J. G. WRIGHT.

WRENCH.

APPLICATION FILED MAY 25, 1915.

1,167,242.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 1.

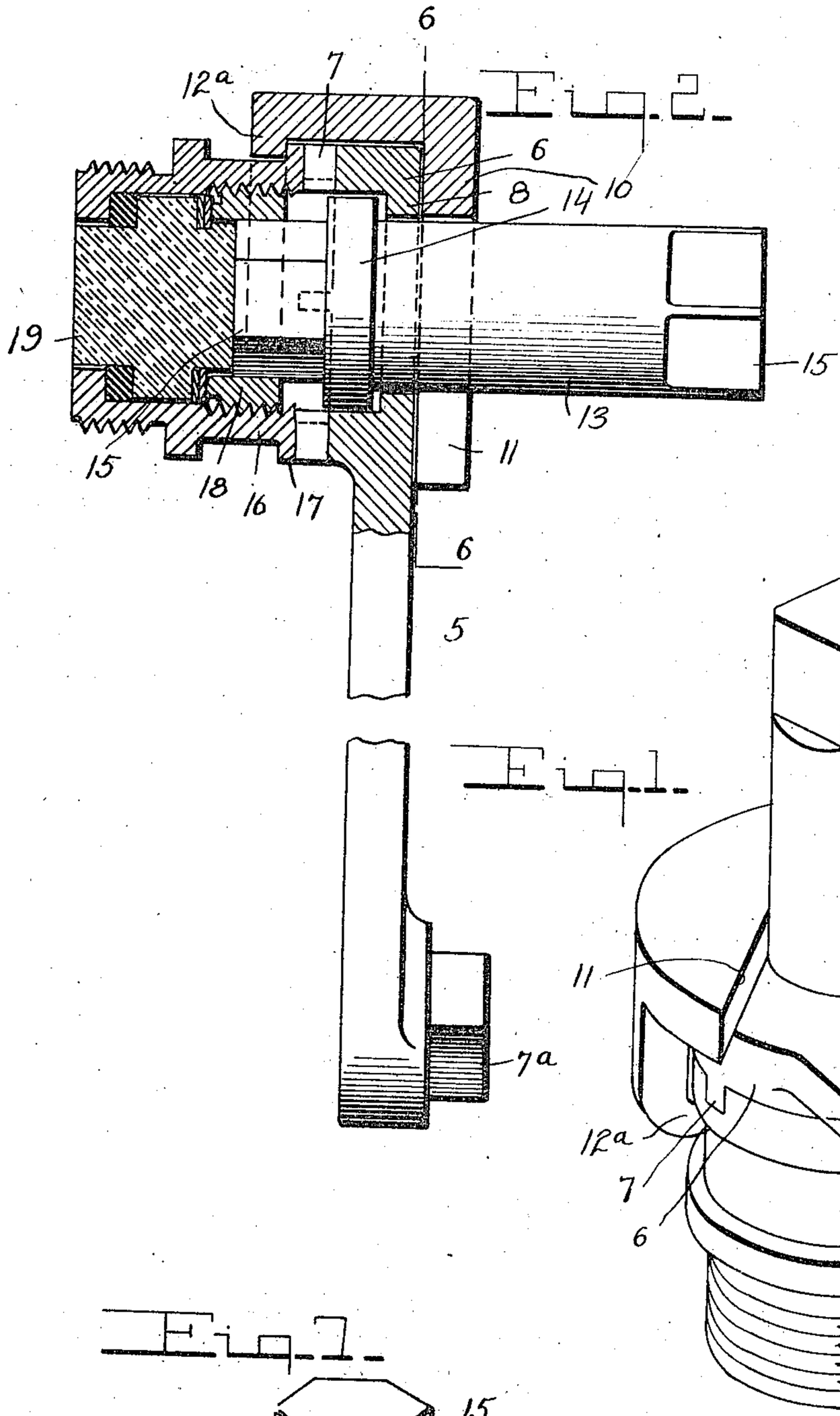
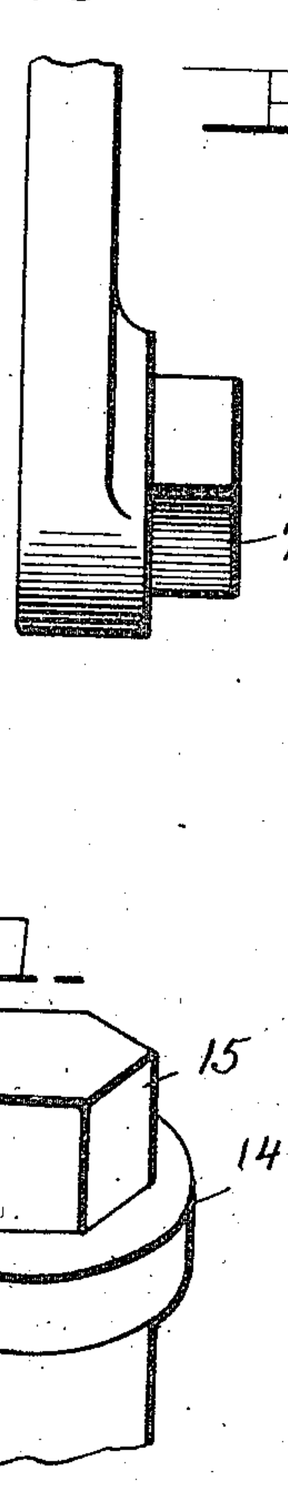


