W. F. BONNESS.

LOCK NUT.

APPLICATION FILED MAY 24, 1911.

1,033,778. Patented July 30, 1912.

Fig. 1.

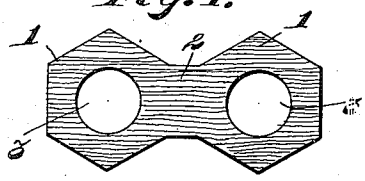


Fig. 2.

Fig. 3.

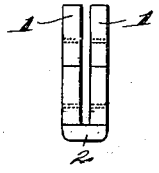


Fig. 4.

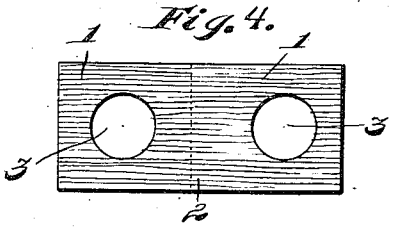


Fig. 5.

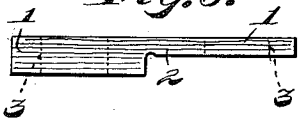


Fig. 6.

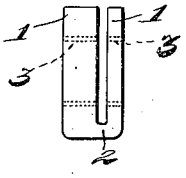
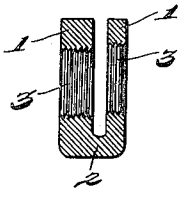


Fig. 7.



Witnesses:
C. E. Wessels
A. A. Olson

Inventor:
William F. Bonness,
By Joshua R. H. Potts
his Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM F. BONNESS, OF MADISON, WISCONSIN.

LOCK-NUT.

1,033,778. Specification of Letters Patent. Patented July 30, 1912.

Application filed May 24, 1911. Serial No. 629,101.

To all whom it may concern:

Be it known that I, WILLIAM F. BONNESS, a citizen of the United States, and a resident of the city of Madison, county of Dane, and State of Wisconsin, have invented certain new and useful Improvements in Lock-Nuts, of which the following is a specification.

My invention relates to improvements in lock-nuts and has for its object the production of a device of this character which is of improved construction and efficient in operation.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of the specification, and in which—

Figure 1 is a plan view of a blank from which a lock-nut embodying one form of my invention may be formed; Fig. 2, a side elevation thereof; Fig. 3, a side elevation of the blank shown in Figs. 1 and 2, bent to a position for threading; Figs. 4, 5, and 6 are views similar to Figs. 1, 2, and 3, respectively, of another form of the lock-nut, and Fig. 7 is a sectional view of the lock-nut shown in Figs. 4, 5, and 6, ready for use.

The form of construction illustrated in Figs. 1 to 3 inclusive, comprises a blank which is formed of any suitable malleable sheet metal, wrought iron being preferably used. The blank consists of the similarly formed end portions 1 and the intermediate or connecting portion 2, the end portions being shown of hexagonal form for the production of a lock-nut of this formation. The portions 1 are formed with central circular openings or perforations 3. In the formation of the blank as shown in Figs. 1 and 2, and which formation is preferably effected by punching, the blank is first bent transversely upon itself, as shown in Fig. 3. As shown in Fig. 3, the ends 1 are disposed parallel with each other with the openings 3 in alinement for tapping or screw-threading, both openings being simultaneously tapped. Finally one of the end portions 1 is forced to a position to bring said openings in non-alinement, with one of said openings farther transversely from the bend than the other.

In Figs. 4 to 6 inclusive, is illustrated a construction slightly different from that just described, the blank being formed at one end 1 of greater thickness than at the other, this form being designed for heavier work than that first described. A recess is formed at the juncture between the ends of portions 1 on the side thereof falling outside the bend to facilitate the bending and the formation of a smooth outer surface at the bend. The device shown in Figs. 4 to 6 inclusive, is square in outline, but it is understood that if desired the same may be formed of the same shape as the form first described, or of any other polygonal outline.

Fig. 7 shows the construction last described in form for use. It will be observed that the end portions 1 are forced transversely, relatively to each other, so as to position one of the openings farther from the bend than the other. When the nut is applied to a bolt, the openings are forced into alinement with each other, thus springing the parts and exerting the binding pressure upon opposite sides of the bolt. The binding pressure exerted by the nut is perpendicular to the axis of the bolt, thus causing a direct wedging and binding action between the threads, and consequently a very secure lock.

While I have illustrated and described the preferred forms of construction for carrying my invention into effect, these are capable of variation and modification without departing from the spirit of my invention. I, therefore, do not wish to be limited to the exact details of construction as set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claim.

Having described my invention, what I claim as new and desire to secure by Letters Patent, is:

A lock-nut formed from a blank provided with circular screw-threaded openings in its

ends, said blank being bent transversely upon itself to position said openings relatively in non-alinement and one of said openings farther transversely from said bend than the other, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM F. BONNESS.

Witnesses:
CHAS. O'NEILL,
H. A. NIETERT.