(No Model.)

J. H. BURROWS.

NUT LOCK.

No. 256,971. Patented Apr. 25, 1882.

Fig. 1

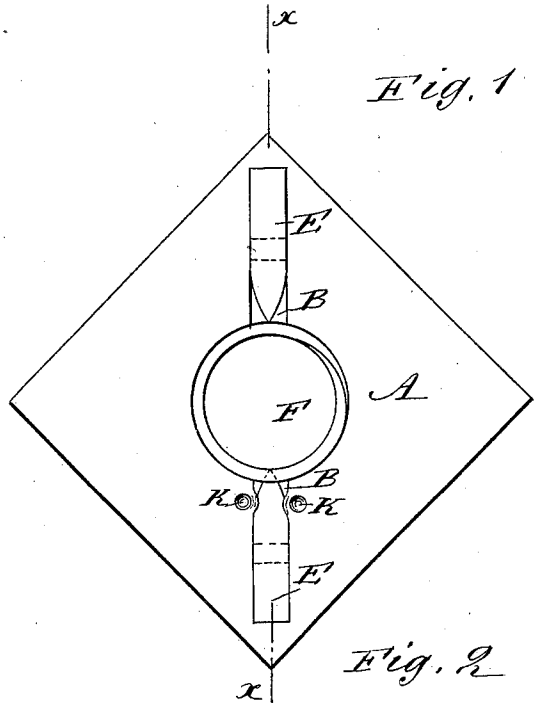


Fig. 3

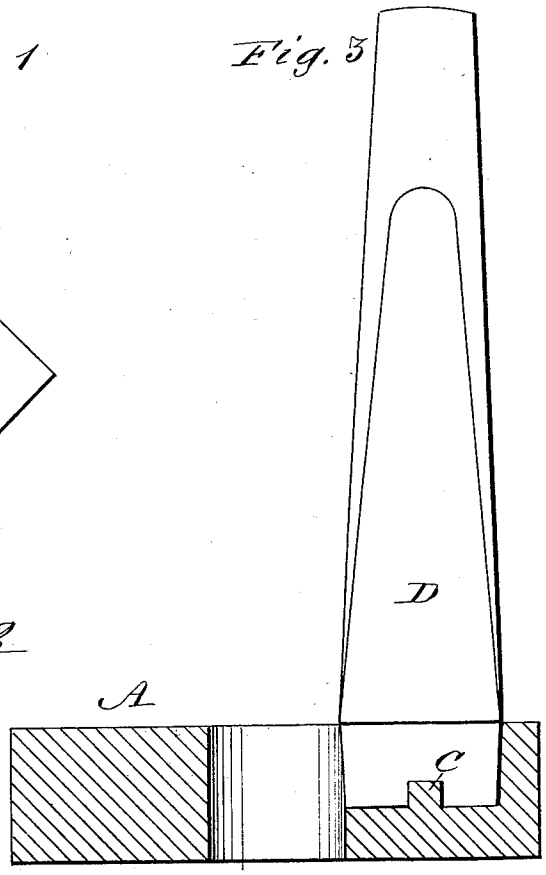
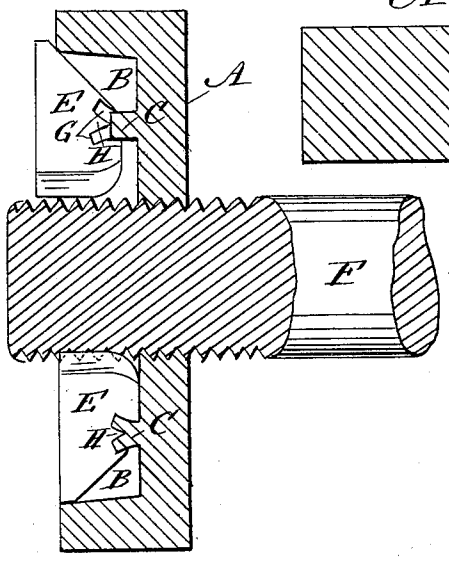


Fig. 2



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UNITED STATES PATENT OFFICE.

