

No. 831,405.

PATENTED SEPT. 18, 1906.

S. M. BARKLEY.

NUT LOCK.

APPLICATION FILED MAR. 20, 1906.

Fig. 1.

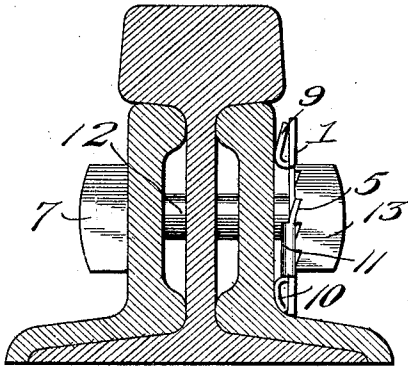


Fig. 2.

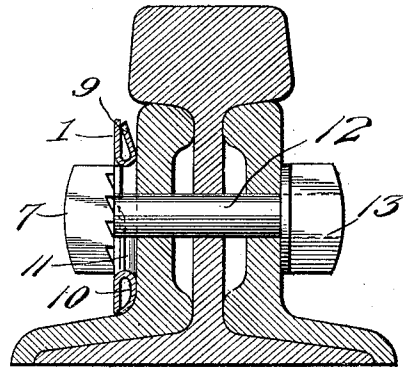


Fig. 3.

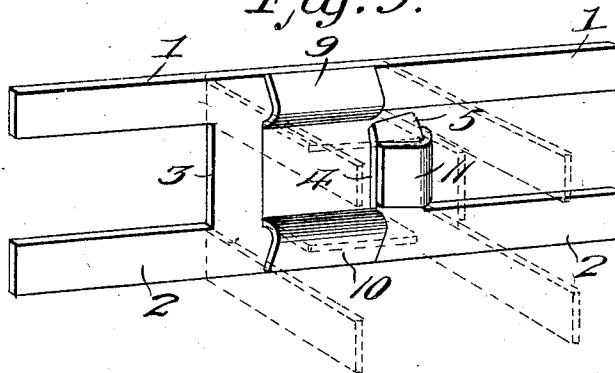
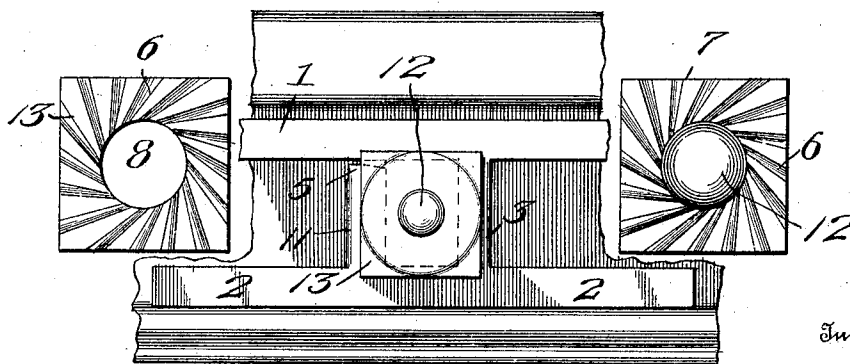


Fig. 4.

Fig. 6.

Fig. 5.



Inventor

Steward M. Barkley

Witnesses

Frank B. Hoffman.
P. M. Smith.

By

Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

STEWARD M. BARKLEY, OF FAIRCHANCE, PENNSYLVANIA.

NUT-LOCK.

No. 831,405.

Specification of Letters Patent.

Patented Sept. 18, 1906.

Application filed March 20, 1906. Serial No. 307,082.

To all whom it may concern:

Be it known that I, STEWARD M. BARKLEY, a citizen of the United States, residing at Fairchance, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

This invention relates to nut-locks, the object of the invention being to provide a simple, cheap, and effective nut-lock especially designed for use in connection with railways; but also adapted for the purpose of locking nuts at any and all places where bolts are employed, the improved nut-lock hereinafter described being adapted to be used either in connection with a bolt-head for preventing the bolt from turning or with a nut to prevent the nut from turning on the bolt.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, hereinafter more fully described, illustrated, and claimed.

