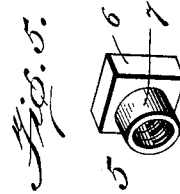
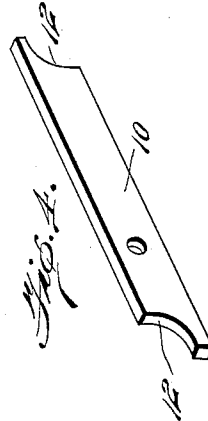
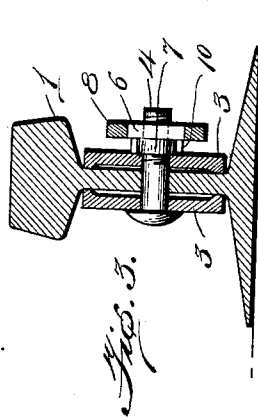
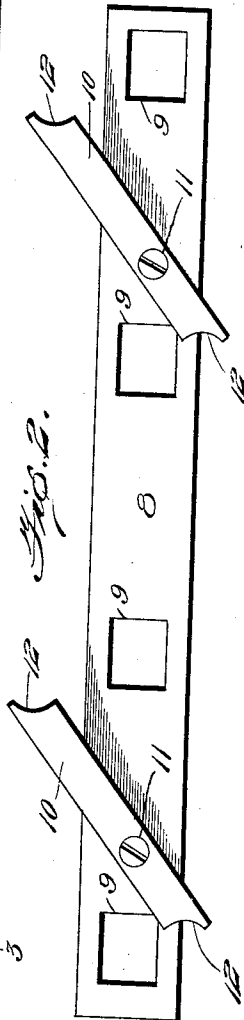
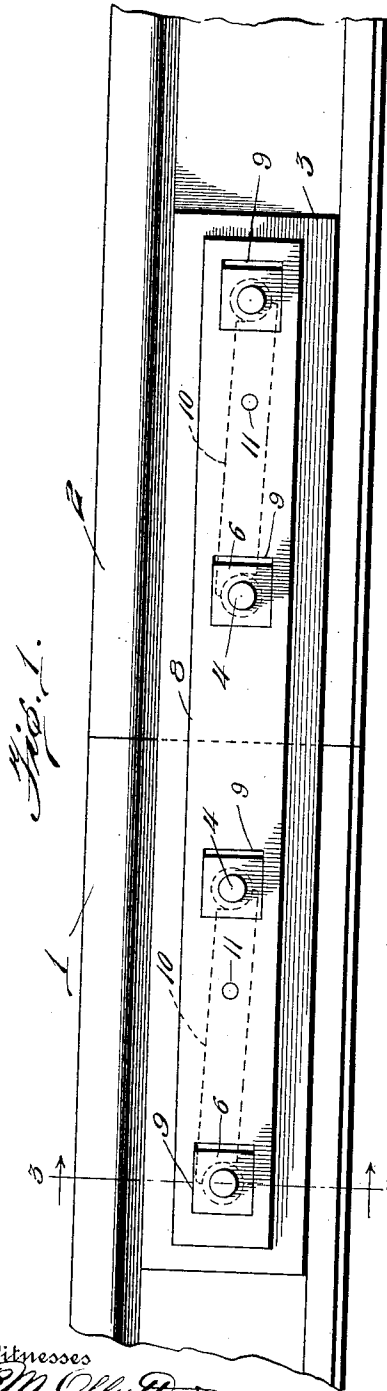


G. W. SHANK.
NUT LOCK.

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1,039,599.

Patented Sept. 24, 1912.



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NUT-LOCK.

1,039,599.

Specification of Letters Patent.

Patented Sept. 24, 1912.

Application filed July 6, 1911. Serial No. 637,188.

To all whom it may concern:

Be it known that I, GEORGE W. SHANK, a citizen of the United States, residing at Moncure, in the county of Chatham and State of North Carolina, 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.

This invention relates to new and useful improvements in nut locks, especially designed to be used on nuts of railway-rail joints.

An object of this invention is to simplify devices of this character, rendering them comparatively cheap in manufacture, which may be applied or removed in an instant without the aid of a tool and which will be strong, durable and efficient in use.

