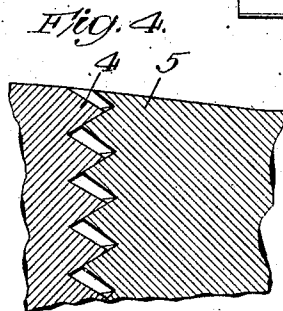
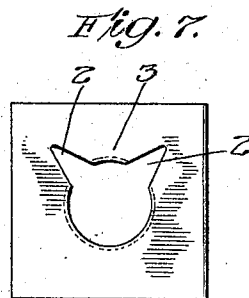
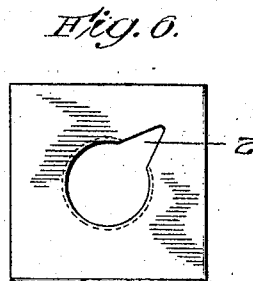
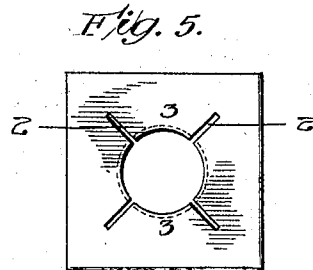
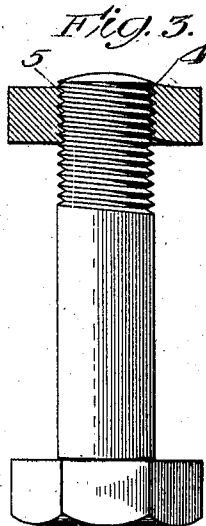
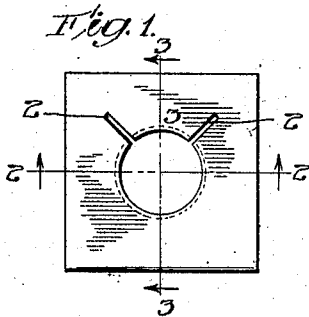


No. 800,188.

PATENTED SEPT. 26, 1905.

D. O. WARD.
METAL NUT.

APPLICATION FILED SEPT. 24, 1904.



Witnesses:
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UNITED STATES PATENT OFFICE.

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METAL NUT.

No. 800,188.

Specification of Letters Patent.

Patented Sept. 26, 1905.

Application filed September 24, 1904. Serial No. 225,860.

To all, whom it may concern:

Be it known that I, DANIEL O. WARD, a citizen of the United States of America, residing at Oak Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metal Nuts, of which the following is a description.

My invention belongs to that class of devices in which the nut is so engaged with the bolt that the danger of accidental displacement is minimized.

The object of my invention is to produce a more simple and effective device for the purpose specified than is now available.

To this end my invention consists in the novel construction, arrangement, and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters indicate like or corresponding parts, Figure 1 is a plan view of the preferred form of my improved nut. Fig. 2 is a transverse section of the same in line 2 2 of Fig. 1. Fig. 3 shows a bolt with my improved nut mounted thereon, the latter being in section substantially on line 3 3 of Fig. 1 to more clearly illustrate the operation. Fig. 4 is an enlarged fragmentary section exaggerated somewhat to show the operation. Figs. 5, 6, and 7 are plan views of slightly-modified forms.

In the preferred form shown in the drawings, 1 represents a screw-threaded nut of the usual construction provided with two slits 2 2, extending outward from the opening, preferably substantially as indicated and forming a section 3, which is separated from the body of the nut at the opening. The inner part of said section is then offset by a press or other suitable means, so that the threads 4 of said section are slightly out of registry with or set out of the plane of the threads 5, of which they originally formed a part. By this construction it will be seen that the threads of the said section are slightly deflected or set out of line with the threads on the body portion of the nut, so that when adjusted to a bolt and forced up by a wrench the threads on the two parts are at an angle to each other. The force applied tends to bring the threads again into registry, the raised portions im-

ping on the sides of the bolt-thread and firmly binding the parts together.

It will be seen that the nut is self-locking in its operation, requiring no supplemental or separable part in its use. In practice it is found that a nut may fit a bolt quite loosely, commonly called a "finger" fit, and that it may be readily engaged with the bolt by hand and screwed on until a point is reached where the threads in the deflected section engage the bolt-threads, when a wrench is required. When once seated, vibration or friction fails to disengage it, although it readily yields and backs off with the wrench.

As shown in Fig. 5, four slits or notches 2 are employed, and in such case more than a single section may be offset, if desired. In Fig. 6 a single V-shaped slit 2 is formed, and such form may perhaps be more readily punched out. The section is offset on one side or the other of the slit, as preferred. In Fig. 7 two such V-shaped slits 2 are provided. The construction is substantially the same as first described. In the preferred construction the section 3 is never offset more than the distance of a single thread, although the distance may be varied as desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. A device of the kind described, comprising a screw-threaded nut provided with a flat working face, and having a groove extending through its threaded opening and interrupting the threads thereof, the threads adjacent one side of said groove being slightly offset from their normal plane longitudinally of said opening.

2. A device of the kind described, comprising a screw-threaded solid nut provided with a groove or slit interrupting the threads thereof and extending toward its margin, and having the threads adjacent to one side of said groove slightly offset from their normal plane longitudinally of said opening.

3. A device of the kind described, comprising a screw-threaded nut provided with a plurality of grooves or slits interrupting the threads thereof and extending toward its margin, and having the threads between two of said slits slightly offset from their normal plane longitudinally of said opening.

4. A device of the kind described, compris-

ing a screw-threaded solid nut provided with a
flat working face, and having a groove per-
pendicular to said working face extending
through its threaded opening and interrupting
5 the threads thereof, the threads adjacent one
side of said groove being slightly offset from
their normal plane longitudinally of said open-
ing.

In testimony whereof I have hereunto signed
my name in the presence of two subscribing 10
witnesses.

DANIEL O. WARD.

Witnesses:

BURTON U. HILLS,

CHARLES I. COBB.