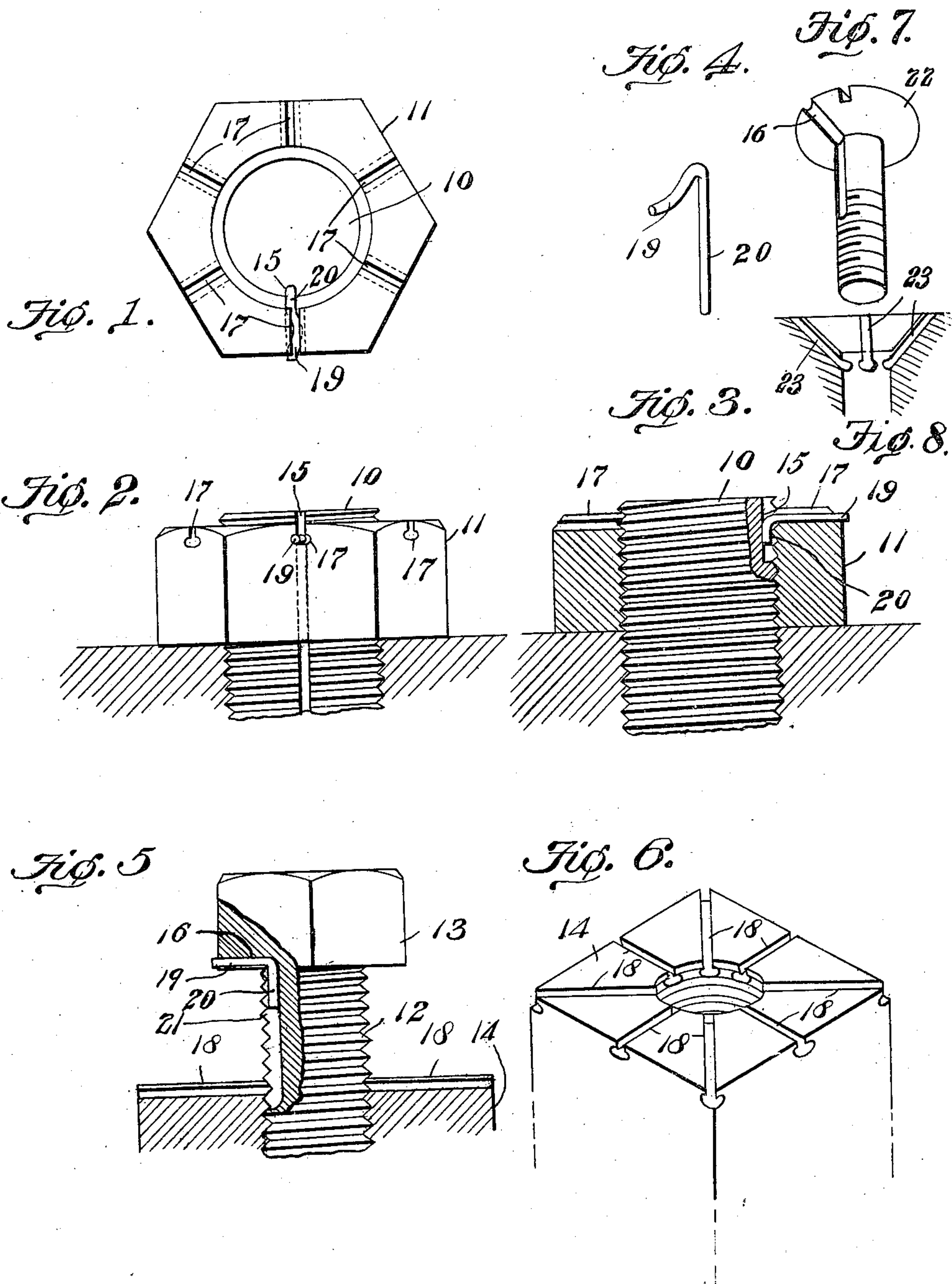


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F. W. NEWMAN.
NUT LOCK.

APPLICATION FILED JAN. 27, 1906. RENEWED JAN. 4, 1907.



WITNESSES:

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FLOYD W. NEWMAN, OF BRADFORD, PENNSYLVANIA.

NUT-LOCK.

No. 861,139.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FLOYD W. NEWMAN, a citizen of the United States, residing at Bradford, in the county of McKean and State of Pennsylvania, have invented
5 a new and useful Nut-Lock, of which the following is a specification.

This invention relates to nut locks and has for its object to simplify and improve the construction and increase the efficiency of devices of this character.

10 With this and other objects in view which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction as hereinafter fully described and claimed.

In the accompanying drawings forming a part of this
15 specification and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that various changes in the form,
20 proportion and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention within the scope of the appended claims.

