No. 652,530. Patented June 26, 1900.

A. V. BRYCE.

NUT LOCK.

(Application filed Sept. 19, 1899.)

(No Model.)

Fig. 1.

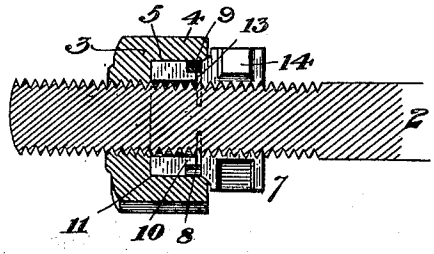


Fig. 2.

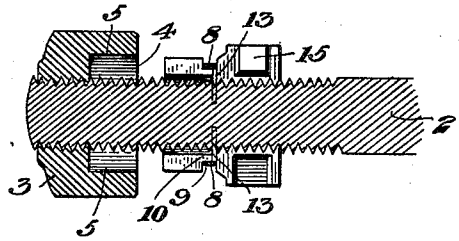


Fig. 3.

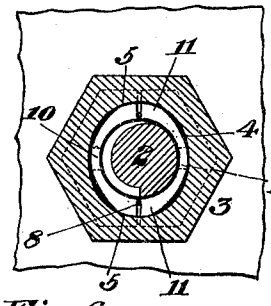


Fig. 4.

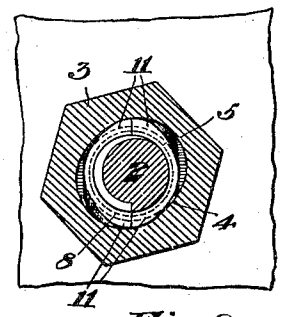


Fig. 5.

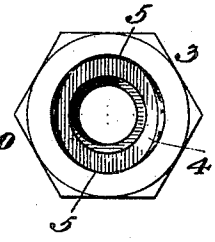


Fig. 6.

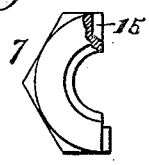


Fig. 7.

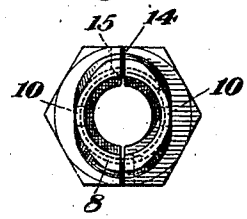
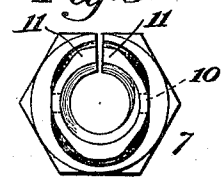


Fig. 8.



WITNESSES

INVENTOR

Andrew V. Bryce

by Baldwin & Baldwin

his Att'ys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ANDREW V. BRYCE, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR OF NINE-TWENTIETHS TO GEORGE B. WIX, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 652,530, dated June 26, 1900.

Application filed September 19, 1899. Serial No. 730,970. (No model.)

To all whom it may concern:

Be it known that I, ANDREW V. BRYCE, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Nut-Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal sectional view showing my improved nut-lock, the parts being in a locked position. Fig. 2 is a like view, the parts being in an unlocked position. Fig. 3 is a cross-sectional view of Fig. 1, the parts being in an unlocked position. Fig. 4 is a like view, the parts being in a locked position. Fig. 5 is a rear view of the locking-nut, showing the enlarged cavity. Fig. 6 is an end view of one of the sections of the nut, showing the mortise and tenon. Fig. 7 is a view of the face of the divided or sectional nut; and Fig. 8 is a like view, the nut being split instead of being formed in sections.

Like figures of reference indicate like parts wherever they occur.

My invention relates to an improvement in nut-locks; and it consists in a peculiar combination of two nuts having engaging cam-faces, as hereinafter more fully described, and set forth in the claims.

In the drawings, 2 represents the bolt, screw-threaded in the usual manner. Fitting over the bolt is a threaded nut 7, preferably formed in two or more sections on longitudinal lines, or it may be simply split longitudinally, as is shown in Fig. 8. These sections may be held together by a split ring 8, which fits in a recess 9 in the neck 10 of the nut. This spring-neck 10 of the nut is reduced in its outer circumference to be inserted within the inner circumference of the extension 4 of the locking-nut 3. The inner circumference of this extension 4 is provided with one or more cam-surfaces 5. The outer circumference of the neck of the nut 7 is also provided with cam-faces 11 to correspond with and be adapted to bind in the cam-faces 5 of the inner circumference of the locking-nut 3.

The bore of the locking-nut proper is threaded to engage with the thread of the bolt. The neck of the nut 7 is preferably slotted, as at 13, to render it flexible and compressible that it may be caused to bind on the bolt 2 by this action of the cams 5 and 11.

Where the nut 7 is formed in two or more sections, the meeting faces are provided with a tongue 14 and groove 15, the end of one of which is beveled. As the nut locks and the sections are caused to press against each other this bevel tends to throw the sections of the nut askew and causes them to bind firmly on the screw-thread of the bolt.

As both the nut 7 and the locking-nut 3 are threaded, the nut may be locked at any point on the bolt 2 without the necessity of being in contact with a backing. The operation is as follows: The parts of the nut 7 being assembled and held by the ring 8, the spring-neck 10 is inserted in the cavity of the locking-nut 3, and both nuts are screwed down together on the bolt 2 to the desired position. The locking-nut 3 is then turned independently of the nut 7 sufficiently to cause the cams 5 and 11 to jam on each other and to bind the spring-neck on the bolt 2.

The advantages of my invention will be apparent to those skilled in the art.

Having thus described my invention, what I claim is—

1. In a nut-lock, the combination of a nut having a spring-neck, a locking-nut having an extension with an enlarged cavity within which the spring-neck is adapted to extend, and a cam-face in the cavity of the extension of the locking-nut and on the neck of the nut; substantially as described.

2. In a nut-lock, the combination of a nut formed in sections having a spring-neck, the sections being provided with a tongue and groove, one of which is beveled, said neck being provided with a cam-face, and a locking-nut having an enlarged cavity within which the spring-neck is adapted to fit, said cavity being provided with a cam-face; substantially as described.

3. In a nut-lock, a nut made in longitudinally-divided sections, each section threaded on the line of its bore, and having a spring-neck portion provided with a cam, and a locking-nut having a threaded outer portion

and provided with a cavity having cam-faces parallel with the bore; substantially as described.

4. In a nut-lock, the combination of a nut formed in separate longitudinally-divided sections with interfitting projections and recesses, each section having a spring-neck with a cam-face, and a locking-nut having a cam-faced cavity arranged to coact with the spring-neck; substantially as described.

In testimony whereof I have hereunto set my hand.

ANDREW V. BRYCE.

Witnesses:
GEO. B. BLEMMING,
H. M. CORWIN.