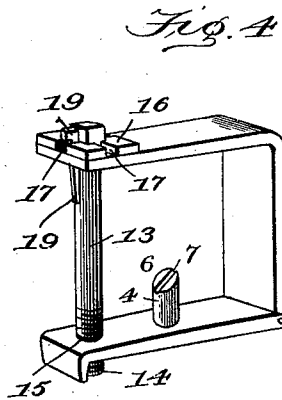
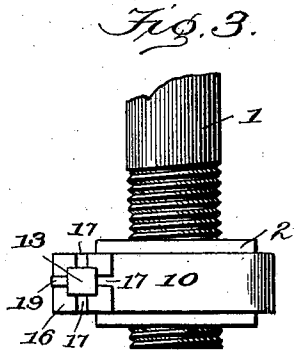
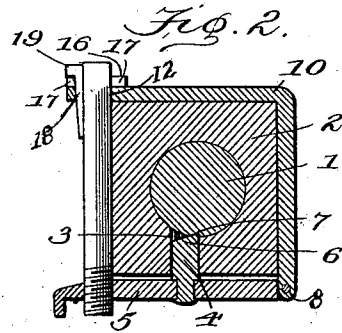
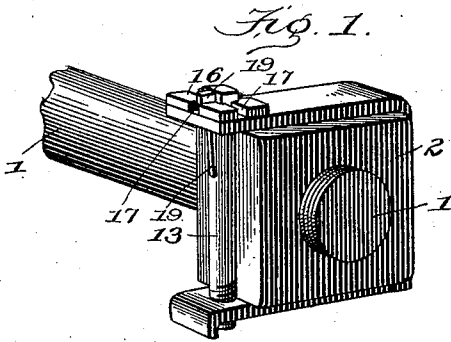


(No Model.)

J. W. DONALDSON.
NUT LOCK.

No. 595,701.

Patented Dec. 21, 1897.



WITNESSES:

Edwin L. Bradford
R. M. Pherson

INVENTOR

John W. Donaldson

BY

R. S. A. Lacey
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN W. DONALDSON, OF BOWERSTON, OHIO.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 595,701, dated December 21, 1897.

Application filed April 12, 1897. Serial No. 631,791. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. DONALDSON, a citizen of the United States, residing at Bowerston, in the county of Harrison and State of Ohio, have invented certain new and useful Improvements in Nut-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in nut-locks for railroad-rails; and the object is to provide a simple, effective, and reliable lock of this class; and to this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved nut-lock as it appears on the nut of an ordinary machine-bolt. Fig. 2 is a transverse section through the nut and bolt. Fig. 3 is a top plan view. Fig. 4 represents the lock removed from the nut.

1 represents an ordinary machine-bolt, and 2 the usual rectangular nut.

3 represents a circular radial orifice formed in one of the plane walls of the nut to receive a cylindrical pawl 4, fixed at a right angle on the bar 5, and the inner rearwardly-beveled end 6 of said pawl 4 is formed with V-shaped teeth 7 7, which engage the threads on the bolt and effectually prevent the nut turning backward. One end of the bar 5 forms a hinge 8 with the contiguous end of the right-angular yoke 10, the opposite end of which is provided with a transverse orifice 12 to receive the bolt 13, the threaded end 14 of which engages the threaded orifice 15 in the end of the bar 5, and it will thus be seen that by tightening the bolt 13 the ratchet-shaped teeth 7 7 on the pawl 4 are forced into the threads on the bolt 1 to effectually lock the nut 2 in place, and by loosening the bolt 13, so as to release the pawl, the nut 2 can be removed from the bolt 1 and replaced as often as may be necessary.

The head of the bolt 13 is provided with an integral flange or collar 16, in which is formed a series of rectangular slots 17, any one of which may be brought into alinement with a

recess 18 in the contiguous end of the yoke 10 and communicating with the orifice 12, which receives the body of the bolt, and when so alined a tapering key 19 is removably secured therein to prevent the bolt 13 from working loose.

The device is very simple and practical. As it is secured to the nut itself independent of any fixed support, it will be found very convenient in a variety of places when a lock requiring a support independent of the nut would be of no use.

While I have described my improved nut-lock as applicable to railroad-rails, it is by no means confined to such use, as it is my intention to apply it to machinery and similar structures wherever such a device is needed.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. The bolt 1, and the nut 2, provided with the radial orifice 3, in combination with the removable pawl 4, the bar 5 to which said pawl is secured, and which is provided with a hinge-joint 8 and threaded orifice 15, the yoke 10 provided with the orifice 12, and the bolt 13 connecting the yoke 10 and the bar 5, substantially as shown and described.

2. The bolt 1 and the nut 2 provided with the radial orifice 3, in combination with the removable pawl 4, provided with the V-shaped teeth 7, the bar 5 to which the outer end of said pawl is secured and which is formed with a hinge-joint 8, and threaded orifice 15, the yoke 10 provided with the orifice 9, and the orifice 12 having the communicating recess 18, the bolt 13 provided with the integral flange 16 having the slots 17 and the removable key 19, substantially as shown and described.

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

JOHN W. DONALDSON.

Witnesses:

WM. H. HOST,
L. D. PRICE.