

No. 650,156.

Patented May 22, 1900.

J. PEARSON.
NUT LOCK.

(Application filed Oct. 17, 1899.)

(No Model.)

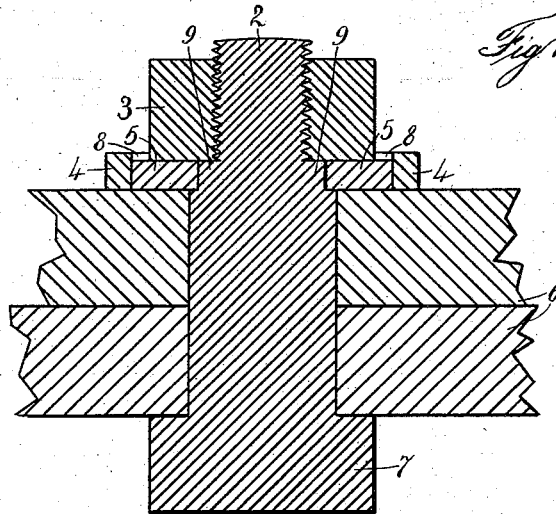


Fig 1

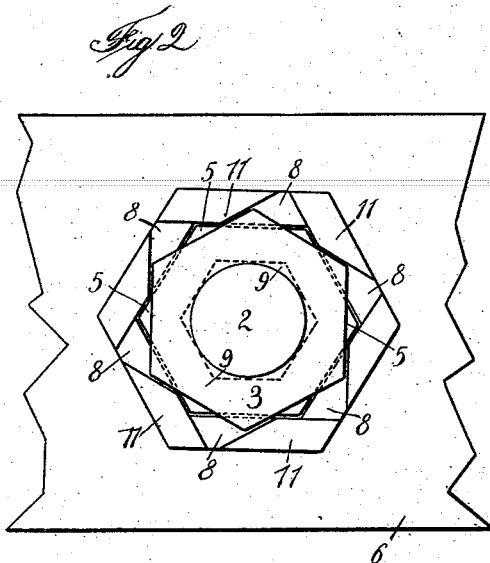


Fig 2

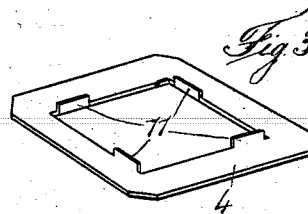


Fig 3

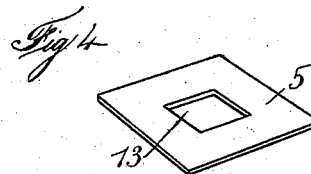


Fig 4

WITNESSES

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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 650,156, dated May 22, 1900.

Application filed October 17, 1899. Serial No. 733,859. (No model.)

To all whom it may concern:

Be it known that I, JOHN PEARSON, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain useful Improvements in Swing Nut-Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an improvement in nut-locks.

The object of this invention is to provide a lock for nuts, comprising a keeper, which is to be secured to the bolt to be locked, and a holder adapted, first, to lock upon the keeper and in turn lock the nut to the bolt, as will be described more fully hereinafter.

In the accompanying drawings I have shown, in Figure 1, a central sectional view of a bolt and nut securing the two plates in which my nut-lock is employed to lock the nut. Fig. 2 shows a top view of Fig. 1. Fig. 3 shows a perspective of a modification of the holder as used in my invention, while Fig. 4 shows one of the keepers used in connection with my nut-lock.

In the accompanying drawings an ordinary bolt 2 is provided with the head 7 and an additional angular collar 9, as is shown in Fig. 1 and in dotted lines in Fig. 2, and which angular collar is preferably of a diameter less than the stem proper of the bolt and from which extends the threaded portion 2 of the bolt. This bolt is shown as holding together the two plates 6 6, and surrounding the angular portion 9 of the bolt is the keeper 5, provided with an opening in outline conforming to the shape of the neck of the bolt, which in the drawings is shown as hexagonal. This keeper is removably held upon the bolt, but cannot be revolved thereon, being locked thereon by means of the angular portions of the stem of the bolt. Surrounding the keeper 5 and provided with an interior opening corresponding to the exterior conformation of the keeper 5 is a holder 4, which holder is provided with a plurality of upward extensions 11, so as to provide a flat surface 8, as is shown in Fig. 2. These portions 8 form seatings

within which the corners of the nut 3 work, as is shown in Fig. 2. From this it will be seen that my invention embodies a bolt the neck of which is provided with an angular collar, a keeper adapted to be removably held upon said angular collar, a holder working upon said keeper, and a nut working upon the stem of the bolt.

I do not wish to confine myself to any special angular form as regards the keeper, as this keeper may be made of sheet metal, as is shown, for instance, in Fig. 4, and simply be rectangular in outline and provided with a rectangular opening 13. So also could the holder be made of sheet metal, as is shown in Fig. 3, and provided with one or more upward extensions 11, against one or more of which extensions the nut would work in case the same should work loose after the lock has been placed in position.

In order to lock a nut secured to a bolt embodying my invention, the two pieces 6 would be placed together, the bolt 2 would be forced through the openings within these pieces, when the keeper 5 would be placed upon the bolt to be locked, upon the angular neck 9 thereof. The nut 3 would then be screwed upon the bolt to tightly lock upon the keeper 5, which, it will be noticed, is in the form of a washer and performs this function, so that the two pieces 6 would be impinged between the head 7 and the keeper 5 retained by the nut 3.

The holder 4 would next be placed upon the keeper. Then the nut would be unthreaded a little, sufficiently to carry the edge of the nut over and upon the holder, the nut preferably being turned until stopped by means of the upwardly-projecting lips or stops 11, against which of course the nut would lock, as the nut could not be turned without revolving the holder, and this holder, however, is locked upon the angular portion of the bolt. As there would be no tendency of the nut to lock itself upon the bolt in being jolted or jarred and as the tendency of the bolt to unlock is normal, the nut would of course be normally held against one or more of these upwardly-projecting lips and form a secure lock for the nut.

If desired, the upper face of the device, upon which the keeper rests, may be provided

with a hole or indentation, into which hole or indentation a part of the sheet-metal washer may be punched or upset, so that when the nut rests upon the keeper the projecting portion of said keeper is held within the opening, which prevents the washer from revolving. This would eliminate the necessity of an angular collar upon the bolt 2, as then the keeper is not held or locked upon the bolt, but upon the upper face of the thing upon which the keeper rests, the holder 4 then being secured in the usual manner.

Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

1. In a nut-lock of the character described a bolt, a keeper adapted to work over said bolt, a nut-holder working over and held by said keeper, said holder being provided with an abutting projection, and a nut adapted to partially swing over and upon said holder to abut against said projection.

2. In a nut-lock of the character described a suitable bolt, a keeper removably locked

upon said bolt, a holder working about and held by said keeper, said holder being provided with a projection so arranged that a nut adapted to lock upon said bolt will impinge itself upon said keeper and work over and above said holder and against said projection when unwound.

3. In a nut-lock of the character described a bolt, a keeper removably secured to said bolt and held thereon, a nut adapted to thread upon said bolt and upon said keeper, and a holder adapted to work over said nut, when in position, and about said keeper to be held by the same, said holder being provided with a projection so arranged that when said nut is partially unthreaded said holder is locked in one position by said nut, and in a plane at right angles by said keeper.

Signed in the presence of two witnesses.

JOHN PEARSON.

Witnesses:

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