

(No Model.)

I. HOSIER.
NUT LOCK.

No. 606,145.

Patented June 21, 1898.

FIG. 1.

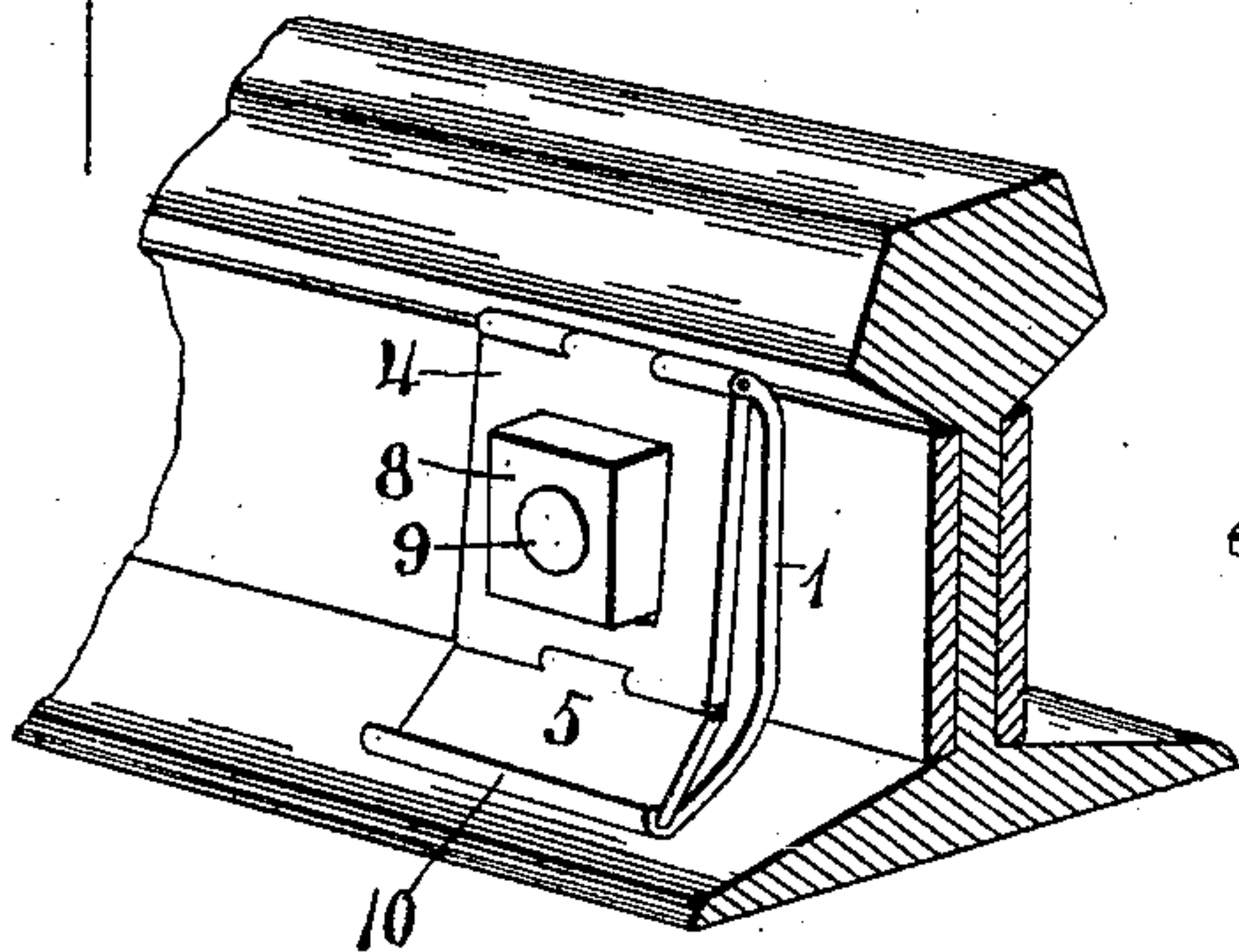


FIG. 2.

