Nov. 3, 1925. 1,559,720

C. A. McCRAY ET AL

POWER TOOL

Filed April 11, 1924

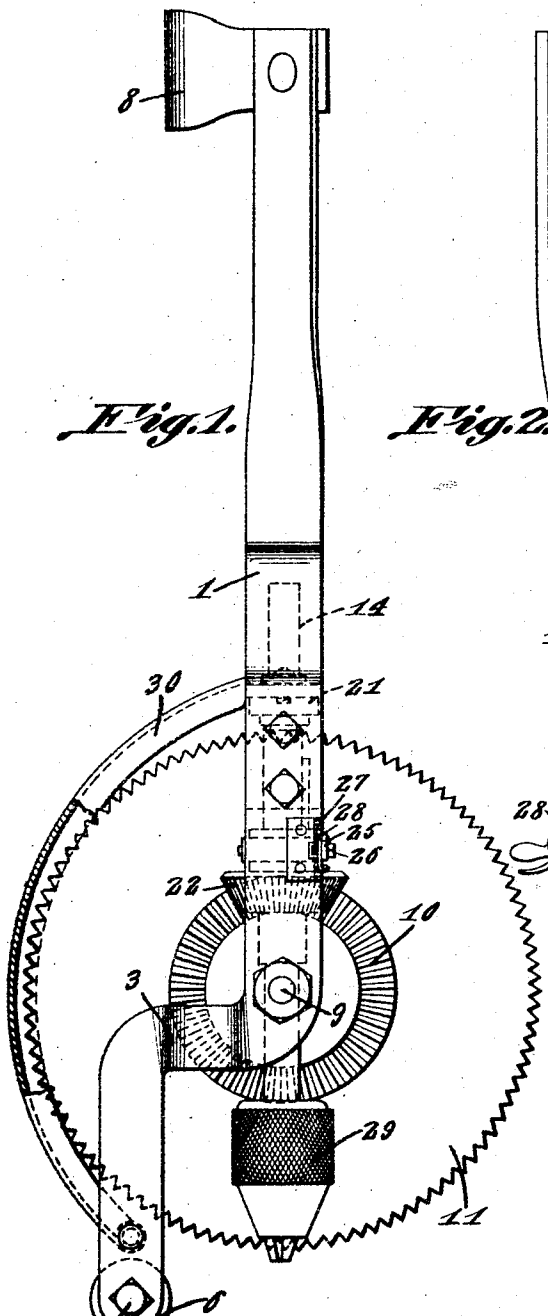


Fig. 1.

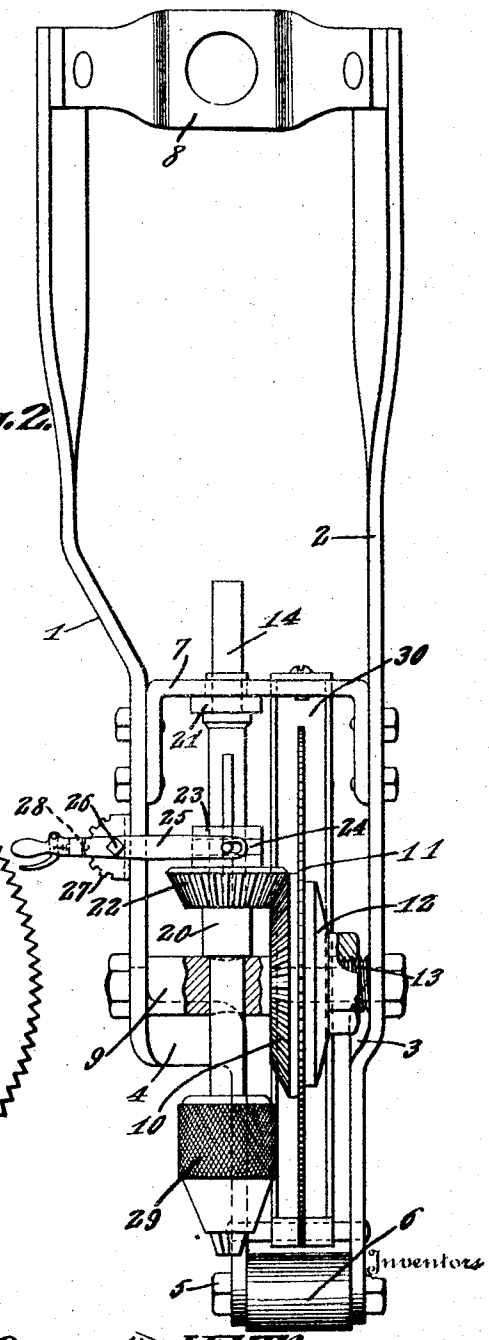


Fig. 2.

