

(No Model.)

J. G. NETSCHERT.
LOCK NUT.

No. 471,492.

Patented Mar. 22, 1892.

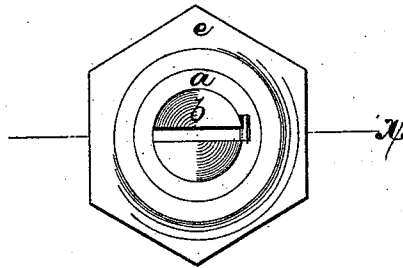


Fig. 1.

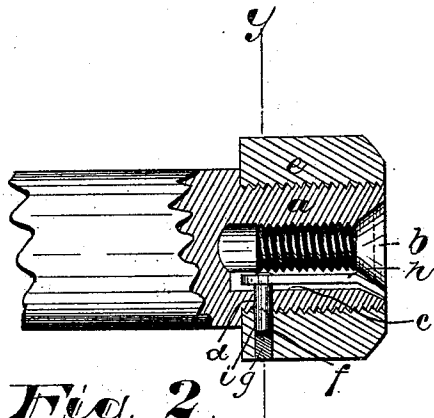


Fig. 2.

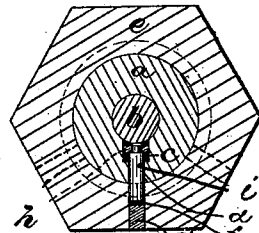


Fig. 3.

Witnesses

Inventor

Oscar A. Michel.
James Wayland

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By *Drake & Co.* Attys.

UNITED STATES PATENT OFFICE.

JOHN GEORGE NETSCHERT, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-THIRD TO JOHN WILLIAM VOGEL, OF SAME PLACE.

LOCK-NUT.

SPECIFICATION forming part of Letters Patent No. 471,492, dated March 22, 1892.

Application filed January 22, 1892. Serial No. 418,939. (No model.)

To all whom it may concern:

Be it known that I, JOHN GEORGE NETSCHERT, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Lock-Nuts; 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 letters of reference marked thereon, which form a part of this specification.

The object of this invention is to secure greater safety to the nut and the parts held in position thereby, to more readily admit of the removal of the nut from its locked relation, and to secure other advantages and results, some of which will be described in connection with the description of the working parts.

The invention consists in the improved nut-lock and in the combinations and arrangements of parts, substantially as will be hereinafter set forth, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters indicate corresponding parts in each of the figures, Figure 1 is an end or face elevation of the improved lock-nut and co-operating parts. Fig. 2 is a section of the same, taken on line *x*; and Fig. 3 is another section taken on line *y*.

In said drawings, *a* indicates a shaft, upon which the nut is locked, the end of said shaft being threaded to receive the nut and provided with an axial recess to receive a screw *b*. At one side of said recess I form a groove *c*, toward the inner end of which, leading outward to the threaded periphery of the shaft, is a transverse perforation *d*. The nut *e* is provided with an interior recess *f*, adapted to coincide with the perforation *d*, as indicated, to enable a key to pass from the interior of the shaft outward into said recess *f* to hold the nut in position. The said nut-recess *f* is preferably made by boring or drilling through from the side of the nut and then plugging up the outer end of the bore, as shown in the sectional figures, where *g* indicates the plug.

The perforation *d* may be formed at the time of making the recess.

The key employed to lock the nut consists of a finger-piece *h*, adapted to lie in the groove *c* and extend outward to a point where it may be readily grasped by the hand, and a pin *i*, fastened to said finger-piece and extending at right angles therefrom to enable said pin to be placed into recess and perforation *d f*. The axial recess or chamber for the screw *b* is sufficiently large to admit of the adjustment of the key, and the screw serves as a keeper to hold the key in position.

To prevent the screw *b* from working out of place I may bend the projecting end of the finger-piece into the slot of the screw, as will be understood. To take up wear I may multiply the recesses and perforations, as indicated in outline in Fig. 3; but under ordinary circumstances this is unnecessary. Again, I may employ a keeper other than the screw *b* without departing from the spirit or scope of the invention; but I prefer the screw form, because of the facility and ease with which it may be removed to admit of the removal of the key.

Having thus described the invention, what I claim as new is—

1. The combination, with the recessed and threaded shaft *a*, having a lateral or transverse perforation *d*, of an interiorly-recessed nut, and a key having a pin adapted to extend outwardly through said perforation into the interior recess to lock the nut in place, substantially as and for the purposes set forth.

2. The combination, with the centrally-chambered, slotted, and threaded shaft having a perforation extending from the central chamber outwardly to the threaded periphery, of a nut having an interior recess to coincide with said perforation, a key having a pin to lock the nut, and a finger-piece to lie in the slot and admit of easy manipulation, and a keeper to hold said finger-piece and pin in place, substantially as and for the purposes set forth.

3. The improved nut-lock herein described, combining therein the chambered shaft having an outward perforation, the walls of the chamber being threaded, an interiorly-re-

cessed nut, and a key extending outward from the interior chamber into the recess of the nut to lock the same, and a threaded keeper, substantially as set forth.

- 5 4. In combination with a centrally-chambered bolt having a perforation extending outward from the chamber therein, a recessed nut, and a key arranged in said central chamber and extending outward through said per-

foration into the recess of the nut, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of January, 1892.

JOHN GEORGE NETSCHERT.

Witnesses:

OSCAR A. MICHEL,
OLIVER DRAKE.