Figure 1 is a plan view of the improved device, applied.
25 Fig. 2 is a view from one side of the improved device applied. Fig. 3 is a view of the improved device from another side and partly in section. Fig. 4 is a perspective view of the locking member, detached. Fig. 5 is a side view, partly in section, illustrating a modification in the construction. Fig. 6 is a
30 perspective view of the threaded member through which the modified form of bolt shown in Fig. 5 operates. Fig. 7 is a perspective view of a bolt having an inclined head, illustrating the manner of applying the
35 improved attachment to bolts of this form. Fig. 8 is a sectional detail of the threaded receiving structure in which the modified form of bolt shown in Fig. 7 is employed.

The improved device comprises a bolt having a recess
40 contiguous to its threaded portion, a member having a threaded aperture through which the bolt operates and also provided with one or more recesses, the latter recesses contracted at the entrances, and a locking member of resilient wire intermediately bent with
45 one arm curved and adapted to be snapped into one of the recesses having the contracted entrances and with the other arm disposed in the recess in the bolt.

The bolt may be of the ordinary form as at 10 and with an ordinary nut as at 11, or the bolt may be of the
50 cap screw form as at 12 with the wrench head 13 and operating in a threaded aperture in a member 14.

When the improved device is applied to the ordinary bolt the recess in the bolt will be disposed transversely of the threads thereon as at 15, and when applied
55 to a cap screw form of bolt, the recess in the bolt

will be disposed as at 16 in the wrench head 13 contiguous to the threaded portion of the bolt and also in the bolt as at 21.

When the form of bolt shown at 10 is employed the nut 11 used thereon will be provided with the apertures having the contracted entrances as at 17, preferably extending radially from the threaded aperture as shown.

When the cap screw form of bolt is employed, the contracted recesses will be arranged in the member 14
65 as at 18 and also preferably extending radially from the threaded aperture as shown.

The locking member is shown more clearly in Fig. 4, consisting of a section of resilient wire bent intermediately at any required angle and with one of the arms
70 19 curved and the other arm 20 straight as shown.

When applying the improved device to the form of bolt shown in Figs. 1—2 and 3 the nut 11 is set home upon the bolt in the ordinary manner and stopped with the recess 15 of the bolt opposite one of the recesses 17
75 in the nut. The straight arm 20 of the locking member is then thrust into the recess 15 of the bolt and the curved arm 19 forced down into the nearest recesses 17, the resiliency of the wire permitting it to be snapped through the contracted entrance thereto, and springing
80 back into its former shape within the larger portion of the recess, and effectually preventing accidental displacement therefrom.

When the form of bolt shown in Fig. 5 is employed the locking member 19 is disposed in the recess 16 in
85 the head 13 and the bolt then turned home, and when the head 13 bears upon the member 14, it is set with one of the recesses 18 opposite the recess 16 containing the member 19. The member 19 is then "snapped" into the aligned recess 18, to complete the locking.
90

When the device is applied to a set screw or a bolt where the head 13 is spaced away from the structure into which it is threaded, the bolt is turned until the channel 21 is in alinement with one of the recesses 18,
95 when the locking member may be "snapped" into position as before described.

In some forms of structures where a part of a turn of the bolt does not effect the desired result, one of the contracted recesses 17 or 18 only will be required, but in structures wherein a partial turn of the nut or bolt
100 is essential, then a plurality of the recesses will be required.

In structures where it is known before hand just where the nut or wrench head, as the case may be, is to stop the recess 17 or 18 may be located at such predetermined point, as will be obvious.
105

In structures where it is known before hand just where the nut will come on the bolt, the recess 15 need be formed only partly through the space on the bolt which will be covered by the nut.
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The device is very simple in construction, may be readily applied to nuts or bolts of all sizes and to devices of this class employed for any purpose, or in connection with any of the various structures upon which bolts and nuts or set screws are employed.

When the bolt is provided with a tapered head as at 22 in Fig. 7, the recess 16 will be in the inclined portion of the head, and the undercut recesses arranged in the countersunk seat for the head as at 23 in Fig. 8, but the operation is the same as in the modified structure shown in Figs. 5 and 6.

Having thus described the invention what is claimed is:—

1. In a device of the class described, a bolt having a recess contiguous to the threaded portion thereof, one or more recesses in the threaded member through which the

bolt passes and formed with contracted entrance, and a locking member bent intermediately with one arm curved longitudinally, said curved arm springing into one of said recesses in said threaded member and the other arm for engaging the recess in said bolt. 20

2. In a device of the class described, a bolt having a recess contiguous to its threaded portion, one or more recesses in the nut bearing over said bolt and formed with contracted entrances, and a locking member bent intermediately with one leg thereof curved transversely for springing into one of said recesses in the nut and the other arm for insertion into the recess in the bolt. 25

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses. 30

FLOYD W. NEWMAN.

Witnesses:

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