In the accompanying drawings, Figure 1 is a cross-section through a rail-joint, showing the improved nut-lock applied to one of the bolts thereof. Fig. 2 is a similar view, showing the nut-lock applied to the head of the bolt instead of the nut thereof. Fig. 3 is an enlarged perspective view of the nut-lock, looking toward the inner face thereof. Fig. 4 is an inside face view of the nut. Fig. 5 is a similar view of the bolt-head. Fig. 6 is a side elevation of a rail, showing the nut-lock applied thereto.

The nut-lock contemplated in this invention is formed in one piece of sheet metal, the same being stamped out in a form somewhat resembling the capital letter H to comprise connected parallel strips 1 and 2, the same being joined together by a connecting bar or strip 3, located to one side of the center of the length of the connected strips 1 and 2.

Parallel to the connecting bar or strip 3 is another bar or strip 4, which is attached to one of the connected strips 2, but severed from the opposite connected strip 1, as shown clearly in Fig. 3, the severed end of the strip 4 being bent forward to form a spring-catch or engaging lip 5, which is adapted to snap into any one of a series of notches 6, formed in the inner face of a nut 13 and disposed somewhat tangentially to the bolt-hole 8, as shown in Figs. 4 and 5.

In stamping out the opening between the

portions 3 and 4 of the locking device tabs or extensions are left, and the same are bent inward and curved over, as shown in Fig. 3, to form spring-abutments 9 and 10, the same being adapted to bear against the fish-plate of a rail-joint or against any other object in connection with which the bolt and nut are employed. The outer edges of the spring-abutments 9 and 10 rest against the rear faces of the connected strips 1 and 2, near the outer edges thereof, as shown in Figs. 1, 2, and 3.

The strip 4, forming the spring-catch 5, is also provided with a lateral extension, which is bent over and inward to form a spring-abutment 11, which corresponds in function and shape to the spring-abutments 9 and 10, and is located at the same side of the nut-lock as a whole.

In using the nut-lock upon a rail-joint the nut-lock as a whole is placed against the fish-plate, so as to extend lengthwise thereof, as shown in Figs. 1, 2, and 6, so that the connected strips 1 and 2 will lie adjacent to the base-flange of the fish-plate and the head of the rail, thus preventing the nut-lock from turning. The side of the nut-lock containing the spring-abutments 9, 10, and 11 is placed next to the fish-plate, as shown in Figs. 1 and 2, so that the bolt 12 will pass through the opening formed by bending back the spring-abutments 9 and 10. The nut is then screwed upon the bolt and turned up tightly until the spring-catch 5 snaps into engagement with the notches or shoulders on the inner face of the nut, the spring-abutments 9, 10, and 11 yielding to allow the nut to be turned up and thereafter acting to hold the spring-catch 5 in firm engagement with the nut, thus preventing the nut from working loose.

In using the nut-lock upon a bolt passing through a wooden beam, for example, the opposite face of the nut-lock may be placed against the wood, so that the spring-catch 5 will be driven or pressed into the wood, and when the nut is screwed up tight the end portions of the connected strips 1 and 2 may then be bent around opposite sides of the nut and across the same, so as to embrace the nut and prevent the same working loose, the manner of bending being indicated by dotted lines in Fig. 3.

Instead of providing the nut 13 with the notches 6 the head of the bolt may be provided with notches for the same purpose, as shown in Fig. 5, and the nut-lock may be

placed at the same side of the object as the head of the bolt, as clearly shown in Fig. 2.

The nut may be removed by inserting a suitable implement beneath the spring-catch 5 5, so as to throw the same out of engagement with the notches in the nut or bolt-head, as the case may be, which will permit the bolt or nut to be turned.

I claim—

10 1. A nut-lock made in one piece of sheet metal stamped out to provide substantially parallel connected strips, a spring-abutment formed by punching a portion of the blank from which the lock is formed and bending 15 such punched portion to form a spring-abutment which projects from one side of the lock, and a spring-catch formed integrally with the connected strips and projecting from the opposite side of the lock to engage a 20 nut.

2. A nut-lock made in one piece of sheet metal stamped out to provide substantially parallel connected strips, a cross-bar connecting said strips, spring-abutments formed by punching the central portion of the blank 25 from which the lock is formed and bending such punched portions in opposite directions to form spring-abutments which project from one side of the lock, and a spring-catch 30 formed integrally with the connected strips and projecting from the opposite side of the lock to engage a nut, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

STEWART M. BARKLEY.

Witnesses:

J. C. WILLIAMS,
IRA F. JOHNSON.