Fig. 1.



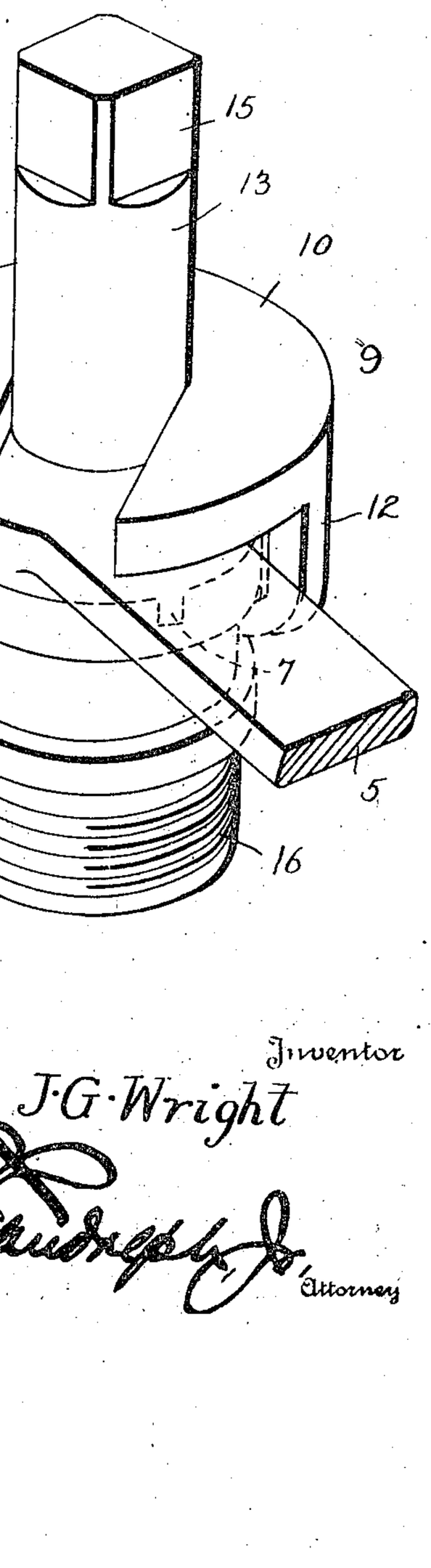
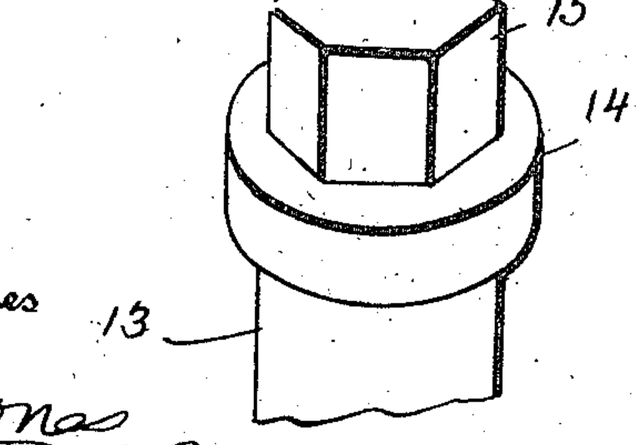