JOSEPH H. BURROWS, OF BOISE CITY, IDAHO TERRITORY, ASSIGNOR OF ONE-HALF TO BARNET E. LIGHT.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 256,971, dated April 25, 1882.

Application filed December 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. BURROWS, of Boise City, in the county of Ada and Territory of Idaho, have invented a new and Improved Nut-Lock, of which the following is a full, clear, and exact description.

The invention consists in a nut provided with one or more recesses having a transverse ridge or projection in the bottom.

The invention further consists in a key fitting in these recesses and having one end sharpened and the other end beveled, and provided on the under side with two diverging recesses, forming a nose between them. If this key is driven or forced into one of the recesses of the nut, the sharp edge cuts into the thread of the bolt, and thus prevents the nut from turning, and the nose on the bottom edge of the key splits the projection on the bottom of the recess in the nut and forces the parts of this projection into the recesses in the bottom edge of the key, thereby holding the latter in the recess of the nut.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a bolt and nut provided with my improved nut-lock. Fig. 2 is a cross-sectional elevation of the same on the line *x x*, Fig. 1, one of the keys being represented as driven home and the other only placed into the recess. Fig. 3 is a cross-sectional elevation of a nut and a longitudinal elevation of the die for making the recess for the keys.

The nut A is provided in its upper surface with one or more recesses, B, extending from the threaded aperture of the nut toward the edges of the same. These apertures have a short projection or transverse ridge, C, at or near the middle of the bottom, as shown in Fig. 3, which transverse ridge is formed by means of a die, D, having a recess in the middle of its lower or cutting edge. However, this stud, ridge, or projection can be formed by means of any other suitable instrument, and either before or after the nut is threaded. The recesses B are adapted each to receive a key, E, having the straight edge toward the threaded aperture of the nut beveled or sharpened, and having the rear edge—that is, the edge toward the ends or edges of the nut—beveled from about the middle of the bottom edge toward the rear end of the upper edge of the key. The length of the upper edge of this key E must be equal to the distance from the outer surface of the spindle of the threaded part of the bolt F to the outer end of the recess B, so that when the key is driven into the recess B to such an extent that the upper edge of the key will be flush with the upper surface of the nut the front sharp edge of the key will cut through the threads of the bolt F, and will thus prevent unscrewing or loosening of the nut. If the nut is to be unscrewed, the outer end of the key is pressed down by means of a punch or any other suitable device, whereby the key will be tilted on the bottom of the inclined rear edge, the sharp edge of the key will be raised, and the key can be removed from the recess B, and the nut can then be unscrewed; but it is necessary that the wedges shall be held in the recesses B, and for this purpose the bottom edge of each key is provided with the two upwardly and outwardly inclined or diverging recesses G, forming a sharp-edged beveled nose, H, between them. If the key E is driven into the recess B, the sharp-edged nose will split the transverse ridge or projection C on the bottom of the recess, and will press the two halves thus formed of this projection outward and into the recesses G, as shown in the lower part of Fig. 2. These outwardly-bent parts of the projection C serve to hold the key in the recess and prevent it from dropping out accidentally.

The metal of the nut at the edges of the recess B can be forced over the upper edge of the key E by making two indentations, K K, adjoining the edges of the recess by means of a center-punch or other suitable instrument. The metal thus forced over the top of the key holds the same in place in the recess B.

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

1. A nut made, substantially as herein shown and described, with one or more recesses in its face, which recesses are provided on their bottom with a transverse ridge or projection, as set forth.

2. The combination, with the screw-bolt F,

of the nut A, provided with one or more recesses, B, provided on the bottom with a projection, C, and of the keys E, provided in the bottom edge with two diverging recesses, G, forming a nose, H, between them, substantially as herein shown and described, and for the purpose set forth.

3. In a nut-lock, the wedge E, having one end sharpened and the other end beveled inwardly from the top to the bottom, and provided with the diverging recesses G, forming a nose, H, between them, substantially as herein shown and described, and for the purpose set forth.

JOSEPH H. BURROWS.

Witnesses:
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