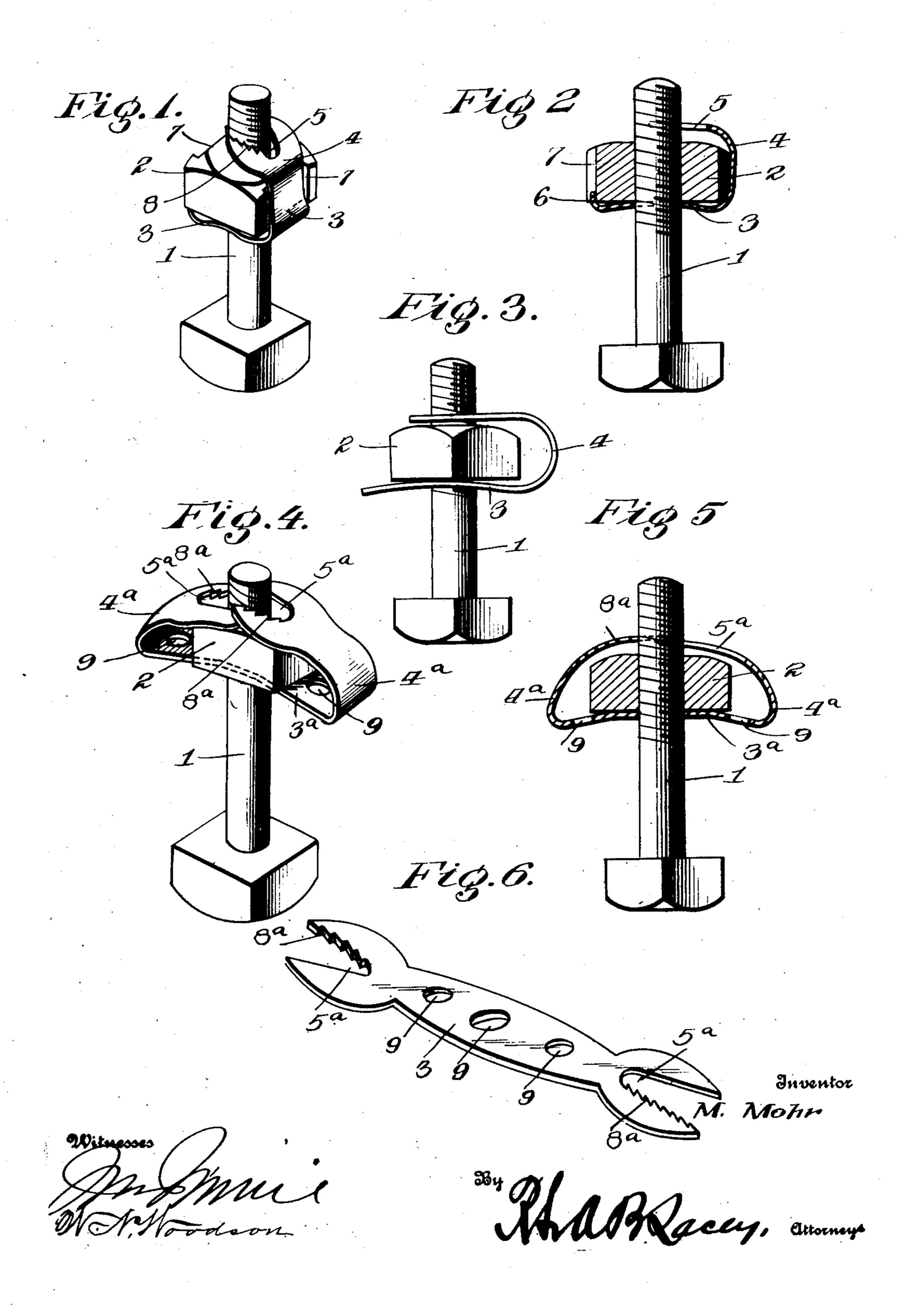
M. MOHR.

NUT LOCK.

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## UNITED STATES PATENT OFFICE.

## MICHEL MOHR, OF WAHPETON, NORTH DAKOTA.

## NUT-LOCK.

No. 826,591.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MICHEL MOHR, a citizen of the United States, residing at Wahpeton, in the county of Richland and State of North Dakota, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

This invention embodies novel improvements in nut-locking devices of the type embodying a washer member having means to engage the bolt so as to effectively prevent unscrewing movement of the nut applied thereto.

An essential feature of the invention resides in the simplicity and cheapness of structure of the device comprising the same, affording resultant advantages of obvious importance.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—.

rut-lock embodying the invention. Fig. 2 is a vertical sectional view. Fig. 3 is a side elevation showing a modification of the invention. Fig. 4 is a perspective view of a further modification. Fig. 5 is a vertical section of the nut-lock shown in Fig. 4. Fig. 6 is a perspective view of the blank from which the nut-lock shown in Figs. 4 and 5 is formed.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In the drawings the numeral 1 designates the bolt, and the numeral 2 the nut.

