(No Model.)

A. B. KERR.

NUT LOCK.

No. 384,767. Patented June 19, 1888.

FIG. 1.

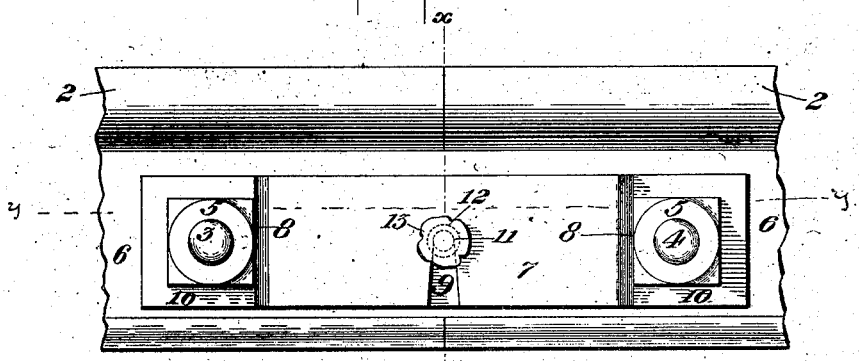


FIG. 2.

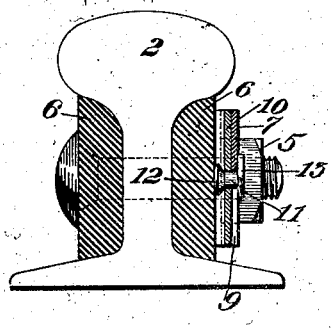


FIG. 3

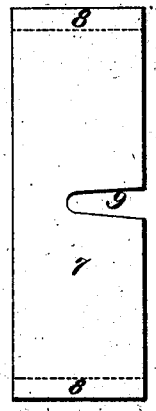


FIG. 4.

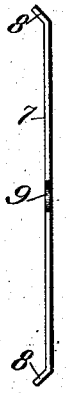
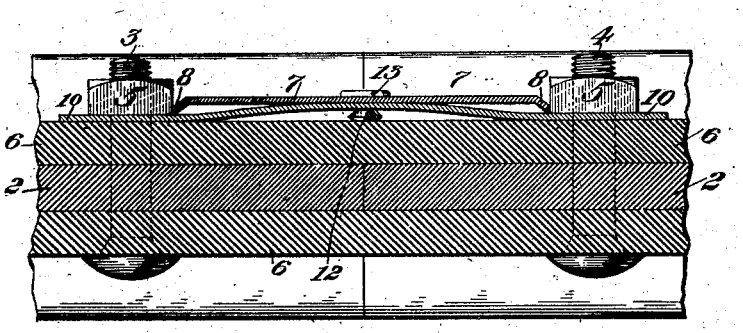


FIG. 5.



Witnesses:—
W. B. Corwin.
H. C. Gill.

Inventor:—
Andrew B. Kerr
by W. Baxewell & Sons
his Attys.

UNITED STATES PATENT OFFICE.

ANDREW B. KERR, OF LOGAN'S FERRY, PENNSYLVANIA.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 384,767, dated June 19, 1888.

Application filed February 20, 1888. Serial No. 264,638. (No model.)

To all whom it may concern:

Be it known that I, ANDREW B. KERR, of Logan's Ferry, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Nut-Locks; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a railroad-rail provided with my improved nut-locking device. Fig. 2 is a vertical cross-section on the line *x x* of Fig. 1. Fig. 3 is a plan view of the blank from which the locking-plate is formed, the lines on which the metal is bent being shown by dotted lines. Fig. 4 is an edge view of the locking-plate. Fig. 5 is a horizontal section on the line *y y* of Figs. 1 and 2.

Like symbols of reference indicate like parts in each.

In the drawings, 2 represents the railway-rail, and 3 and 4 represent adjacent bolts which pass through the rail and through the fish-plates 6 in the usual way.

5 are the nuts, which are screwed on the bolts.

The locking device which I employ consists of a plate having at its ends bent lips, which, when the plate is set between adjacent nuts, bear against the sides of the nuts and prevent them from turning. Extending between the adjacent bolts is a plate, 10, having holes for the reception of the bolts, which plate is set up against the fish-plate so that the bolts shall project through the holes. Extending through this plate 10 is a pin or rivet, 11, which at the back of the plate is swaged out, so as to form a stud or boss, 12, and in front of the plate the rivet is enlarged to form a head, 13. When the nuts are screwed on the bolts against the plate 10, the elasticity of this plate (which is preferably made of steel) and the bearing of the stud or boss 12 against the fish-plate causes the ends of the plate to bend back and, by the spring action thus formed, to assist in locking the nuts in place. The nuts are further locked by means of a locking-plate, 7, which consists of a piece of iron or steel (preferably the latter) whose ends are bent in to form lips 8, and in the body of the locking-plate is formed an elongated slot or hole, 9, which affords means for confining the locking-plate in position. After the plate 10 has been adjusted and the nuts screwed up against it as tightly as possible, the locking-plate is set between the nuts, so that the slot or hole 9 shall fit around the rivet back of the head 13 and shall hold the locking-plate in place. The lips of the locking-plate then bearing against the sides of the nuts prevent them from turning, and form a secure reliable lock.

The advantages of my improvement consist in its simplicity, its cheapness of construction, and its efficiency.

The point of invention consists in the back plate, 10, provided with a stud projecting from the back to give a spring action to the plate, and a locking-plate secured to the back plate and bearing against the sides of the nuts.

I claim—

1. As a nut-lock for confining the nuts of adjacent bolts, the combination of a spring-plate which extends between the bolts, a stud or boss which projects from the back of the plate and bears against the surface back of it, so as to hold out the middle of the spring-plate while the ends are forced in by the nuts, and a second plate, which is secured to the spring-plate and which bears against the nuts, substantially as and for the purposes described.

2. As a nut-lock for confining the nuts of adjacent bolts, a spring-plate which extends between the bolts, a rivet extending through the plate having a head projecting from the face of the spring-plate and having a boss which bears against the surface back of the spring-plate, so as to hold out the middle of the said plate while the ends are forced in by the nuts, and a second plate having locking-lips which is removably attached to the rivet back of the head, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 2d day of February, A. D. 1888.

ANDREW B. KERR.

Witnesses:

THOMAS W. BAKEWELL,

W. B. CORWIN.