No. 848,523. PATENTED MAR. 26, 1907.

C. S. WILSON.

NUT LOCK.

APPLICATION FILED APR. 24, 1906.

Fig. I.

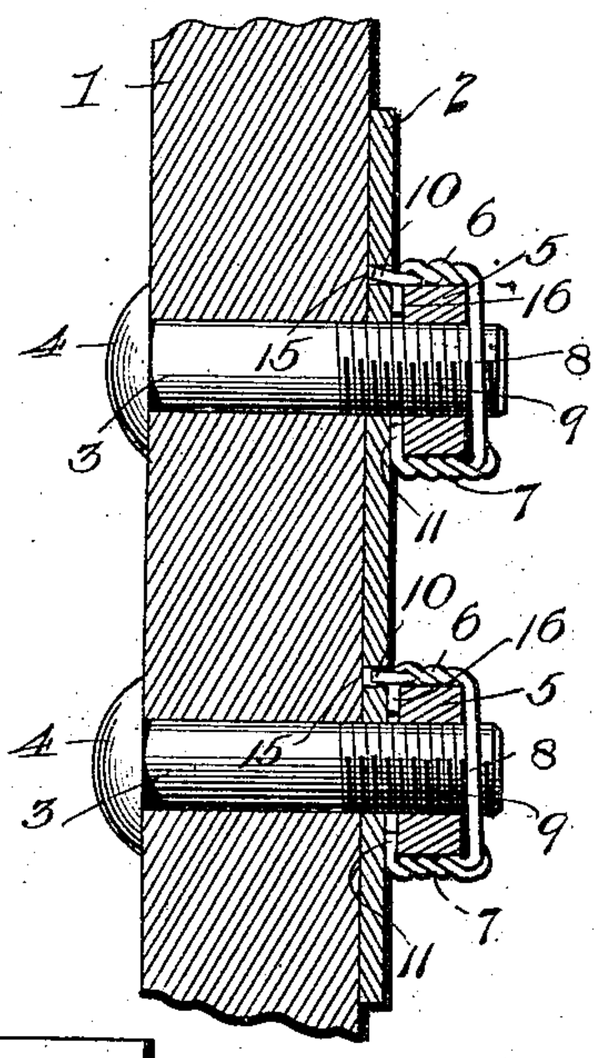


Fig. II.

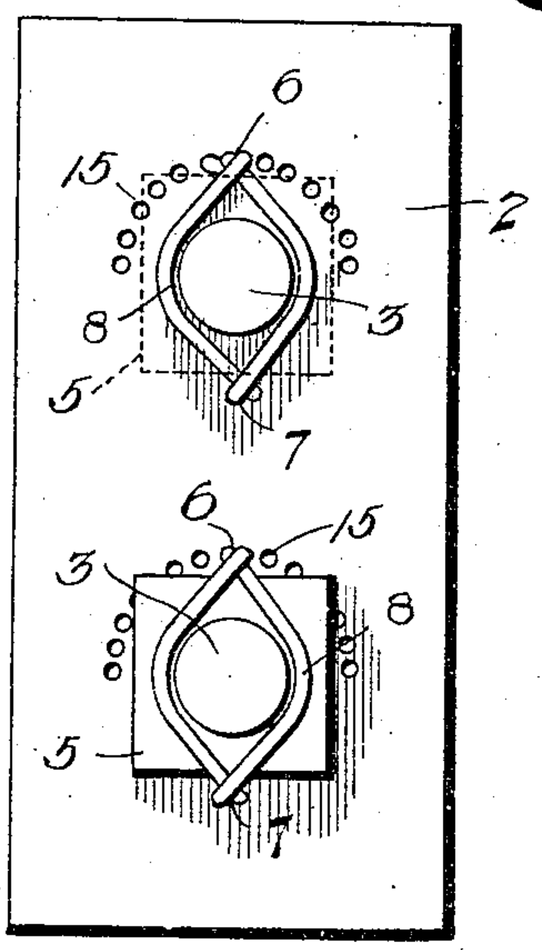
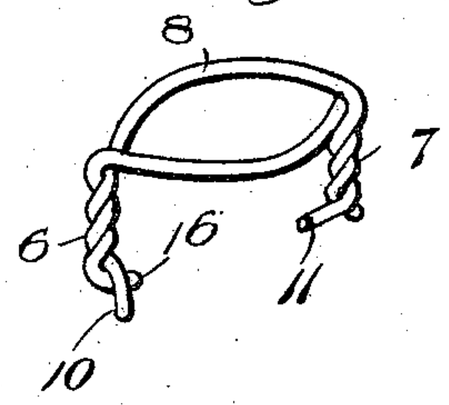


Fig. III.



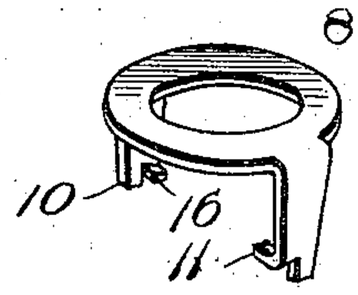


Fig. V.

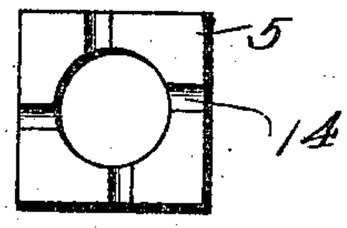


Fig. IV.