With these and other objects in view, my invention consists of a novel construction, formation, combination and arrangement of parts which will be specifically described and pointed out in the appended claims.

In the drawing: Figure 1 is a side elevation of a rail showing my improved invention applied; Fig. 2 is a side elevation of my nut lock; Fig. 3 is a section taken on the line 3-3 of Fig. 1; Fig. 4 is a perspective view of the locking lever, and Fig. 5 is a perspective view of my improved nut.

Referring now more particularly to the drawing wherein like reference characters indicate like parts the numerals 1 and 2 indicate the abutting ends of a rail, having fish-plates 3 on each side thereof, through which extend the bolts 4, all of the usual construction, but to securely hold the same together, I employ special nuts 5. These nuts 5 consist of a squared portion 6, a reduced cylindrical portion 7 and a threaded aperture to fit over the threaded portion of the bolts. To prevent these nuts from turning or coming loose, I provide a longitudinal extending plate 8, provided with a plurality of oblong openings 9 to fit over the square portion 6 of the nuts 5. Whereas I have only shown this adapted to lock four nuts, it is to be understood that this plate may be of the desired length and be provided with as many apertures as there are nuts to be locked.

To prevent the removal of the plate 8 or any lateral movement thereof, I provide a

latch 10, which is pivoted adjacent one end as at 11 to the inner face of the plate 8. The opposite ends of the latch are provided with recesses 12 and the recess in the longer arm is to rest on the top of the cylindrical portion of one nut and the shorter arm is to bear against the under side of the cylindrical portion of another nut. There may be as many of these latches used on each plate 8 as desired and they are the same in width as the cylindrical portion of the nuts and when placed in position the squared portion of the nut will act as a shoulder, thereby preventing the removal of the plate. And when it is desired to remove the plate, turn the latch to a vertical or diagonal position and the same may be readily removed without the use of a tool.

From the foregoing description taken in connection with the drawings, it will be seen that I have constructed a nut lock which will perform all the necessary requirements of such a device.

Having described my invention and what I desire to secure by Letters Patent is:

1. In a nut lock, a plate provided with a plurality of openings to receive nuts, the nuts having shoulders thereon, and locking members pivotally secured to said plate and adapted to engage the shoulders on the nuts to hold the plate from displacement.

2. In a nut lock, a plate having a plurality of openings therein, nuts engaging said opening and provided with shoulders, and locking members pivotally secured to said plate and adapted to engage the shoulders on the nuts, said locking members being pivotally mounted nearer to one end of said locking members than to the other.

3. In a nut lock the combination with a plate having rectangular apertures formed therein, bolts adapted to project through said apertures, rectangular nuts adapted to operate on the terminals of said bolts and be retained by said apertures, and inwardly extending tubular extensions formed on the inner faces of said nuts, and latches pivotally mounted on said plate and provided with quadrantal depressions in the terminals thereof, adapted to engage said tubular extensions.

4. In a nut lock, a plate having a plurality of openings, nuts adapted to engage said openings and having reduced cylindrical portions thereon, and latch bars pivotally secured to said plate and having segmental

notches in their ends to engage the cylindrical portions on said nuts and to prevent lateral displacement of the plate.

5 5. In a nut lock the combination with a plate having apertures formed therein, of bolts projecting through said apertures, nuts rotatably mounted upon said bolts, said
10 of said sections to be retained within the apertures of said plates and the opposite section adapted to project through said plates, and means pivotally mounted on said
15 plates, adapted to engage said projecting sections of said nuts to retain said plate in coöperation with said nuts.

6. A nut lock comprising a plate having

openings therein, nuts adapted to engage said openings and having reduced cylindrical portions on their rear faces, latch bars pivotally mounted on said plate and having
20 segmental notches in their ends to engage the cylindrical portions on adjacent nuts, the pivots of said latch bars being nearer to one end of said bars than the other, said
25 latch bars operating to prevent lateral displacement of the locking plate.

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

GEORGE W. SHANK.

Witnesses:

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C. B. CRUTCHFIELD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."