WILLIAM H. PHIPPS.

Improvement in Nut Locks.

No. 115,889. Patented June 13, 1871.

Fig. 1.

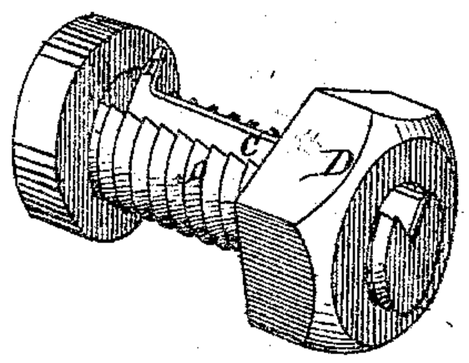


Fig. 2.

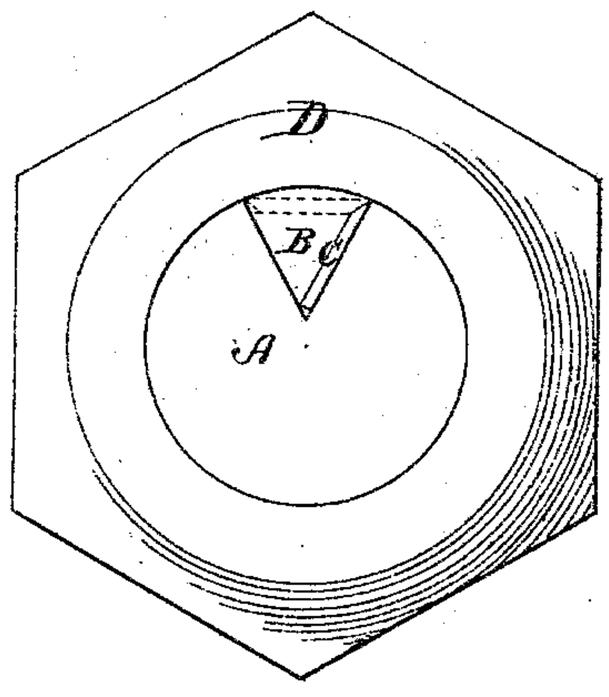
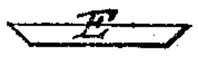


Fig. 3.



Witnesses.

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

115,889

UNITED STATES PATENT OFFICE.

WILLIAM H. PHIPPS, OF SOUTHBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. 115,889, dated June 13, 1871.

I, WILLIAM H. PHIPPS, of Southborough, in the county of Worcester and State of Massachusetts, have invented certain Improvements in Nut-Locks, of which the following is a specification:

Figure 1 is a perspective view; Fig. 2, an end elevation. Figs. 3 and 4 are views of parts detached.

The object of this invention is to produce a device which, of itself, will allow a nut to be screwed inward on its bolt, but will prevent the same from being turned outward or removed from the bolt; and it consists in providing said bolt with a longitudinal wedge-shaped groove of a depth less than half the diameter of the bolt, in which groove is located a curved piece of spring steel running longitudinally of the same, being exactly the width of one side of said groove, as will hereinafter more fully appear.

A represents the bolt, which is provided with a suitable thread, and has a longitudinal wedge-shaped groove, B, which extends into the same toward the center, as shown, its depth being less than half the diameter of the bolt A. In the groove B, and resting against one side thereof, is a piece of spring-steel, C, which extends from the pointed bottom of said groove to the top of the same, its outer edge being sharpened and exactly flush with the periphery of the bolt A, as shown in Fig. 2. The piece C is slightly curved, as shown in Fig. 4. D represents the nut, which is of the usual form.

Operation.

In screwing up the nut D it is turned in the direction of the arrow, Fig. 2, and its bore passes over the sharpened edge of spring C without obstruction, the latter bearing against the side of the groove B; but when the nut is turned in the opposite direction the edge of spring C engages with the nut, and, being pivoted, as it were, eccentrically of bolt A, its edge falls outside of the arc of bolt A and binds tightly against the interior of nut *c*, thereby firmly holding the same. This action is insured by the curve of spring C, which tends to keep the edge of the same always in contact with the nut. If it is necessary to remove the nut, a plug, of the shape shown in Fig. 3, can be inserted in the groove B, as shown in dotted lines in Fig. 2, thereby holding the spring C tightly against the side of groove B, and allowing the nut to be turned in either direction. The spring C is prevented from falling from groove B by a projection, I, or other suitable device.

Claim.

The nut-lock described, consisting of bolt A, having wedge-shaped groove B and curved spring-plate C I, substantially as described.

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

WILLIAM H. PHIPPS.

Witnesses:
CARROLL D. WRIGHT,
CHARLES F. BROWN.