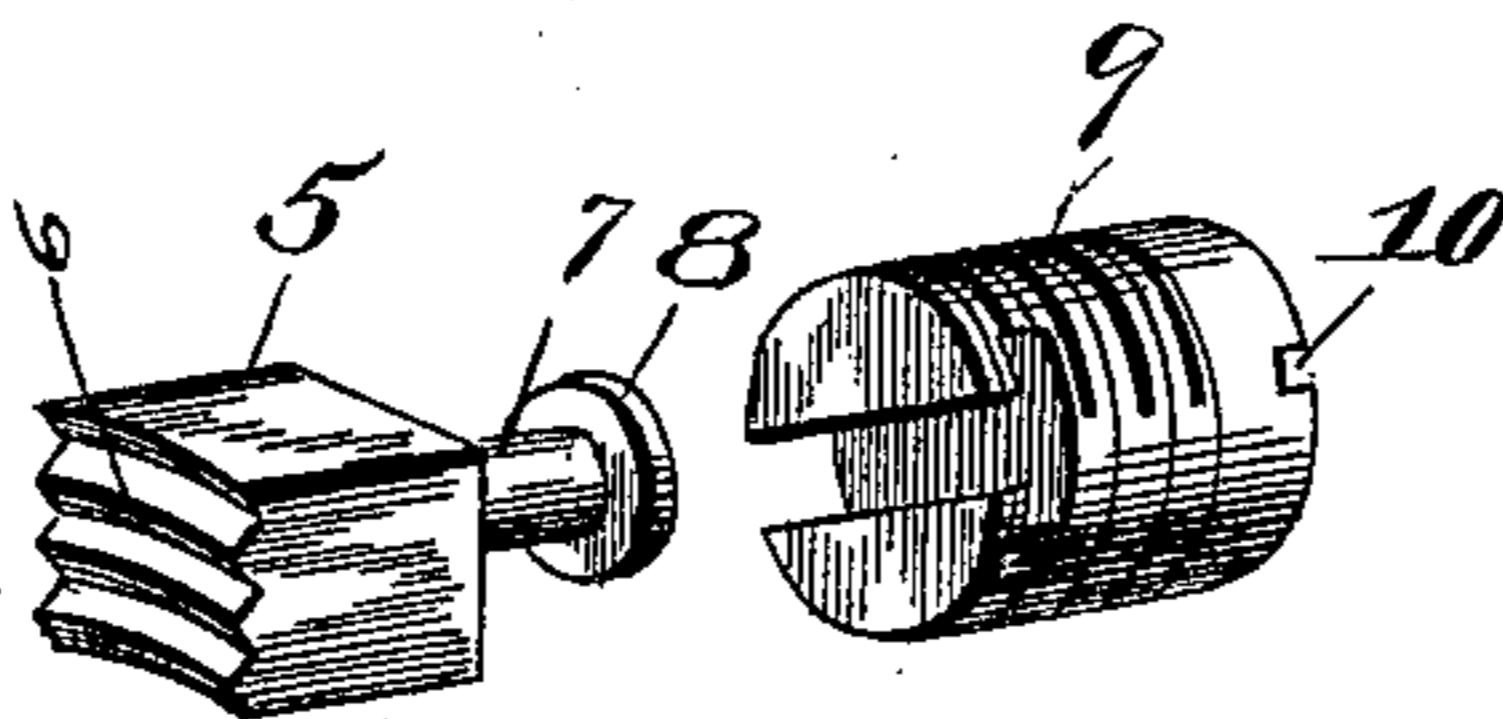


Fig. 3.



Witnesses

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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 602,120, dated April 12, 1898.

Application filed July 14, 1897. Serial No. 644,543. (No model.)

To all whom it may concern:

Be it known that I, ALBERT S. WRIGHT, of Battle Creek, in the county of Calhoun and State of Michigan, 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.

The invention relates to a nut-lock in which the nut carries in itself the means for locking it to and unlocking it from the bolt.

It consists in the combination, with a nut provided with a perforation extending through its sidewall and having a squared or polygonal portion adjacent to the threaded bore of the nut, of a block conforming in shape to the said end of the perforation and provided on its inner face with screw-threads adapted to engage the screw-threads of the bolt, and a screw engaging the outer end of the block or die and adjustable in the screw-threaded outer end of the perforation in the nut for moving the block or die into or out of engagement with the bolt, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a sectional view of the nut, showing the bolt and the means for locking the nut thereto in side elevation. Fig. 2 represents a section through the nut, showing the inner face of the locking die or block; and Fig. 3 is a perspective view of the locking block or die and its actuating-screw.