Fig. 7.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

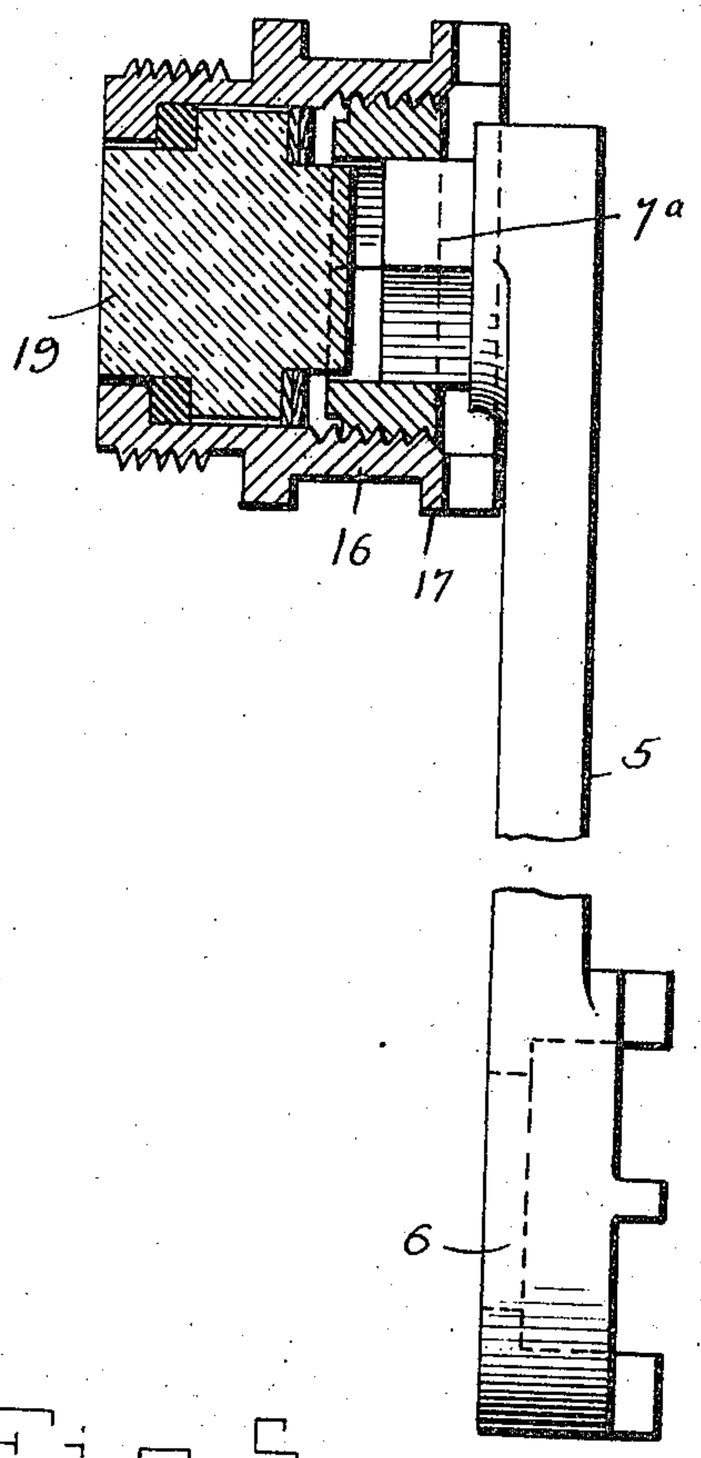


Fig. 6.

