

J. W. MEAKER,
NUT.
APPLICATION FILED JUNE 9, 1913.

1,156,798.

Patented Oct. 12, 1915.

Fig. 2.

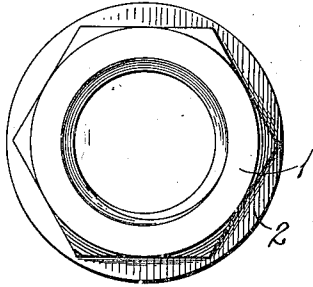


Fig. 5.

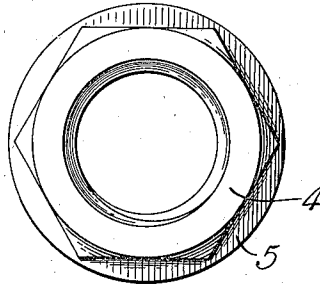


Fig. 1.

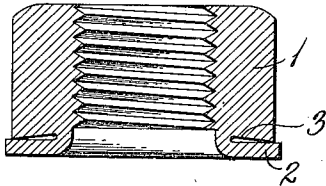


Fig. 4.

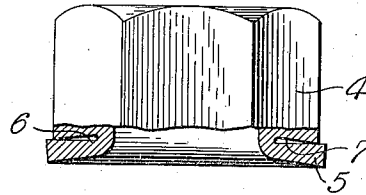


Fig. 3.

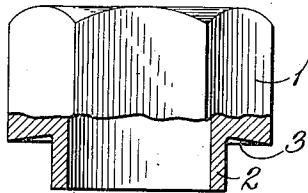


Fig. 6.

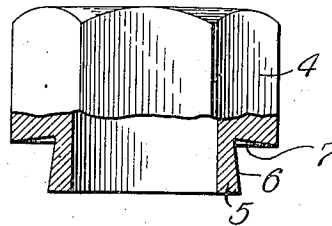


Fig. 8.

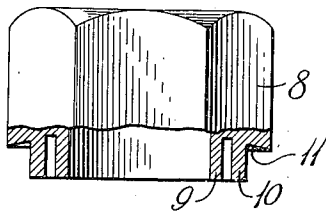
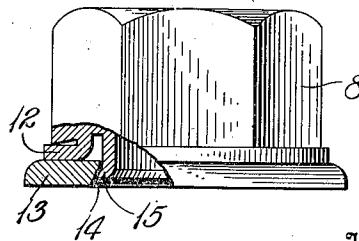


Fig. 7.



Witnesses
Chas. W. Stauffer
Anna M. Dorr.

Inventor

John W. Meaker,

By

Charles W. Stauffer
Attorneys

UNITED STATES PATENT OFFICE.

JOHN W. MEAKER, OF DETROIT, MICHIGAN.

NUT.

1,156,798.

Specification of Letters Patent.

Patented Oct. 12, 1915.

Application filed June 9, 1913. Serial No. 772,553.

To all whom it may concern:

Be it known that I, JOHN W. MEAKER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Nuts, of which the following is a specification, reference being had therein to the accompanying drawings.

15 Nuts of the cap and pedestal type which have a base flange of a diameter equal to or greater than the greatest diameter of the polygon of the nuts must ordinarily be formed of stock of sufficient diameter to turn the flange thereon and then mill or shape the body of the nut itself. This occasions great waste of stock and high cost of manufacture due to the necessity of shaping the body from round bars.

20 The invention relates to nuts with flanges thereon and consists in the matters hereinafter set forth and particularly pointed out in the appended claims.

Referring to the drawings, Figures 1 and 2 are views in detail of one form of nut that embodies features of the invention and are formed by the process referred to; Fig. 3 is a view in detail of the blank from which the nut is formed; Figs. 4 and 5 are views in detail of a slight modification of the nut; Fig. 6 is a view in detail of a blank from which the modification is formed; Fig. 7 is a view in detail of another modification of the nut provided with a rotatable washer; and Fig. 8 is a view in detail of the blank from which such nut is formed by the process that is a part of the invention.

35 In general the process consists in taking a stock or mill bar of the square, or polygonal section and diameter required, in drilling and screwthreading an end portion thereof as a blank, in forming an annular flange around the opening of the blank on the face end thereof and in spinning or pressing the flange out and down upon the face end.

40 As shown herein in preferred form a body 1 is cut from a mill bar of desired section in such manner as to leave an annular flange 2 projecting from the inner or face end of the blank. Preferably a shoulder face 3 on the blank is slightly relieved by being inwardly beveled. The flange is then pressed outwardly by spinning or other suitable means to bear firmly against the face 3 along its outer margin. The diameter of the expanded base that is thus formed by

the flange is of course, dependent upon the length given to the blank flange 2. The blank is then finished in the usual manner.

In this construction the inner and outer peripheral faces of the flange 2 are parallel so that the base of the finished nut is flat. Where it is desired to have the nuts slightly dished to bear closely around the margin of the flange only, the modification shown in Figs. 4, 5 and 6 is used. In this construction a blank is formed with a body 4 having the shape and dimensions of the stock bar from which it is cut with a base flange 5 whose outer peripheral face 6 is made slightly conical so that the outer edge of the flange is thicker than the root thereof. A recessed or inwardly beveled base face 7 is formed on the blank and the flange then expanded to seat against its base 7 as indicated in Fig. 4. Because of the proportions of the flange the latter is slightly dished and is adapted to rest on its margin when the nut is screwed home.

If a cap nut is desired that is provided with a rotatable washer, a nut is formed as indicated in Fig. 7 from a blank such as shown in Fig. 8. In this instance a blank body 8 of stock bar dimensions and shape, is turned up with a pair of concentric flanges 9 and 10 on its base face, the latter being slightly dished or concaved as indicated at 11. The outer flange 10, is turned to seat against the face 11 to form a base flange 12. A washer 13 of the dimensions desired and with a slightly beveled inner periphery 14 is sleeved over the inner flange 9 and the margin of the latter is spun or pressed out to form a retaining bead 15 which holds the washer against the flange 12.

As a result of this method of manufacture a nut is formed from a square or polygonal bar by the process of shaping the bar in such manner as to leave the necessary flange on the base face of the nut blank and then out-turning this flange against said face, thus obviating the necessity of milling, swaging or pressing the blank to obtain the desired shape. The diameter of the flange may be as desired and the flange may be formed to have either a flat or concave face. By the use of a second flange a washer nut is obtained at a very low cost of production.

Obviously, changes in the details of construction may be made without departing from the spirit of my invention and I do not care to limit myself to any particular

form or arrangement of parts except as set forth in the appended claims.

What I claim is:—

5 1. A nut having a square or polygonal body and a base flange of a diameter not less than the greatest diameter of the body, said flange being integrally attached to the body around the bore of the nut and bent outwardly into abutment with the outer portion of the base.

10 2. A nut comprising a body of stock bar cross section having a base flange of a diameter not less than the greatest diameter of the body, said flange being integral with the body adjacent the bore of the nut and abutting the base of the body around the marginal portion thereof.

3. A nut comprising a body of stock bar

dimensions and contour, and a base flange that is integrally formed with the body adjacent the bore of the nut and extends outwardly and abuts the outer marginal portions of the base face. 20

4. A nut comprising a body of stock bar dimensions and contour, and a base flange that is integrally formed with the body adjacent the bore of the nut and extends outwardly and abuts the outer marginal portions of the base face, the base being slightly concaved. 25 30

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. MEAKER.

Witnesses:

ANNA M. DORR,
C. R. STICKNEY.