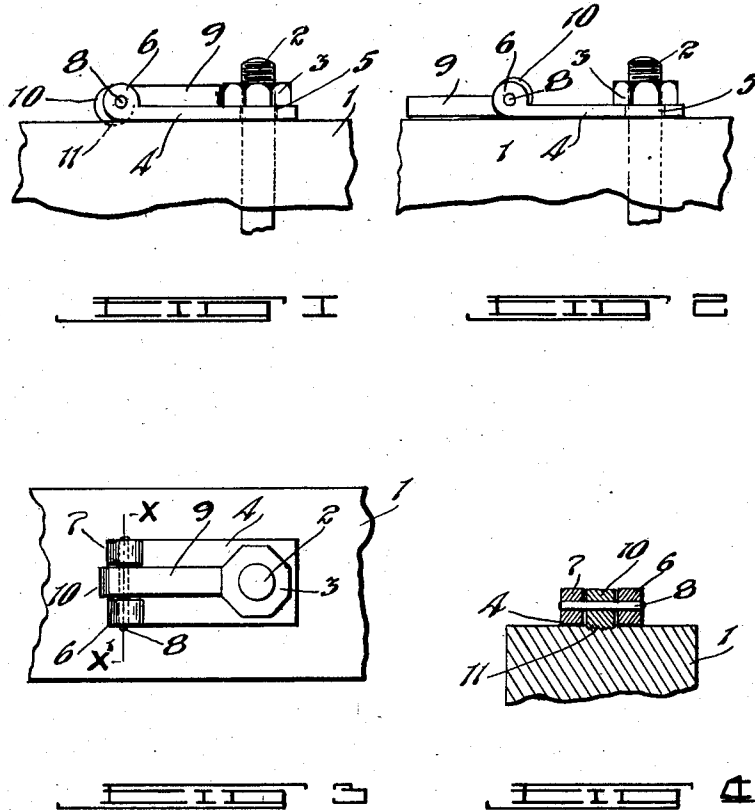


W. E. SMITH.
NUT LOCK.

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1,021,807.

Patented Apr. 2, 1912.



Witnesses

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WILLIAM ECKFORD SMITH, OF WINNIPEG, MANITOBA, CANADA, ASSIGNOR OF ONE-THIRD TO JOSEPH EDWARD ACTON AND ONE-THIRD TO THOMAS HENRY CAIRNS, BOTH OF WINNIPEG, CANADA.

NUT-LOCK.

1,021,807.

Specification of Letters Patent.

Patented Apr. 2, 1912.

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To all whom it may concern:

Be it known that I, WILLIAM ECKFORD SMITH, of the city of Winnipeg, in the Province of Manitoba, Canada, have invented certain new and useful Improvements in Nut-Locks, of which the following is the specification.

My invention relates to a nut lock and the object of the invention is to provide a nut lock which is simple, cheap and durable, and which will effectually hold a nut against casual displacement.

With the above object in view the invention contemplates the use of a base plate, and a locking plate having an enlarged end pivotally secured to the base plate, there being straight threads or cutting edges formed on the head, which are adapted to cut into or bite the material through which the bolt or such like carrying the nut to be locked passes, the parts being arranged and constructed as hereinafter more particularly described.

Figure 1 represents a side elevation of my nut lock applied in the locking position. Fig. 2 represents a side elevation of the same in the open position. Fig. 3 represents a plan view of the parts as they appear in Fig. 1. Fig. 4 is a vertical cross sectional view through the head of the locking lever and adjoining parts, the section being taken in the plane denoted by the line X X', Fig. 3.

In the drawing like characters of reference indicate corresponding parts in each figure.

1 designates a rail block, fish plate or other body through which is passed a bolt 2 supplied with the usual octagonal nut 3. 4 is a base plate having an opening therein located at 5 to receive the bolt, which plate is supplied with offstanding, upturned, and rounded pivot ears 6 and 7, which support a pivot pintle or pin 8.

9 is a locking plate or lever with an enlarged rounded head 10 having an opening therein to receive the pin 8, which pin it will be noticed does not pass longitudinally through the center of the head but to the side of the center, so that the plate is what might be termed eccentrically mounted on the pin. The under side of the head or that side which adjoins the member 1 in the

locking position of the plate 9 is supplied with cutting edges or straight threads 11 which cut or bite into the material 1 when the lever is passed to locking position.

When the nut is to be used, the plate 4 is placed on the bolt with the lever in the position shown in Fig. 2. The nut 3 is then turned downwardly as tightly as possible and the lever is then thrown over to the position shown in Fig. 1, and the free end of it butts up against one of the faces of the nut. As the lever is swung over the threads cut into the adjoining face of the member 1 and prevent the plate 4 from swinging in respect to the bolt. The lever in turn holds the nut from unscrewing. When the nut is once locked there is no possibility of the lever being accidentally moved from contact with the nut, as the eccentric position of the pin in the head causes the lever to cling to the plate 4, as will be readily understood.

Where material 1 is so hard that the threads will make no impression on it when the lever is turned, the plate 4 will be prevented from turning in respect to the bolt by the frictional contact between the head and the adjoining face of the member 1 only. This will be considerable as the plate 4 is short and it will take a considerable force to spring it upwardly once the nut is tightened down.

What I claim as my invention is:

A nut lock comprising a base plate having an opening at one end adapted to receive the end of the bolt, and having at the opposite end a bifurcated portion, and a locking plate having one end pivoted in the bifurcated portion of the plate and its opposite end adapted to abut against the side of the nut, said pivoted end having a serrated portion eccentric to the axis of the pivot and adapted, when said locking plate is swung down into locking position, to engage the part to which the nut lock is applied, substantially as described.

Signed at Winnipeg, in the Province of Manitoba, this 9th day of March, 1911.

WILLIAM ECKFORD SMITH.

In the presence of—

G. S. ROXBURGH,
J. K. ELKIN.