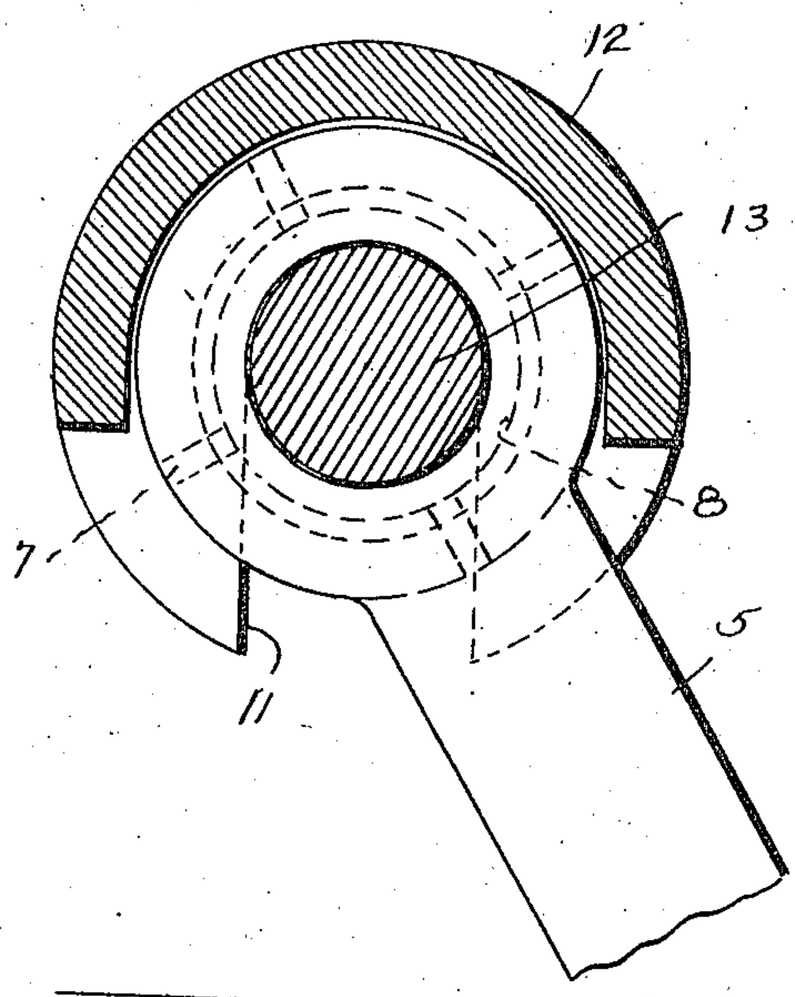


Fig. 4.