1 indicates a bolt of any usual or desired construction, and 2 a nut engaging the screw-threaded end of said bolt, said nut being square or polygonal in form on its outer face for adapting it to be adjusted upon the bolt by means of a wrench in the usual manner. The nut is provided with one or more perforations (indicated at 3) extending from the threaded bore of the nut to the outer face thereof and upon one or more sides of the nut, as may be deemed expedient. The inner end of this perforation is square or polygonal in form, as indicated at 4, adapting it to receive a block 5, adjustable in said end and provided on its face, adjacent to the screw-threaded bore of the nut, with the ribs or screw-threads 6, arranged upon the face of the block to engage the threads of the bolt

when the block or die 5 is adjusted in proper relation thereto. The outer end of this block or die is provided with a headed pin 7, 8 indicating the head of the pin, said pin being preferably formed integral with the block 5; but it may be otherwise formed and rigidly secured to said block. The block 5 is made sufficiently small to be passed through the enlarged outer end of the perforation 3 and into the squared or polygonal portion of the perforation at the inner end thereof. This enlarged outer end of the perforation is screw-threaded to receive a screw 9, which is provided on its inner end with a T-shaped or dovetail-formed groove for the reception of the head 8 of the pin 7, thereby engaging the block 5 and making it adjustable with the screw 9. The screw 9 may be provided with a nick 10 in its outer face to receive a screw-driver for the adjustment of the screw, or it may be provided with a polygonal head at its outer end for adapting it to be adjustable by the wrench, as described. The nicked outer end, however, is preferred as adapting the end of the screw to move within the outer face of the nut and out of danger of interference with the use of the wrench in adjusting said nut upon the bolt.

By the construction described it will be seen that the block or die 5 is adapted to be adjusted, by means of the screw 9, into engagement with the threads of the bolt 1 after the nut 2 has been properly adjusted upon said bolt, and its screw-threaded or ribbed face is adapted to engage the threads of the bolt with the grasp given by its adjusting set-screw and so effectually prevent the relative rotation of the bolt and nut while such engagement is continued. The polygonal form of the inner end of the perforation and the corresponding form of the block 5 prevents rotation of the latter and insures the proper presentation of the corrugated or ribbed faces 6 to the threads of the bolt. The face of the block should be so hardened or formed of such material as to insure the thorough engagement of its threads with those of the bolt.

When it is desired to relieve the bolt or the nut from the block, the screw 9 can be readily backed, and carries with it the block 5, relieving said block from engagement with the bolt and rendering the relative movement of

the bolt and nut possible for the removal of the bolt or nut, as may be required. The nut is thus provided with means for engaging the bolt and locking the same in its relation to the nut.

By the construction described the nut is provided with a set-screw having a non-rotating screw-threaded inner face adapted by the adjustment of the screw to engage the threads of the bolt in such manner as to avoid injury thereto and at the same time to effectually lock the nut and bolt against relative rotation.

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

1. In a nut-lock, the nut provided on one side of its screw-threaded bore with a perforation angular in form at its inner end and round and screw-threaded at its outer end, in combination with a block or die roughened on its inner face and conforming in shape in transverse section to the inner end of said perforation, and a screw adjustable in the outer screw-threaded end of said perforation, said screw being connected with the outer end of said block or die for moving it into and out of engagement with the bolt, substantially as described.

2. The combination with a nut provided with a perforation extending at right angles to its screw-threaded bore, said perforation being angular or polygonal in form at its inner end adjacent to said bore, and rounded or screw-threaded at its outer end, of a block or die movable in said angular end and held against rotation thereby, and having a threaded inner face for engaging the threads of the screw-bolt, and a screw coupled to said block or die and adjustable in the outer end of said perforation for moving said block into and out of engagement with the bolt, substantially as described.

3. The combination with a nut having a perforation extending laterally from its bore and screw-threaded at its outer end, of a set-screw engaging said perforation, and a non-rotatable block connected with the inner end of said screw and having a screw-threaded inner face, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ALBERT S. WRIGHT.

Witnesses:

W. L. HOOVER,
S. N. CARROLL.