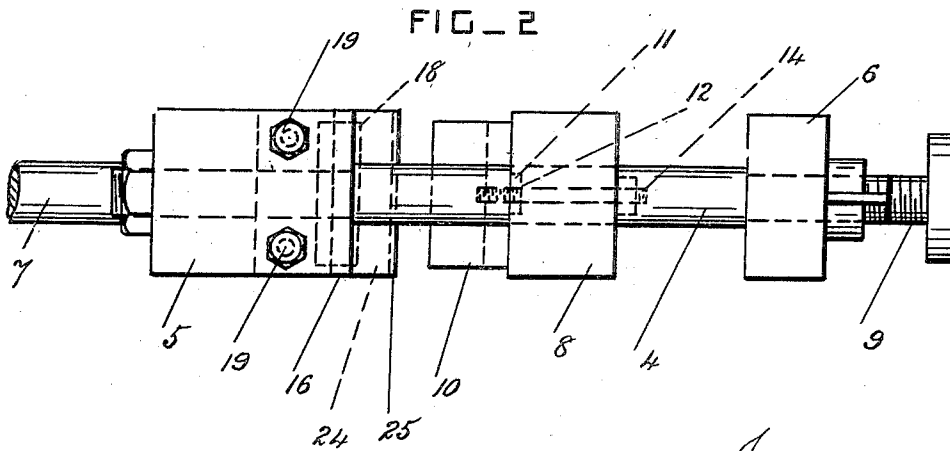
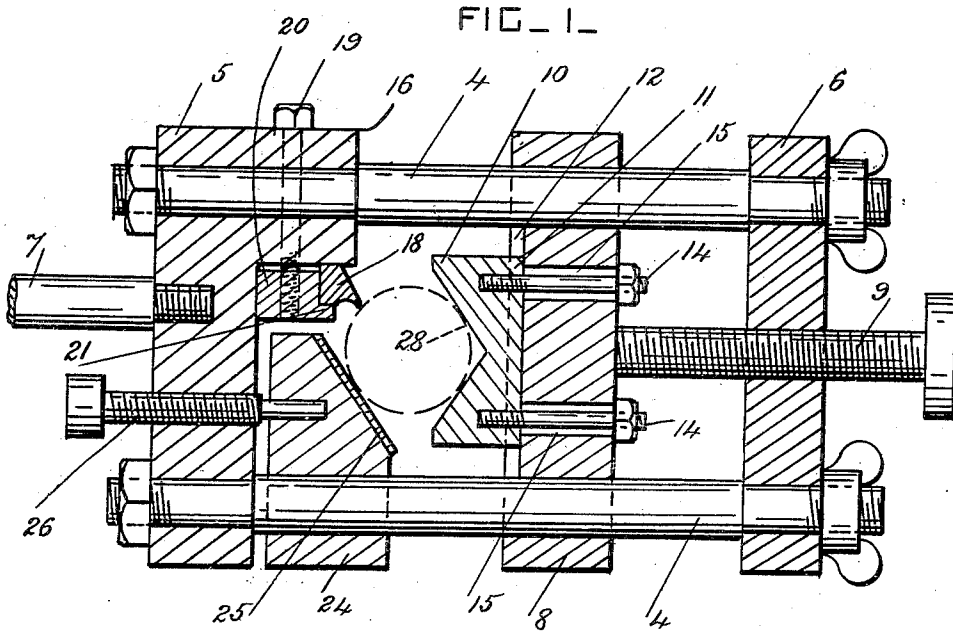


W. MOXHAM.
 TOOL FOR TURNING SHAFT BEARINGS.
 APPLICATION FILED MAR. 11, 1921.

1,430,831.

Patented Oct. 3, 1922.



Inventor.
 Walter Moxham
 by Herbert W. Jenner,
 Attorney.

UNITED STATES PATENT OFFICE.

WALTER MOXHAM, OF CHESTER, NEBRASKA.

TOOL FOR TURNING SHAFT BEARINGS.

Application filed March 11, 1921. Serial No. 451,606.

