

(No Model.)

A. A. WILDER.

NUT LOCK.

No. 297,894.

Patented Apr. 29, 1884.

Fig. 1.

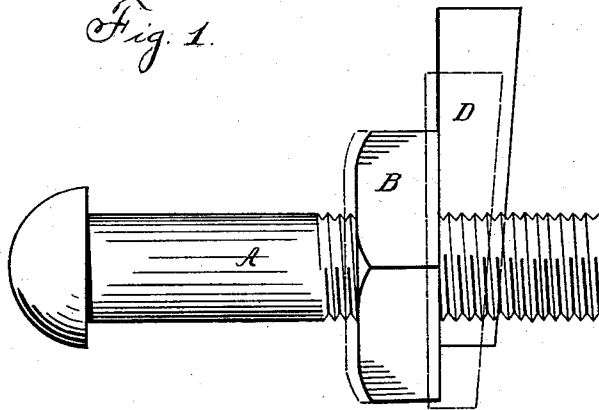


Fig. 2.

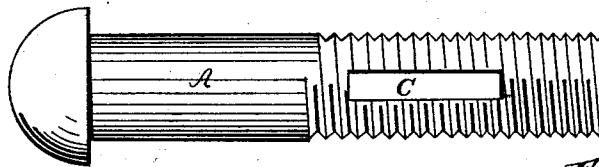


Fig. 3.

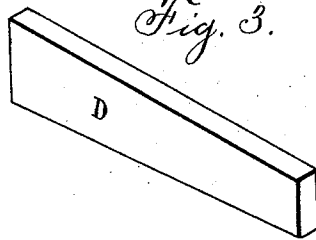
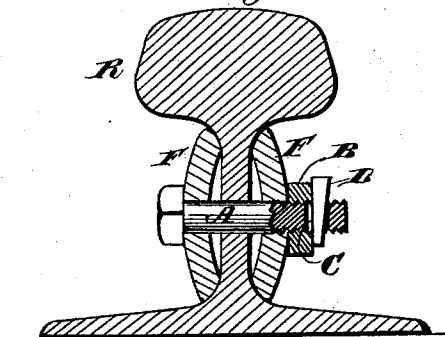


Fig. 4.



WITNESSES

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ARETUS A. WILDER, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO
CORYDON B. PALMER, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 297,894, dated April 29, 1884.

Application filed April 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, ARETUS A. WILDER, of Detroit, county of Wayne, State of Michigan, have invented a new and useful Improvement in Nut-Locks; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists in the combination of devices and appliances hereinafter specified, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a side view of a device embodying my invention. Fig. 2 is a separate view of the bolt. Fig. 3 is a separate view of a key or wedge. Fig. 4 is a sectional view, showing the bolt applied to the fish-plates of a railway-joint.

The object of my invention is to provide means for locking a nut upon a bolt, so as to hold it securely in position and prevent its displacement.

To this end A is a threaded bolt. B is a nut. C is an elongated slot through the threaded shaft of the bolt, extending lengthwise upon it, and sufficiently toward the head of the bolt to pass under the inner face of the nut when in position for use. D is a wedge-shaped key adapted to enter the slot C and hold the nut in position.

In the application of this device the wedge-shaped key is caused to enter the slot, follow up the nut in its adjustment upon the bolt and lock it in position, and is intended more particularly for use in "fish-joints" at the junction of railway-rails, although it may, of course, be employed in any other location where it is desirable to lock the nut.

The letter R in Fig. 4 indicates a railway-rail shown in section, and F F are fish-plates, also shown in section. The bolt is squared or flattened directly under its head in the usual manner, so that it will be prevented from turning in the ordinary elongated bolt holes or slots of the fish-plates. The slot in the bolt A being vertical when the bolt is in

this position, and the wedge D inserted with its point downward, it will always be held snugly in its place, as the bolt cannot turn to reverse the position of said wedge. In thus applying the bolt it will be observed that screw-threading of the fish plate or plates is avoided.

This invention relates more particularly to bolts for first joints, upon which it is intended to run the ordinary nuts after the bolt shall have been passed freely through the rail and fish bar or bars.

I am aware that it is not new to pass a bolt freely through one fish-bar and the rail, and then to tap it through the second fish-bar and then prevent it from unscrewing by a key passed through a slot in its end and bearing against the adjacent fish-bar; and I do not therefore claim such a construction; but such combination dispenses with a nut, and since it requires one of the bars to be screw-tapped it is too troublesome and expensive and is not in use. My invention is designed to overcome these objections, and to combine the locking mechanism entirely to the bolt and an ordinary nut, so that it can be employed with the usual fish-plates, and in any place where a nut is to be locked onto a bolt. I also propose, generally, to employ a bolt, such as is shown in the drawings, having an elongated projection at the sides of the shaft beneath the head, so as to prevent the bolt from turning as the nut is wrenched upon its end.

What I therefore claim is—

1. The combination, with the ordinary railway fish-plates, of a screw-bolt having a slot through its threaded portion, means for preventing the bolt from turning on its axis, a nut fitting upon said threaded portion, and a wedge-shaped key fitting vertically within the slot in the bolt, with its wider end uppermost, whereby it is adapted to slide and take up the space vacated by the nut in tightening the same on the bolt, substantially as described.

2. The combination, with the ordinary railway fish-plates, of a screw-bolt flattened or squared under its head to enter a correspond-

ing hole in one of the fish-plates, and having
a slot formed through its threaded portion, a
nut to fit upon said threaded portion, and a
wedge-shaped key to fit vertically within said
5 slot, with its outer end uppermost, whereby it
is adapted to slide to take up the space va-
cated by the nut in tightening the same on the
bolt, substantially as described.

In testimony whereof I sign this specifica-
tion in the presence of two witnesses.

ARETUS A. WILDER.

Witnesses:

J. EDWARD WARREN,
N. S. WRIGHT.