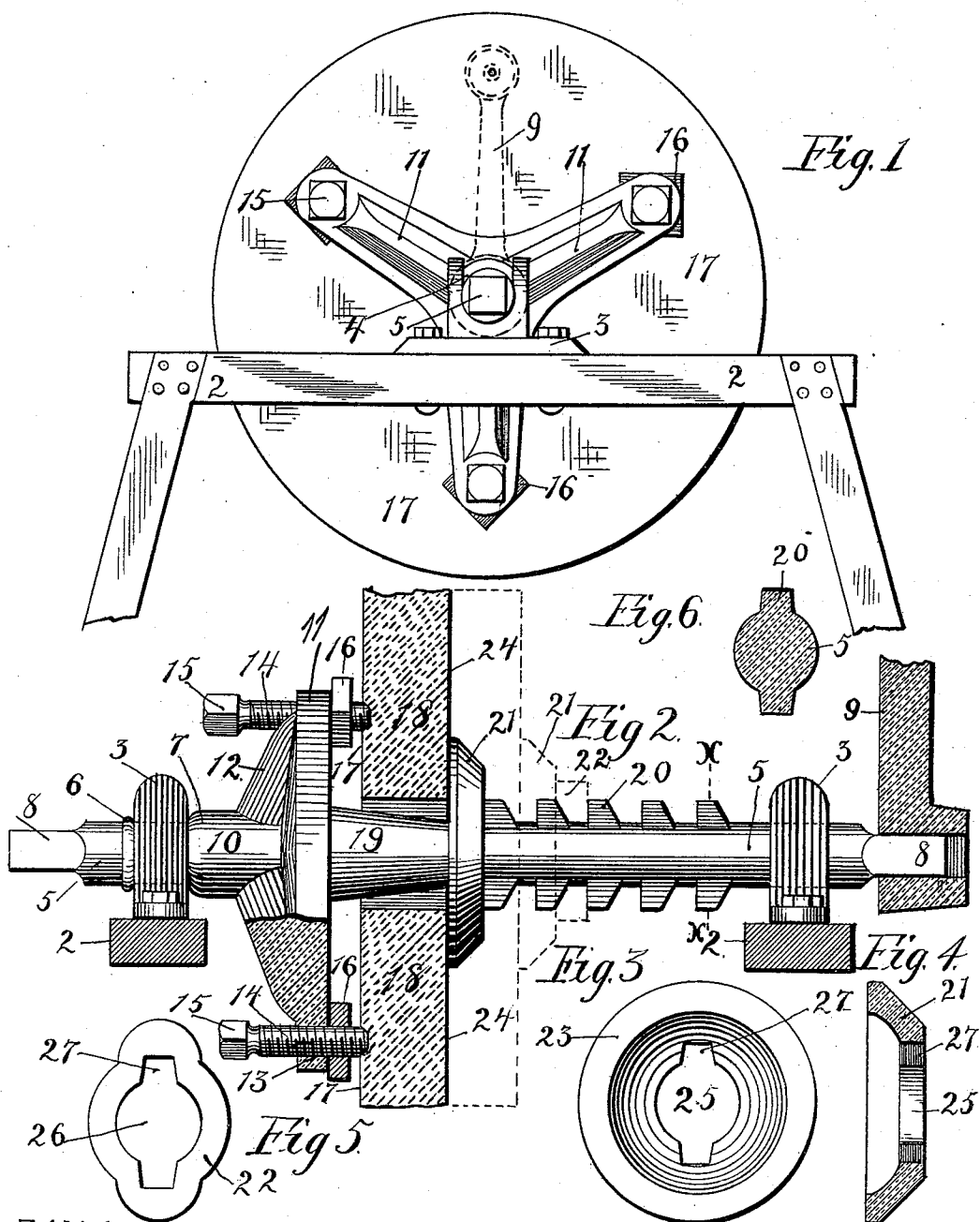


(No Model.)

O. H. PETERSON.
GRINDSTONE HANGER.

No. 486,217.

Patented Nov. 15, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

OLE H. PETERSON, OF GROVE CITY, MINNESOTA.

GRINDSTONE-HANGER.

SPECIFICATION forming part of Letters Patent No. 486,217, dated November 15, 1892.

Application filed March 28, 1892. Serial No. 426,656. (No model.)

