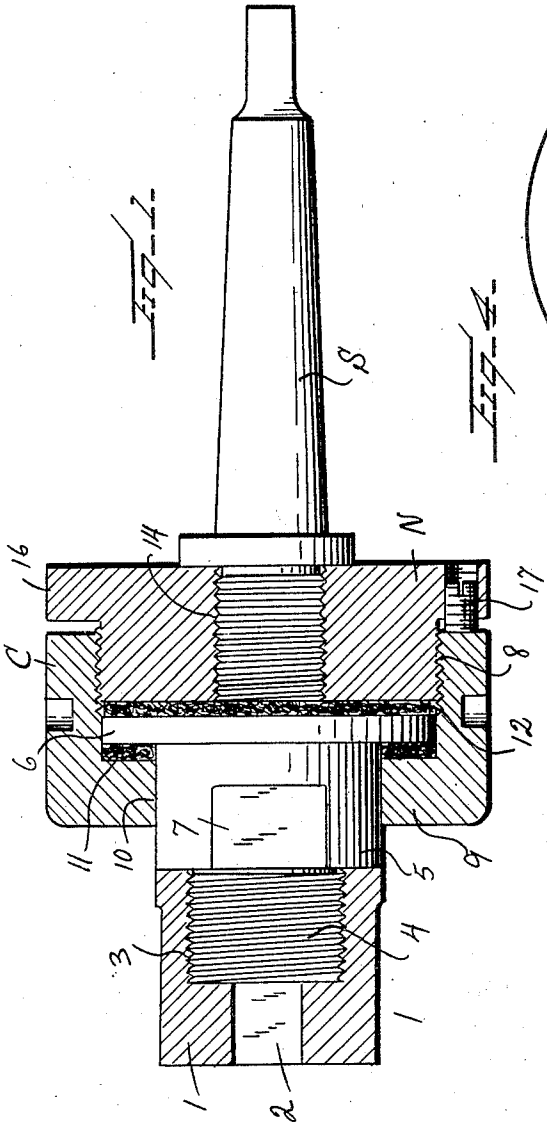
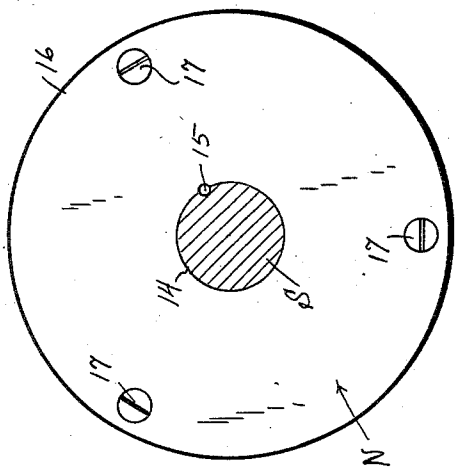
F. C. PALOSKY.

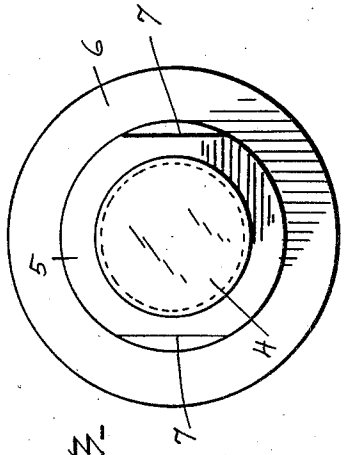
CHUCK.

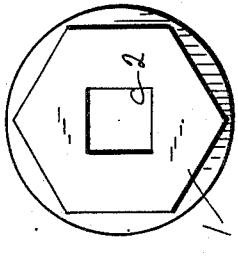
APPLICATION FILED JULY 11, 1919.

1,346,245. Patented July 13, 1920.









Inventor

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UNITED STATES PATENT OFFICE.

FREDRICK C. PALOSKY, OF PONTIAC, MICHIGAN, ASSIGNOR OF ONE-HALF TO SIMON ZIMMERMANN, OF PONTIAC, MICHIGAN.

CHUCK.

1,346,245. Specification of Letters Patent. Patented July 13, 1920.

