A. K. JOHNSON.

BUSHING TOOL.

APPLICATION FILED DEC. 29, 1917.

1,382,834. **Patented June 28, 1921.**

Fig. 1.

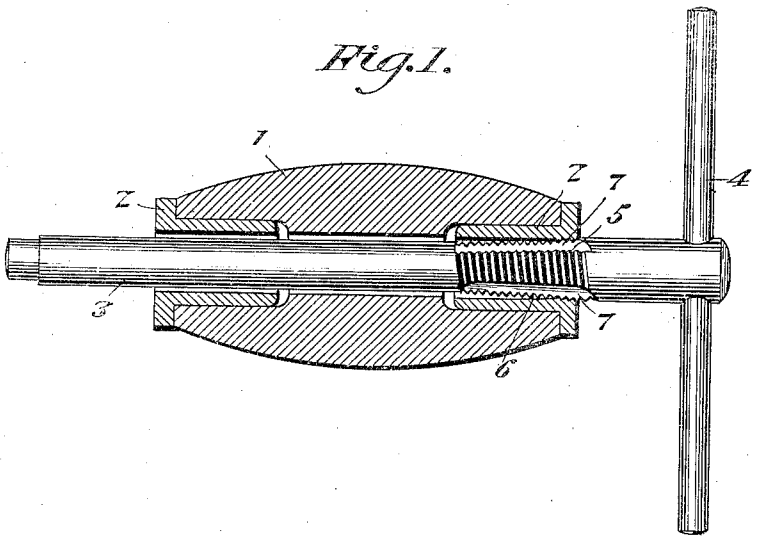
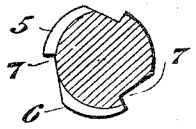


Fig. 2.



Witnesses

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ARTHUR K. JOHNSON, OF HOLLY, COLORADO.

BUSHING-TOOL.

1,382,834. Specification of Letters Patent. Patented June 28, 1921.

Application filed December 29, 1917. Serial No. 209,599.

To all whom it may concern:

Be it known that I, ARTHUR K. JOHNSON, a citizen of the United States, residing at Holly, in the county of Prowers and State of Colorado, have invented new and useful Improvements in Bushing-Tools, of which the following is a specification.

This invention relates to new and useful improvements in tools for removing bushings and the like from hubs or sleeves, and the principal object of the invention is to provide the tool with cutting means whereby the same may be made to firmly engage the bushing so that the same will be removed with the tool.

Another object of the invention is to form the tool with an elongated body part and a handle integral therewith so that the tool consists of one piece and the danger of misplacing the different parts of the tool where the same is composed of two or more separate parts is eliminated.

Another object of the invention is to provide a device of this character which is simple and durable in construction, reliable and efficient in operation and one which can be manufactured and placed upon the market at a minimum cost.

The invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a longitudinal sectional view of the hub provided with bushings and showing my tool engaging therewith.

Fig. 2 is a cross sectional view through the screw threaded part of the tool.

In these views 1 represents a hub provided with the bushings 2 at the ends thereof. When the bushings are worn and it is desired to replace them by new ones, a great deal of trouble is usually experienced in removing the bushings from the hub and it is the object of my invention to provide means whereby said bushings may be easily removed. In carrying out my invention I utilize a tool consisting of a body or shank part 3 and a handle 4, said handle being passed through a hole at the upper end of the shank. As will be seen, the shank is of greater diameter at its upper end than at its lower end and a tapered part 5 connects the two parts together. This tapered part is provided with screw threads 6 and I provide longitudinal recesses 7 in said tapered part, three of such recesses being shown in the drawing. As will be seen, these recesses are spaced apart so as to provide three screw threaded sections around the circumference of the tool. As will be seen one side of the recess is provided with a straight wall while the other wall flares outwardly as shown. The straight wall forms a cutting edge so that as the screw threaded portions come in contact with the sides of the bushing and the tool is rotated said threads will cut grooves into the bushing and thus a firm contact of the tool with the bushing is secured. Then by tapping the end of the tool with a hammer the bushing can be removed.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make slight changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:—

1. A tool for removing bushings comprising a shank of a length adapting it to extend through a bushing, provided at one end with a transverse impact surface and also having means whereby it may be turned, and a tapered thread forming member carried by the shank between its ends.

2. A tool for removing bushings comprising a shank having a tapered portion extended at its smaller end to form a terminal impact surface and also having means whereby it may be turned, said tapered portion being provided with a thread forming surface.

3. A tool for removing bushings comprising a one-piece bar or shank of a length adapting it to extend through a bushing, provided at one end with means whereby it may be rotated and at the other end with an abrupt transverse impact surface and fitted between its ends with a thread forming portion.

In testimony whereof I affix my signature.

ARTHUR K. JOHNSON.