In Figs. 1 and 2 the nut-lock illustrated comprises a washer member 3, bent or formed so as to be of concavo-convex form in cross-section, said washer member 3 being provided with a suitable opening to receive 45 the bolt 1 and having a lateral extension 4, the outer end of which is bifurcated to form a jaw 5, adapted to positively engage the bolt 1 at the point above the upper or outer side of the nut 2. Opposite the extension 4 the 50 washer member may be provided with an integral lip or flange 6, which is adapted to engage in the recessed side portion 7 of the nut. Opposite sides of the nut are preferably recessed, as at 7, the extension 4 engaging any 55 one of the recessed portions, said extension being bent outwardly from the plane of the

washer member and the jaw 5 being bent laterally, so as to receive the bolt therein. One of the sides of the jaw, which is adapted to engage the bolt, is toothed, as shown at 8. The 60 action of the nut-lock hereinbefore set forth is very simple. As the nut 2 is screwed hard against the washer member 3 the latter, being comprised of a spring body portion, is sprung toward the part against which it is impinged, 65 and this spring action tends to force the jaw member 5 into positive engagement with the threaded portion of the bolt 1, so as to accomplish the desired locking action of the washer, and thereby prevent the same from rotating 70 and the nut from unscrewing.

In Fig. 3 the nut-lock consists of substantially the same parts as hereinbefore described, save that the washer member and its jaw extension are sufficiently large to admit 75 of turning of the nut after the same has been once adjusted to cause engagement of the jaw with the bolt. The spring or friction contact of the washer against the under side of the nut is relied upon in this instance to 80 prevent rotation of the nut, the washer member of course being fixed by the coöperation of its jaw member with the bolt.

Fig. 4 illustrates a further modification of the invention, and in this instance the washer 85 member 3<sup>a</sup> consists of a spring-body of concavo-convex form, as described with reference to Figs. 1, 2, and 3, opposite ends of said washer member, however, being bent to form the extensions 4a, each of which is provided 90 with a jaw portion 5<sup>a</sup>, toothed, as shown at 8<sup>a</sup>. Diagonally opposite sides of the jaws 5<sup>a</sup> of the extensions 4ª are toothed, this being desirable, in that said jaws may thus coöperate with either a right or left hand nut, the teeth 95 inclining toward the outer extremities of the jaw members. When the nut in Fig. 4 is screwed in position, the compression of the body of the washer member causes the engagement of the jaws 5° in a manner which 100 will be readily apparent. The washer member 3ª may have a plurality of openings 9, three of which are shown, the intermediate opening receiving the bolt and the other openings weakening the washer member to facili- 105 tate its spring action when the nut is screwed thereagainst.

It will be understood that other forms of the nut-lock may be used embodying substantially the washer member and the jaw reextension, as hereinbefore specified. Those illustrated are preferred, however. The nut-locks are simple and may be readily applied and detached in the practical embodiment of the invention.

Having thus described the invention, what

5 is claimed as new is—

1. In a nut-lock, the combination of a bolt, a washer member provided with an opening receiving the bolt, a nut screwed against the outer side of said washer member, the washer member being provided with an integral extension projecting therefrom and having its outer end bifurcated to form a jaw, the jaw or bifurcated portion of the extension of the washer member being bent so as to engage the bolt upon opposite sides in the manner specified.

2. In a nut-lock, the combination of a bolt, a nut, a washer member for the nut of concavo-convex form in cross-section, and a jaw extension for said washer member adapted to engage the bolt as said washer member is sprung by engagement of the nut therewith.

3. In a nut-lock, the combination of a bolt, a nut, a washer member for the nut of concavo-convex form in cross-section, and a jaw extension for said washer member adapted to engage the bolt as said washer member is sprung by engagement of the nut therewith, the jaw extension aforesaid being integral with the washer member and adapted to en-

gage the threaded portion of the bolt on opposite sides.

4. In a nut-lock, the combination of a bolt, a nut, a washer member of concavo-convex form in cross-section, an integral extension 35 projecting from the washer member and formed with a jaw to receive the threaded outer portion of the bolt, a side of said jaw having teeth to engage said bolt when the nut is screwed against the washer member to 40 spring the same and cause engagement of the jaw with the bolt.

5. In a nut-lock, the combination of a bolt, a nut, a washer member having opposite end portions thereof bent to form extensions, 45 each of said extensions being provided with jaws adapted to engage the bolt at the threaded outer portion thereof, the body of the washer member having an opening to receive said bolt, the nut being adapted to 50 compress the body portion of the washer member to cause the jaws aforesaid to engage with the bolt.

In testimony whereof I affix my signature

in presence of two witnesses.

MICHEL MOHR. [L. s.]

Witnesses:

JENNIE WEIMAR, BELLE HARRISON.