Application filed July 11, 1919. Serial No. 310,243.

To all whom it may concern:

Be it known that I, FREDRICK C. PALOSKY, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Chucks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in chucks and has relation more especially to a device of this general character especially designed and adapted to hold a tool for drilling and the like or for tapping, and it is an object of the invention to provide a novel improved device of this general character including relatively movable parts normally maintained by friction means for unitary rotation.

It is also an object of the invention to provide a novel and improved chuck of this general character which will lessen the breakage of drills and taps and is quick acting for bolting up.

The invention consists in details of construction and in the combination and arrangement of the several parts of my improved chuck whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view partly in side elevation and partly in section illustrating a chuck constructed in accordance with an embodiment of my invention.

Fig. 2 is a view in end elevation of the socket member as herein embodied.

Fig. 3 is a view in end elevation of the member with which the socket member engages, and

Fig. 4 is a view partly in elevation and partly in section of the nut and coacting shank, as herein included.

As disclosed in the accompanying drawings, my improved chuck comprises a member 1 having in its outer end portion a socket 2 of desired cross sectional configuration and which has its inner end portion provided with an internally threaded recess 3 to receive the threaded end portion of the stem 4.

The opposite end portion of the stem 4 is provided with a head 5 and the outer end portion of the head 5 is defined by an outstanding annular flange 6.

At diametrically opposed points the head 5 is provided with the flattened faces 7 to facilitate engagement therewith of a wrench or other tool as the occasions of practice may necessitate.

C denotes a cap having its side wall 8 internally threaded and having its central or body portion 9 provided with an opening 10 through which the stem 4 and head 5 are insertible. The flange 6 overlies the inner face of the portion of the cap C surrounding the opening 10.

Mounted upon the head 5 is a fiber washer 11 which, when the device is in assembled relation is interposed between the flange 6 and the opposed face of the cap C.

N denotes a nut engageable with the threads of the wall 8 of the cap C and interposed between the inner end of said nut N and the head 5 is a fiber washer 12. The central portion of the nut N is provided with a threaded bore 14 in which is engaged the threaded end portion of the shank S. The shank S and nut N are further connected by a key 15 to prevent unscrewing of the nut N and the shank S one relative to the other when the device is in use.

In practice the frictional contact of the nut N with the head 5 through the washer 12 is sufficient to cause the head 5 and the member 1 operatively engaged with the head to rotate in unison during a working operation but upon undue resistance being offered by the work the shank S, nut N and cap C will be permitted to rotate independently of the head 5 so that the breaking of drill in the event the drill should stick, or from any other cause its rotation is stopped and similarly whereby a tap is prevented from breaking when the tap has been tightened sufficiently. In view of this advantageous feature, my improved chuck may be employed with equal facility in reaming, bolting, counterboring or the like.

In order to regulate or control the desired friction I find it of advantage to dispose

through the outstanding flange 16 the equidistantly spaced screws 17 which are engageable with the outer or free edge of the wall 8 of the cap C. The screws 17 are equi-distantly spaced and preferably three in number.

From the foregoing description, it is thought to be obvious that a chuck constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. A device of the character described comprising a cap, a head in swivel engagement therewith, a socket member carried by the head, a nut engaged within the cap for frictional action upon the head, a shank engaged with the nut, and regulating members threaded through the nut for contact with the cap.

2. A device of the character described comprising a cap, a head in swivel engagement therewith and provided with a socket, a nut engaged within the cap for frictional action upon the head, said nut being provided with an outstanding flange overlying the outer or free edge of the wall of the cap, and a plurality of members threaded through the flange of the nut for contact with said edge of the cap.

3. A device of the character described comprising a cap having an opening in its central portion, a head disposed through said opening and extending within the cap, the inserted end portion of the cap being defined by an outstanding flange, a socket member engaged with the opposite end portion of the head, a fiber member surrounding the head and interposed between the flange thereof and the body of the cap, a nut threaded within the cap, a fibrous member interposed between the cap and the head, and a shank engaged with the nut.

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

FRED C. PALOSKY.

Witnesses:
WILLIAM C. ZIMMERMANN,
VERN LARKIN.