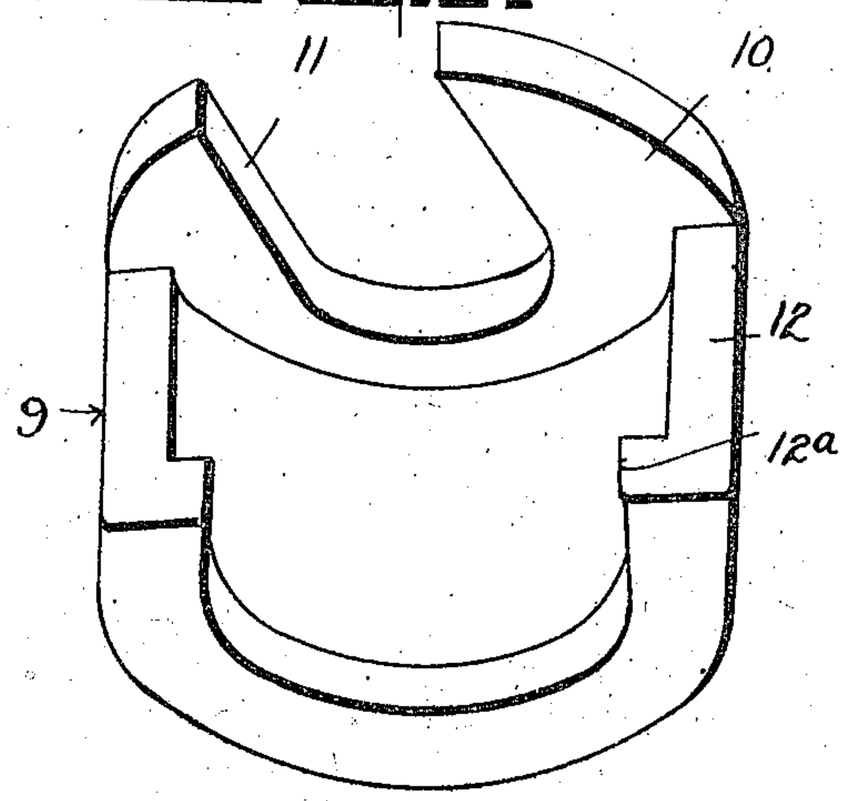
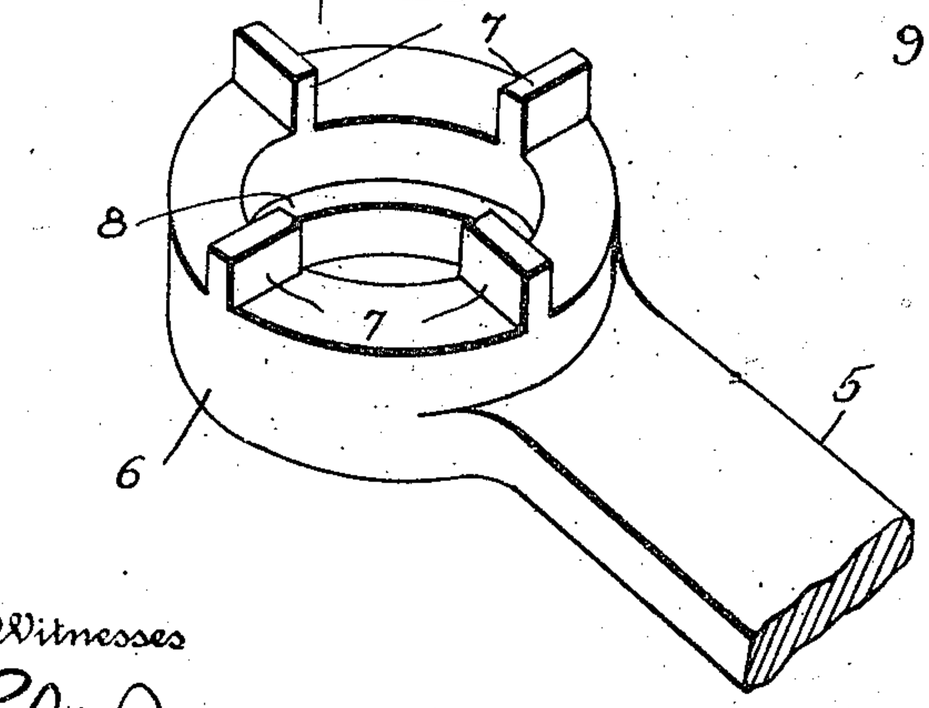


Fig. 5.



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UNITED STATES PATENT OFFICE.

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WRENCH.

1,167,242. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed May 25, 1915. Serial No. 30,349.

To all whom it may concern:

Be it known that I, JOHN G. WRIGHT, a citizen of the United States, residing at Tyler, in the county of Smith and State of Texas, have invented certain new and useful Improvements in Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to wrenches and more particularly to that type generally known as the spanner wrench.

The invention has for its primary object to provide an improved spanner wrench including means for reliably retaining the wrench head in proper position with relation to the object to be rotated.