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UNITED STATES PATENT OFFICE.

CHARLES A. McCRAY, OF WAYNESBORO, AND JOSEPH S. McCRAY AND JOSEPH E. THOMAS, OF HOT SPRINGS, VIRGINIA.

POWER TOOL.

Application filed April 11, 1924. Serial No. 705,898.

To all whom it may concern:

Be it known that we, CHARLES A. McCRAY, a citizen of the United States, residing at Waynesboro, in the county of Augusta and State of Virginia (whose post-office address is Waynesboro, Va.), and JOSEPH S. McCRAY and JOSEPH E. THOMAS, citizens of the United States, residing at Hot Springs, in the county of Bath and State of Virginia, have invented a new and useful Power Tool, of which the following is a specification.

This invention relates to a tool designed primarily for attaching to a motor whereby various operations may be carried out conveniently, the structure being more especially designed for use by plumbers, steam fitters, and other mechanics whose work can be expedited by the use of a simple and compact power driven tool in lieu of ordinary hand operated tools.

It is an object of the invention to provide a simple and compact structure which can be handled readily and will not easily get out of order.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings

Figure 1 is a side elevation of the tool, a portion of the saw guard being broken away.

Fig. 2 is a front elevation of the device, a portion being broken away.

Referring to the figures by characters of reference 1 and 2 designate the side members of the frame, each of these side members being offset at one end, as shown at 3 and 4, the offset portion 4 being also offset laterally as shown in Fig. 2 so as to reduce the distance between the members 1 and 2 at one end where they are connected by a bolt 5 extending through a spacing sleeve 6. A cross member 7 is attached to the side members 1 and 2 so as to cooperate therewith to form a rigid frame and those ends of the side members 1 and 2 remote from the bolt 5 are connected by a transverse yoke 8 adapted to be bolted or otherwise secured to the frame of the motor, not shown.

A cross bar 9 is secured between the members 1 and 2 close to the offset portions 3 and 4, and mounted for rotation on this bar is a gear 10. A circular saw 11 is adapted to be clamped to the back of this gear by a disk 12 engaging a threaded hub 13 extending from the gear.

A longitudinal shaft 14 is journaled in the cross strip 7 and the bar 9 and is adapted to be coupled at one end to the motor by any suitable means not shown. This shaft is held against longitudinal movement by collars 20 and 21 bearing against the strip 7 and bar 9. A gear 22 is feathered on the shaft 19 and has a hub 23 carrying a ring 24 which is engaged by one end of a shifting lever 25. This shifting lever is mounted to swing about a pivotal connection 26 on a toothed segment 27 and can be locked by means of a dog 28 or the like in any position to which it may be moved. Thus gear 22 can be shifted readily into and out of mesh with gear 10.

Shaft 14 is extended at one end beyond the offset portions 3 and 4 and is provided with a chuck 29 for engagement with the drill or other tool.

It will be apparent that by connecting this attachment to a motor so that shaft 14 will be driven by the shaft of the motor the tool can be used for various purposes and will constitute an efficient labor saving device. While gears 22 and 10 are in mesh the saw will be driven. By shifting gear 22 the rotation of the saw can be stopped but the chuck 29 will be rotated so that a bit in the form of a drill, screw driver, or the like can be driven.

As shown particularly in Fig. 1 an arcuate shield 30 can be secured to the cross strip 7 and extended partly around the saw 11, one end of the shield being attached between the side members 1 and 2 close to the spacing sleeve 6.

Obviously this tool can be used by different mechanics and, by employing various attachments can be utilized for cutting metal, and wood, drilling materials, grinding and polishing, scraping floors, etc.

What is claimed is:—

A power tool attachment for motors including a frame having a contracted offset portion at one end and an attaching yoke at its other end, a longitudinal shaft journaled in the frame and terminating adjacent one side of the offset end portion, a chuck carried by said shaft, a saw mounted for rotation within the frame on an axis extending transversely of the frame, means for transmitting motion from the shaft to the saw, said means including a shiftable gear, and an arcuate guard secured at its ends to the frame and housing a portion of the periphery of the saw.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures.

CHARLES A. McCRAY.
JOSEPH S. McCRAY.
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