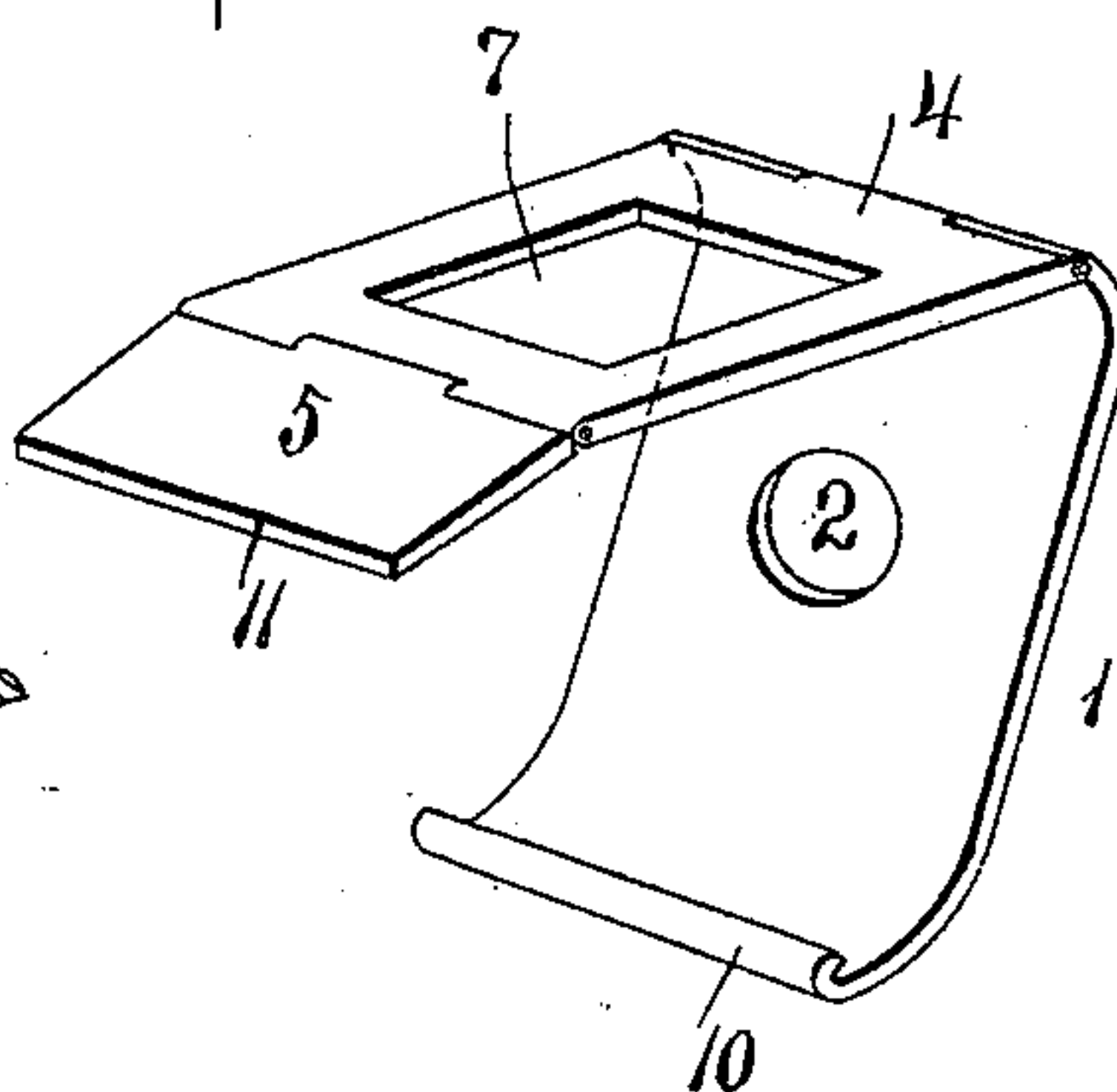


FIG. 3.