To all whom it may concern:

Be it known that I, WALTER MOXHAM, a citizen of the United States, residing at Chester, in the county of Thayer and State of Nebraska, have invented certain new and useful Improvements in Tools for Turning Shaft Bearings, of which the following is a specification.

This invention relates to tools for turning the bearings of shafts after they have become worn, so as to restore them to their original truly cylindrical condition; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a longitudinal section through a tool constructed according to this invention. Fig. 2 is a plan view of the same.

The tool is provided with a supporting frame comprising two parallel guide bars 4 having their end portions secured in blocks 5 and 6. The block 5 is the main block, and it has a handle bar or stop bar 7 which projects from it in the opposite direction from the guide bars. A slide 8 is mounted on the two guide bars, and 9 is a screw which engages with a screwthreaded hole in the middle part of the block 6, and which bears against the slide 8, and affords a means for pressing the slide towards the main block 5. An angle-shaped jaw 10 is provided and it has a tongue 11 on its back which is slidable in a longitudinal groove 12 in the slide 8. Two clamping bolts or screws 14 are provided for securing the jaw to the slide, and these bolts engage with slots 15 in the slide, so that the jaw can be adjusted.

The main block 5 is provided with an offset portion 16 at one end, and 18 is a cutter or blade which is clamped against the offset portion 16 by means of screws 19 and a clamping bar 20. The screws are arranged in holes in the part 16, and are screwed into holes in the clamping bar, and the clamping bar has a lip 21 which overlaps a portion of the cutter 18 and secures it firmly to the main block.

A slidable block 24 is arranged on one of the guide bars adjacent to the cutter, and it has an inclined plate 25 of hardened steel secured to its face and arranged at an angle to the guide bar, and substantially parallel to one of the inclined faces of the angle-shaped jaw 10. A screw 26 is provided, and is screwed into a hole in the main block

5, and engages with the block 24 so that the block can be slid on the guide bar. The shaft bearing 28 to be turned is indicated by the dotted circle, and the slidable block 24 is provided so that shaft bearings of different diameter can be operated on.

The shaft to be turned is preferably mounted between the centers of a lathe, and is revolved at any suitable speed. The jaw 10 and the plate 25 are adjusted to the bearing so as to press the cutting edge of the blade 18 against the bearing. The handle or bar 7 is used to prevent the tool from revolving, and it may be held by hand or permitted to bear against the bed of the lathe. The cutting tool scrapes or cuts the bearing to its original truly cylindrical condition. This is particularly desirable on the crankshafts of high speed engines, as it enables the engine to function much better than is possible when the crankshaft bearings are worn.

If desired, the tool may be operated by revolving it upon the shaft bearing while the shaft is held stationary, but it is better to revolve the shaft in a lathe.

What I claim is:

1. A turning tool for shaft bearings, comprising a frame provided with parallel guide bars, a cutter secured to one end portion of the frame, a single slidable block mounted on one of the guide bars adjacent to the cutter and provided with a face arranged at an angle to the guide bar, a slide mounted on the guide bars and provided with an angle-shaped jaw arranged opposite the said cutter, and means for adjusting the said slidable block and slide on the guide bars.

2. A turning tool for shaft bearings, comprising a frame provided with parallel guide bars, a cutter secured to one end portion of the frame, a slidable block mounted on one of the guide bars adjacent to the cutter and provided with a face arranged at an angle to the guide bar, a slide mounted on the guide bars, an adjustable angle-shaped jaw arranged opposite the said cutter, the said slide and jaw having a longitudinal tongue and groove, clamping devices for securing the said jaw to the said slide, and means for adjusting the said block and slide on the guide bars.

3. A turning tool for shaft bearings, comprising a frame having two parallel guide bars and a main block having an offset portion, a cutter, clamping devices securing the

cutter against the offset portion of the main block, a slidable block mounted on one of the guide bars adjacent to the said offset portion and cutter and provided with a face
5 arranged at an angle to the guide bar, a slide mounted on the guide bars and provided with an angle-shaped jaw arranged

opposite the said cutter, and means for adjusting the said slidable block and slide on the guide bars.

In testimony whereof I have affixed my
signature. 10

WALTER MOXHAM.