To all whom it may concern:

Be it known that I, OLE H. PETERSON, of Grove City, Meeker county, Minnesota, have invented a certain new and Improved Grindstone-Hanger, of which the following is a specification.

My invention relates to a simple and convenient means for hanging a grindstone upon its bench; and the object of my invention is to provide a device of this class which will readily admit of the use of either a large or a small stone, the same being adjustable to any width or thickness of stone, and, further, to provide a hanger which from its peculiar construction will permit a greater economy in manufacture than those hitherto devised.

To this end my invention consists in various combinations and constructions, all as hereinafter described, and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 represents a side of a grindstone secured upon a hanger embodying my invention. Fig. 2 is an enlarged longitudinal view of the hanger and showing the stone in section. Figs. 3 and 4 are respectively side and sectional views of the collar which I employ. Fig. 5 shows the washer. Fig. 6 is a cross-section of the shaft on the line $x x$ of Fig. 2.

As shown in the drawings, 2 represents the side bars of the grindstone bench or support, upon which are fastened the bearing-blocks 3, having the open grooves or bearings 4 to receive the shaft 5. At one end this shaft has a bead 6 on one side of the block 3 and a shoulder 7 upon the other side, which shoulder is formed by the enlargement of the shaft.

Both ends 8 of the shaft have the polygonal form shown and are adapted to receive the crank 9. Upon the enlarged and intermediate portion 10 of the shaft I arrange three or more radial arms 11, each strengthened by a raised rib 12 and each having in its end a smooth hole 13 to receive a set-screw 14, which is free to move back and forth therein. The set-screws have the square heads 15, by means of which they may be held while the locking-nuts 16 are turned to draw the set-screws through the smooth openings of the arms and fix their ends firmly against the face 17 of

the grindstone 18. This grindstone has the usual large central opening and is made concentric with the tapering portion 19 of the shaft in the usual manner—namely, by wedges and, if desired, cement. The opposite end of the shaft is provided with a series of lugs or wings 20, which project out from the same, as shown in Fig. 2, and are arranged at such distances apart as to permit the collar 21 or the washer 22 thereof to rest and be revolved, if necessary, between any two of them. The collar is hollowed out on the inside, as shown in Figs. 3 and 4, so as to give an annular bearing-surface 23, adapted to engage the face 24 of the stone. Both the collar and the washer have circular openings 25 26 of the size of the shaft, and also have the slots 27, so that either one may be pushed on over the end of the shaft and passed by one or all the projections or lugs thereon. When the collar is set against the grindstone, it is turned upon the shaft, so as to throw the slots out of line with the lugs, after which it will be seen that it is impossible for the collar to slip lengthwise on the shaft. In case the collar engages the stone when in a position shown by dotted lines in Fig. 2, in which case it would be held from turning by the lugs, I back up the collar by a separate washer 22, having like slots 27, and which after adjustment is turned and locked upon the shaft. The nice adjustment, balance, and truing of the stone upon the shaft is accomplished by adjusting the ends of the set-screws 14 against the same. The ends of the screws are set into the side of the stone and effectually prevent the same revolving upon its shaft. The object of making smooth holes 13 in the arms 11 is to obviate the resting of the threads of the screws therein.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the shaft, of the bearings therefor and means for attaching the power device to said shaft, said shaft having several integral arms containing adjustable set-screws adapted to engage one side of the grindstone to prevent the same from turning and by which the stone is trued, and a collar provided on the shaft to engage the other side of the stone, substantially as described.

2. The combination, with the shaft having integral arms 11 and lugs 20, of the bearings for the shaft, said arms provided with small holes 13, set-screws arranged therein, locking-nuts 16 on said screws, whereby the same are forced into engagement with one side of the grindstone, and a collar provided with the annular opening and slots 27, whereby the same may be passed over the lugs 20 to engage the other side of the stone, substantially as described.

3. The combination, with the shaft having the enlarged portion 7 and the integral arms 11 projecting therefrom, with lugs 20 provided

on said shaft, a concave collar having the opening 25 and slots 27 to avoid said lugs, the washer 22, said arms provided with small openings 13, set-screws arranged therein, and locking-nuts 16, whereby said set-screws are forced into engagement with the grindstone to prevent its turning, substantially as described.

In testimony whereof I have hereunto set my hand this 22d day of March, 1892.

OLE H. PETERSON.

In presence of—

O. G. HAWLEY,

F. S. LYON.