With this and other objects in view, the invention consists in the novel construction, arrangement and formation of parts as will be hereinafter specifically described, claimed and illustrated in the accompanying drawing, in which:

Figure 1 represents a fragmental perspective view of the wrench complete. Fig. 2 represents a side elevation of the improved wrench, partly in section, and applied to use. Fig. 3 represents a side elevation of the wrench, partly broken away, illustrating the same applied to use. Fig. 4 represents a perspective view of the holder removed. Fig. 5 represents a fragmental perspective view of the annular head and adjacent portion of the handle of the wrench. Fig. 6 represents a fragmental sectional view on the line 6—6 of Fig. 2. Fig. 7 represents a fragmental perspective view of the centering element for the wrench removed.

Referring to the drawing in detail, wherein similar reference numerals designate corresponding parts throughout the several views, the numeral 5 indicates the handle or shank of the wrench, which is formed at one end with an enlarged annular head 6 formed at one edge with an inwardly directed annular flange 8. The side face of the annular head 6 opposite the flange 8 is formed with a plurality of axially projecting ribs or wings 7. The end of the wrench handle 5 opposite the head 6 is formed with a lateral enlargement or head 7ª.

A holder designated generally by the numeral 9 includes a body plate 10, preferably of circular formation and provided with a radial recess 11 and a semicircular laterally projecting flange 12, which latter is provided with a semicircular extension 12ª lying in a plane parallel to the body plate 10 and adapted to coöperate therewith in holding the wrench head 6 in position upon the object to be rotated, as will hereinafter appear.

A centering element 13 is provided with a cylindrical shank adapted to be rotatably mounted within the annular head 6 and a flange 14 adjacent that end adapted to engage the flange 8 of the head 6 to limit the outward movement of the shank 13 with relation to the head 6, in one direction. The opposite ends 15 of the shank are preferably of polygonal formation, whereby the centering element may be used for removing washer nuts.

The wrench is especially designed for use in removing annular or washer nuts 16, which are often used for holding gage glasses 19 of sight feed oiling systems. The glass 19 is retained in position in the holder 16 by the washer nut 18 and the holder 16 is formed at its outer edge with a plurality of spaced recesses for the reception of the lugs or wings 7 of the wrench head. The holder 16 is further provided with an annular flange 17. In use, the ribs or wings 7 of the wrench head 6 are engaged within the recesses in the outer flanged end of the holder 16, and one end of the centering element 13 is engaged within the polygonal bore of the washer nut 18 and the flange 14 thereof is seated within the annular head 6 and engaged with the flange 8 thereof. The wrench holder 9 is subsequently engaged over the flange 17 of the holder 16 and the head 6 of the wrench as clearly illustrated in Figs. 1 and 2, thus securing the wrench head against lateral removal from the holder 16 and insuring positive gripping action of the ribs or wings 7. The washer nut 18 may be conveniently removed from within the holder 16 by engaging the laterally projecting head 7ª of the wrench handle 5 therein and rotating the wrench in the proper direction.

What I claim is:

1. In combination, a wrench including a handle, a head at one end of said handle, axially projecting ribs or wings on said head, and means for securing said head in position upon an object to be rotated.

2. A wrench including a handle, an annular head at one end of said handle, a plurality of ribs or wings projecting axially of said head, a centering element removably positioned in said head, and means for securing said head against lateral movement with relation to an object engaged therewith.

3. A wrench including a handle, an annular head at one end of said handle, a plurality of wings or ribs projecting axially of said head, a centering element removably positioned in said annular head, means for limiting longitudinal movement of said centering element with relation to said head, and means for securing said wrench head in operative position upon an object.

4. A wrench including a handle, an annular head at one end of said handle, a plurality of ribs or wings projecting axially of said head, a centering element removably positioned in said head, and a holder removably engaged with said head for retaining the latter in engagement with an object including a body plate, an annular flange thereon, and a semi-circular extension on said flange disposed at right angles thereto.

5. A wrench including a handle, an annular head at one end of said handle, a plurality of axially projecting ribs or wings on said head, a centering element removably positioned in said head, means for limiting the longitudinal movement of said centering element in one direction with relation to said head, and a holder for retaining said head in operative engagement with an object including a body plate having a radial slot therein, a semi-circular flange on said plate, and an angular semi-circular extension on said flange.

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

JOHN G. WRIGHT.

Witnesses:
W. J. McAdams,
L. H. Hobbs.