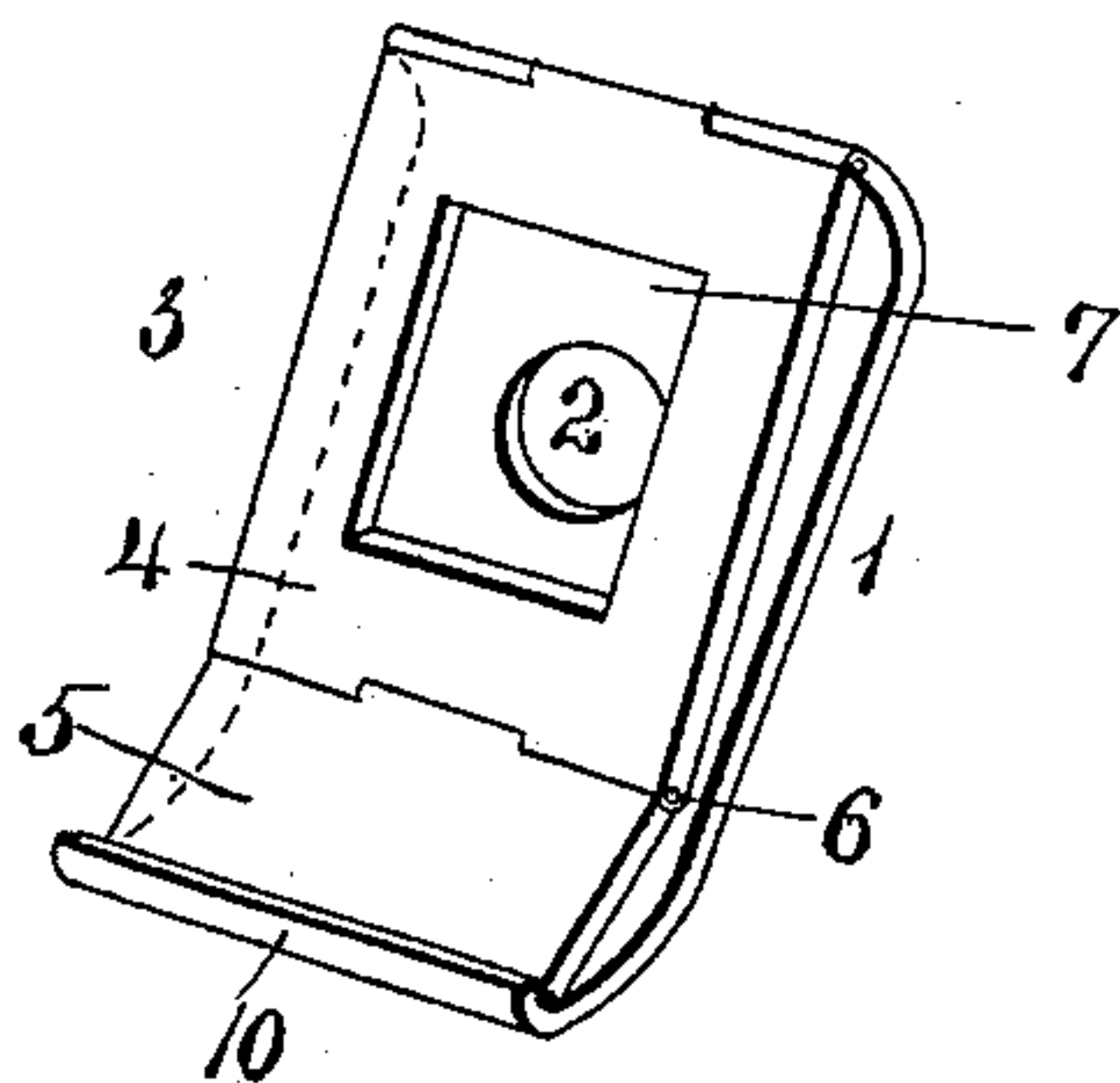
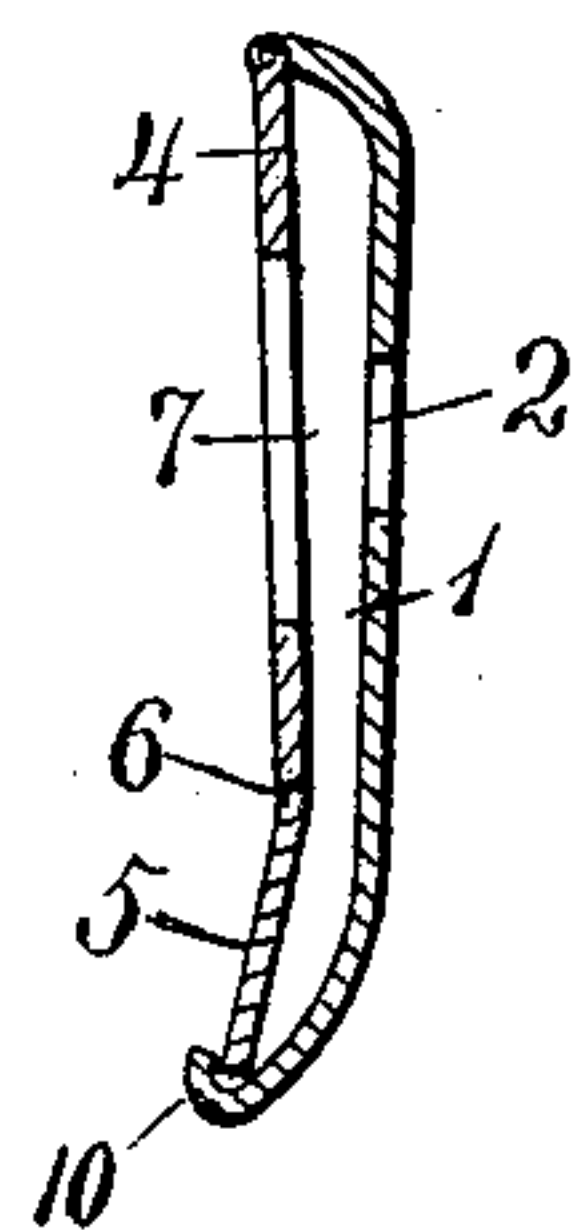


FIG. 4.



