

F. E. MENSINGER.
NUT LOCK.

APPLICATION FILED MAR. 5, 1909.

923,365.

Patented June 1, 1909.

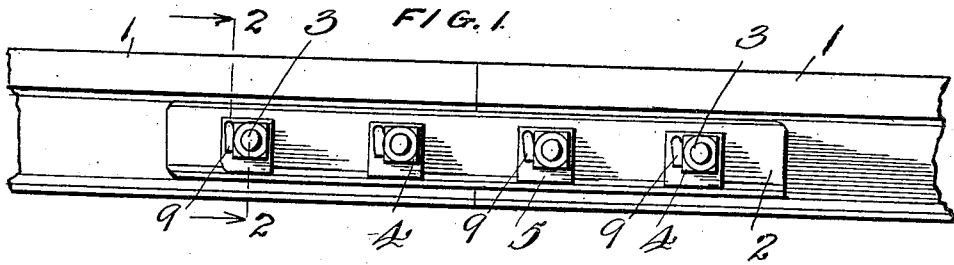


FIG. 2.

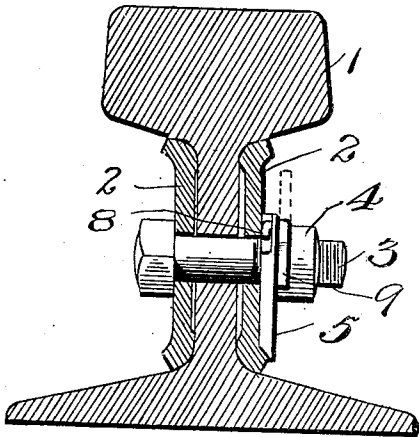
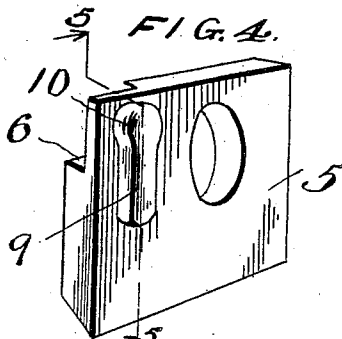
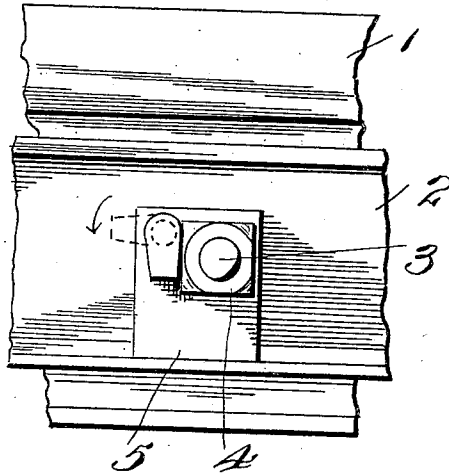
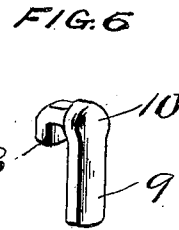
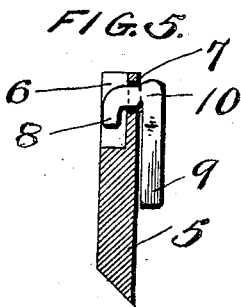


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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NUT-LOCK.

No. 923,365.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed March 5, 1909. Serial No. 481,319.

To all whom it may concern:

Be it known that I, FRANK E. MENSINGER, a citizen of the United States, residing at Mainville, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

My invention relates to nut-locks, and consists generally, in the provision of a locking means for nuts, said locking means being detachably secured upon a washer.

An important object of my invention is to provide a locking means for a nut, which may be secured to a washer, after the nut has been screwed thereagainst, and which may be readily removed from said washer, when it is desired to unscrew the nut.

A further object of my invention is to provide a device which will hold a nut against unscrewing, in a simple and efficient manner, without having to resort to the employment of a spring.

My invention is applicable to any device, or situation wherever it is desirable to keep a nut, bolt, or the like from unscrewing; for the sake of illustration, I have shown my invention, as utilized in connection with a railway joint provided with fish-plates having outwardly flanged upper and lower edges.

In the accompanying drawings, forming a part of this specification, and in which like numerals indicate like corresponding parts, Figure 1 is a front elevation of a railway joint provided with my improved nut-lock. Fig. 2 is a transverse vertical section, taken through the line 2—2 of Fig. 1. Fig. 3 is an enlarged front elevation of a nut-lock embodying my invention, and showing the same, in a locking position with a nut securing a fish-plate to a railway rail. Fig. 4 is an enlarged perspective view, of my device. Fig. 5 is a transverse vertical section taken on line 5—5 of Fig. 4, showing the detachable key in side elevation, and, Fig. 6 is an enlarged perspective view of the detachable key shown in the previous figures.

In the drawings, 1 designates a railway rail and 2 a fish-plate. The bolt 3 passes

through the fish-plates and rail in the usual manner, and arranged between the nut 4 and the fish-plate is a washer 5, which constitutes a portion of my nut-lock. The lower edge of the washer is made straight and beveled, so as to bear upon the lower outwardly flanged edge of the fish-plate, and thus said washer will be prevented from turning. Upon one side of the washer and adjacent a corner thereof, is a recess 6, having an aperture 7, leading therein, through which passes the hooked portion 8 of a detachable key 9, provided with an enlarged head 10.

In the application of my device in the connection referred to, a bolt is passed through the fish-plates and rail, and the washer is arranged between the nut and fish-plate. The nut is then screwed tight against the washer and the hooked portion of the detachable key is passed through the aperture and into the recess upon said washer (as shown in dotted lines in Fig. 2). The key is then swung laterally and downwardly, (as shown in dotted lines and arrow in Fig. 3, until it occupies a vertical position with one of its sides in contact with the nut. The key may be readily removed by reversing the above operation, and the nut will be free to be unscrewed.

From the foregoing, it will be obvious that if the nut should tend to unscrew it would engage the upper portion of the key and be held fast. It will also be obvious that the key will remain upon the washer and will not fall off, should the nut fail to be in contact with it.

Having fully described my invention, I claim:

In a nut-lock, the combination with a nut and bolt, of a washer, having a straight lower edge, said washer being provided upon one side thereof with a recess, said washer being further provided upon the other side thereof with an opening communicating centrally with said recess, a relatively long key having one extremity thereof bent to form a hooked portion, said hooked portion being adapted when inverted to be inserted through said opening

into said recess upon said washer, said key
being adapted when said hooked portion
thereof is within said recess to be swung
laterally and downwardly to assume a ver-
5 tical position, and said key being adapted
to maintain said vertical position by virtue
of its length.

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

FRANK E. MENSINGER.

Witnesses:

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