

Oct. 6, 1931.

C. G. PAYNE

1,826,631

BEARING PULLER

Filed March 7, 1930

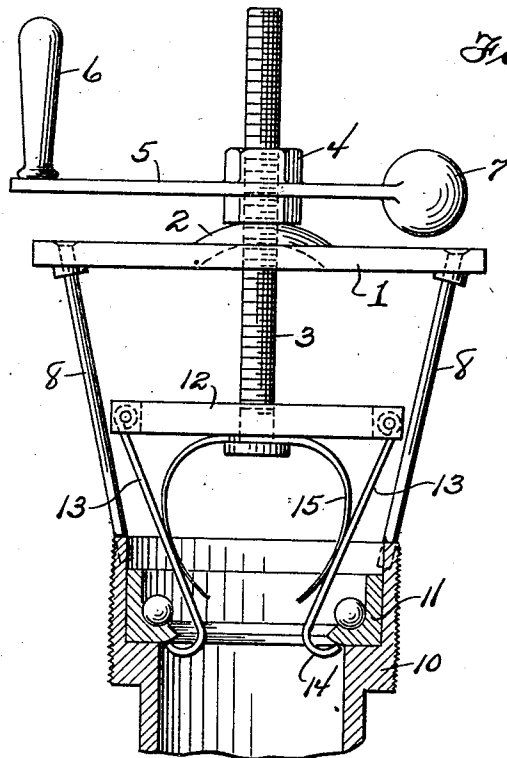


Fig. 1.

Fig. 2.

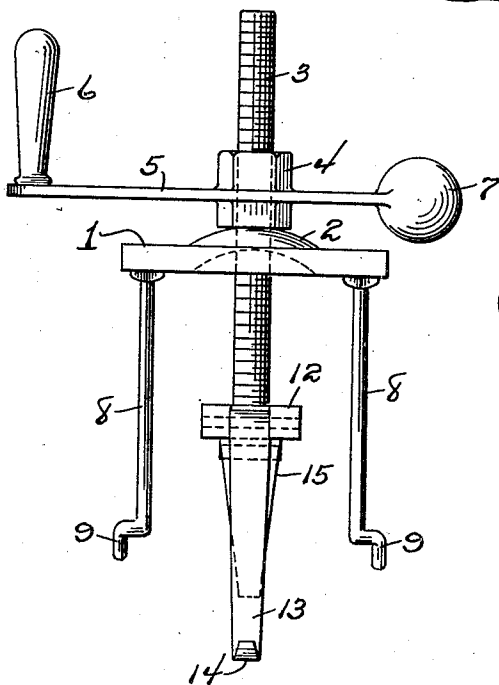
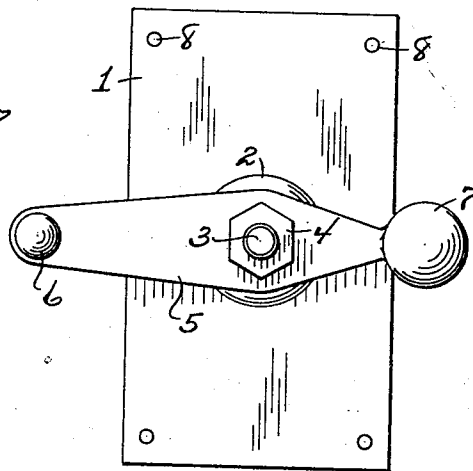


Fig. 3.



Charles G. Payne

INVENTOR

BY Victor J. Evans

ATTORNEY

UNITED STATES PATENT OFFICE

CHARLES G. PAYNE, OF GLASGOW, KENTUCKY

BEARING PULLER

Application filed March 7, 1930. Serial No. 434,070.

This invention relates to a pulling device, the general object of the invention being to provide means for pulling the bearings from their containing parts.

Another object of the invention is to so form the device that it can be used for pulling bearings of various sizes.

This 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 claim.

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 view showing the device in use.

Figure 2 is a view of the device itself.

Figure 3 is a plan view.

In these views, 1 indicates a plate which is provided with a convex projection 2 at the center through which a hole passes to loosely receive a threaded shaft 3. A nut 4 is threaded on the shaft and engages the enlargement or projection and is carried by a hand lever 5 which has a handle 6 attached to one end and a weight 7 attached to the other end. Thus by turning the hand lever, the engagement of the nut with the projection 2 will cause the screw to feed outwardly when said screw or shaft is held against rotation. Divergent legs 8 are arranged at the corners of the plate and these legs have offset terminals 9 for engaging the housing 10 or other container of the bearing 11. A cross piece 12 is fastened to the inner end of the shaft 3 and arms 13 are hinged to the ends of said piece. The outer ends of the arms are of hook shape, as shown at 14, with their terminals beveled to engage a bearing, such as 11. A substantially U-shaped spring 15 is supported on the shaft and has its limbs engaging the arms 13 to press the same outwardly.

From the foregoing, it will be seen that by pressing the arms 13 inwardly, the hooked ends thereof can be passed through a bearing so that the extremities of the hooks will en-

gage the inner side of the bearing, the spring 15 forcing the arms outwardly as soon as they are released. With the legs 8 engaging the housing, the member 5 is turned so as to feed the shaft 3 outwardly. This will cause the arms 13 to pull the bearing from the housing. By making the arms 13 as shown, the device can be used for pulling various sizes of bearings.

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 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 claim.

What I claim is:—

A device of the class described comprising a supporting plate having a substantially spherical projection on its upper face at the center of the plate and said plate and projection having a hole therein, a screw shaft loosely passing through the hole a nut threaded on the shaft and resting against the projection, a handle connected with the nut, legs depending from the plate and having their extremities bent into right angle form, a cross piece supported by the lower end of the screw shaft, an arm hinged to each end of the cross piece and having a hook shaped outer end and a U-shaped spring carried by the lower end of the shaft and having its limbs engaging the arms for pressing the arms outwardly.

In testimony whereof I affix my signature.
CHARLES G. PAYNE.