Witnesses

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UNITED STATES PATENT OFFICE.

CURTIS S. WILSON, OF FOREST, OHIO, ASSIGNOR OF ONE-HALF TO L. A. CONKLIN, OF FOREST, OHIO.

NUT-LOCK.

No. 848,523. Specification of Letters Patent. Patented March 26, 1907.

Application filed April 24, 1906. Serial No. 313,499.

To all whom it may concern:

Be it known that I, CURTIS S. WILSON, of Forest, in the county of Hardin, State of Ohio, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

The object of my invention is to produce a nicely-adjustable nut-lock affording sufficient security against any ordinary tendency which might develop in service or use to dislodge it, but which may be conveniently at the will of an operator released from the means employed to confine it in fixed adjustment.

In the accompanying drawings, which form a part of this specification, Figure I is a central vertical section of a pair of bolts, nuts, and members penetrated by the bolts to which the nuts secure them, some of the members being shown in elevation, and illustrating my nut-lock in place upon the nuts, respectively. Fig. II is an end elevation of the subject-matter of Fig. I looking toward the nut end of the bolt. Fig. III is a perspective view of the lock detached. Fig. IV is a reverse view of the nut detached. Fig. V is a view corresponding to Fig. III, showing a modified form of my lock.

Referring to the numerals on the drawings, 1 indicates any member—as, for example, a wooden upright—to which may be secured a plate 2. The plate 2 may span a plurality of bolts 3, as shown in Fig. I, or any means suitable for holding the plate 2 fixed may be used. The plate 2 constitutes a base with which my lock coöperates. The bolts 3 are shown in the drawings as passing through the member 1 and plate 2, and each is provided at opposite ends with a head 4 and a nut 5, threaded to correspond with the bolt.

Upon each nut 5 I provide a lock, preferably made of spring-wire in two strands. They are intertwisted with each other, as shown at 6 and 7, to firmly unite them and also to form a loop 8, which surrounds the threaded end 9 of the bolt 3. The intertwined ends 6 and 7 terminate, respectively, in a detent 10 and a projection 11, projecting from the end 7 toward the end 6 of the nut-lock. The projection 11 is adapted to enter any one of a series of recesses 14 provided for it in the bottom of the base of the nut 5. The detent 10 projects in the path of a series of apertures 15, provided for its accommodation in the plate 2 or other fixed member, to or from which the nut 5 works in its travel upon the threaded end 9 of the bolt 3.

A projection 16, carried by the end 6 of the lock and extending toward the projection 11, is adapted to engage a recess 14 opposite to that engaged by the projection 11. The function of the detent 10 is to engage one of the series of apertures 15, and so hold the nut stationary, the projections 11 and 16 serving, through the resiliency of the lock, to hold the lock like a clip upon the nut and bolt to the performance of that function.

To disengage the detent 10 from the one of the series of apertures 15 with which it may at any time be engaged may be accomplished by the operator, using for the purpose a pointed instrument, prying between the end 7 of the lock and the nut 5.

The nut-lock, as shown, is made of two pieces of intertwisted steel wire; but it may, if preferred, be made of a single piece of sheet spring-steel struck out and bent up to form the loop 8, projections 11 and 16, and the detent 10, as shown in Fig. V. The apertures 15 are preferably elongated as shown, to permit the detent 10 to enter one of them before the projections 11 and 16 are seated home in the recesses 14, provided for them in the nut.

What I claim is—

1. The combination with a base, of a threaded bolt and nut, a lock secured to the nut and surrounding the bolt above the nut, and means carried by the lock for engaging said base, thereby preventing rotation of said lock and nut.

2. The combination with a base, of a threaded bolt and nut, a lock upon the nut provided with means for surrounding the bolt above the nut, means carried by the lock for positively engaging said base, and means for securing the lock to the nut.

3. The combination with a base, of a threaded bolt and nut, a lock provided with ends upon opposite sides of the nut and with a loop adapted to surround the bolt above the nut, means carried by the lock for engaging said base, and means for securing the lock to the nut.

4. The combination with a base provided with apertures, of a threaded bolt and nut, a lock provided with ends upon opposite sides of the nut and with a loop adapted to sur-

round the bolt above the nut, a detent upon one of said ends adapted to enter said apertures one at a time, and means for securing the lock to the nut.

5. The combination with a base provided with apertures, of a threaded bolt, a nut provided with recesses, a lock provided with ends upon opposite sides of the nut and with a loop adapted to surround the bolt above the nut, a detent upon one of said ends adapted to enter said apertures one at a time, and projections upon the ends fitting said recesses.

6. The combination with a base provided with apertures, of a threaded bolt, a nut provided upon its under surface with recesses, a lock upon the nut provided with a loop adapted to surround the bolt, a detent carried by the lock adapted to enter said apertures one at a time, and projections upon the lock fitting said recesses.

7. As an article of manufacture, a nut-lock composed of a plurality of wires intertwisted to form a loop and provided one with a detent and both with projections, extending from the extremities of said wires.

8. As an article of manufacture, a nut-lock composed of a plurality of spring-wires intertwisted to form a loop and provided one with a detent and both with projections, extending from the extremities of said wires.

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

CURTIS S. WILSON.

Witnesses:
C. C. METZ,
ALFRED G. CONKLIN.