Witnesses

W. F. Allen
Victor J. Evans

Inventor

Isaac Hosier.
by John Wedderburn
Attorney

UNITED STATES PATENT OFFICE.

ISAAC HOSIER, OF PHILMONT, NEW YORK.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 606,145, dated June 21, 1898.

Application filed August 11, 1897. Serial No. 647,892. (No model.)

To all whom it may concern:

Be it known that I, ISAAC HOSIER, a citizen of the United States of America, residing at Philmont, in the county of Columbia, in the State of New York, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

The invention relates to improvements in nut-locks, and has for its object the production of a lock which will prevent the rotation and consequent detachment of a nut incident to the vibration of a bolt when applied, as in railroad or bridge constructions.

Figure 1 of the accompanying drawings represents a sectional perspective view of the end of a rail and the fish-plates, showing my nut-lock applied thereto. Fig. 2 represents a perspective view of my improved nut-lock detached from the bolt and in open position. Fig. 3 represents a similar view of the device in detached locked position. Fig. 4 represents a vertical section of the device in locked position.

The same reference-numerals indicate the same parts in all the figures.

Referring to the drawings, 1 indicates a spring-metal plate of any suitable material, which is preferably curved longitudinally and provided with a bolt-aperture 2. A locking-plate 3 is hinged at one end to the spring-plate 1 and is composed of two sections 4 and 5, hinged together in any suitable manner, preferably by a pintle 6, the section 4 being formed with a rectangular or other shaped nut-hole 7, designed to receive the nut 8, which is screwed upon the bolt 9. A flange 10 is formed at the extremity of the plate 1, and the free edge 11 of the section 5 of the locking-plate is designed to extend under this flange 10 when the device is in locked position.

The operation of the device is as follows: The plate 1 is placed against the fish-plate or other part through which the bolt is designed to pass, and the threaded extremity of the bolt extends through the bolt-hole 2 therein. The nut is then screwed upon the bolt until it impinges against the face of the plate 1 with sufficient force to be resisted to a sufficient degree by the resiliency of said plate 1, which, as heretofore stated, is preferably curved longitudinally. The locking-plate 3

is then swung down and the nut passes through the nut-hole 7 therein, and the edge 11 of the swinging section 5 of the locking-plate is inserted under the flange 10 on the extremity of the plate 1. A slight pressure upon the nut-lock plate at or adjacent to the pintle 6 will cause the axis of the hinge connection between the two sections of the locking-plate to spring inward beyond a plane touching the opposite ends of the spring-plate 1, and the locking-plate will be prevented by the pressure of the ends of the spring-plate 1 from moving outward and releasing the nut, and the parts will be retained in their proper positions to prevent the displacement of the nut. When it is desired to remove the lock, it is simply necessary to swing the locking-plate outward against the resistance of the plate 1, and the nut can then be removed in the usual manner.

While the construction illustrated and described constitutes a preferable embodiment of my invention, I do not desire to limit myself to such structural details, but reserve the right to change, modify, or vary them at will within the scope of my invention.

I claim as my invention—

1. In a nut-lock, the combination of a spring-plate having a bolt-hole therein, a plate hinged at one end to said spring-plate and provided at its opposite end with a hinged section, and adapted to engage a nut, and means for locking said hinged section to said curved plate.

2. In a nut-lock, the combination of a spring-plate having a bolt-hole therein, and provided with a flange, a plate hinged at one end to said spring-plate and adapted to engage a nut, said plate being provided at its opposite end with a hinged section adapted to engage the flange of said spring-plate and lock them together.

3. In a nut-lock, the combination of a spring-plate having a bolt-hole therein, a locking-plate hinged at one end to said spring-plate, and having a nut-engaging hole therein registering with the bolt-hole in the spring-plate, said locking-plate being also provided with a hinged section adapted to engage said spring-plate and lock them together.

4. In a nut-lock, the combination of a spring-plate curved longitudinally and provided with a bolt-hole and with a flange at one end, and

a locking-plate composed of a pair of jointed sections hinged to said spring-plate at one end and engaging the flange at the other and adapted to engage the nut.

- 5 5. In a nut-lock, the combination of a spring-plate provided with a bolt-hole and with an intumed flange extending across one end thereof, a locking-plate provided with a nut-hole coincident with the bolt-hole in the
10 spring-plate, said locking-plate being composed of a pair of jointed sections, one of said

sections being hinged to the end of the spring-plate opposite the flange and the free end of the other section of the locking-plate being designed to engage said flange.

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

ISAAC HOSIER.

Witnesses:

FRANK B. LINDSAY,
EDWARD S. WARRINSE.