

C. BURKHOLDER.

Improvement in Grindstones.

No. 130,014.

Patented July 30, 1872.

Fig 1

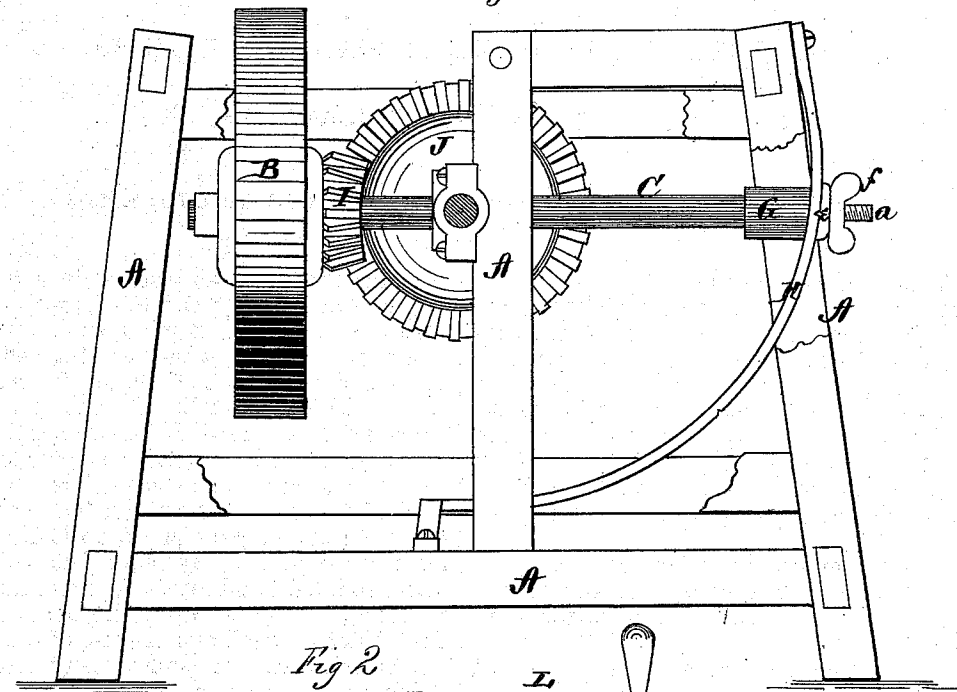
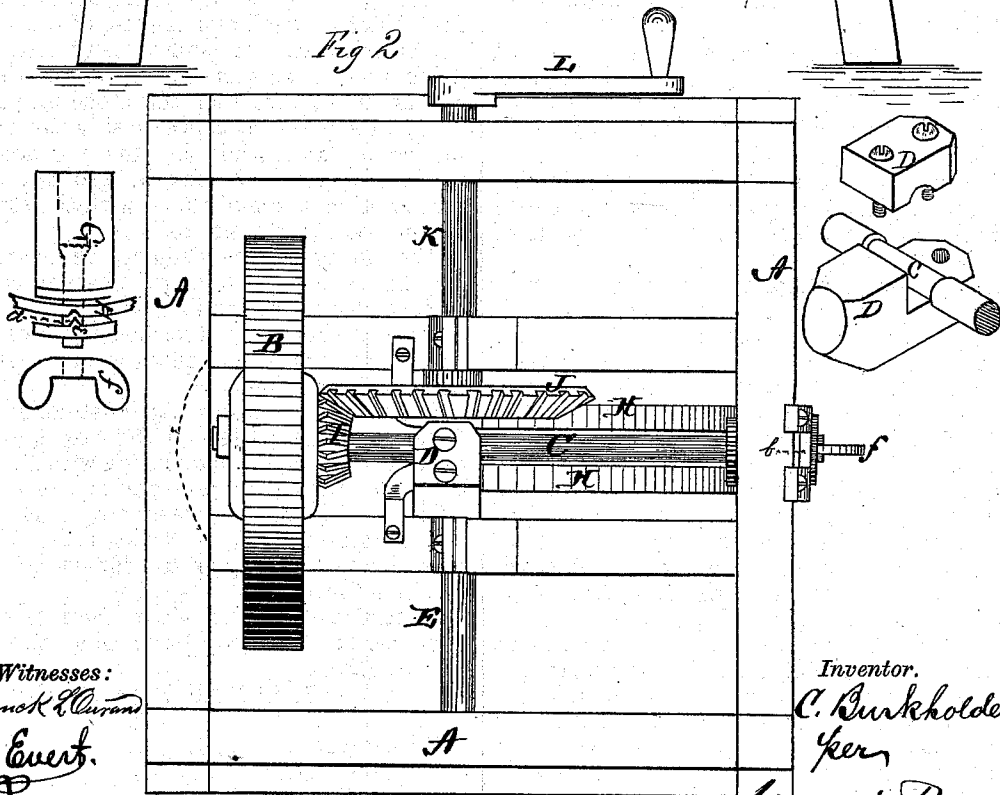


Fig 2



Witnesses:
Frank A. Curran
C. L. Ewert.

Inventor.
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per
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 Attorneys.

UNITED STATES PATENT OFFICE.

CHRISTIAN BURKHOLDER, OF STERLING, ILLINOIS.

IMPROVEMENT IN GRINDSTONES.

Specification forming part of Letters Patent No. 130,014, dated July 30, 1872.

To all whom it may concern:

Be it known that I, CHRISTIAN BURKHOLDER, of Sterling, in the county of Whitesides and in the State of Illinois, have invented certain new and useful Improvements in Grindstone; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of an "adjustable grindstone," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, partly in section; and Fig. 2 a plan view of my entire grindstone. Fig. 3 shows detached parts of the same.

A represents the frame, in which the grindstone with the moving mechanism is placed. B is the grindstone proper, attached in its center to the end of a shaft, C, which passes through a box, D, attached to the inner end of a horizontal shaft, E, having suitable bearings in the frame, and turning or rocking in the same. Upon the other end of the shaft C is placed a core-box, G, having a headed screw or bolt, *a*, passing through its outer end. Upon the end of this core-box is a square projection, *b*, fitting between two curved guides, H H, which are arranged on a quarter circle having the center of the box D for the center. In the rear or under sides of these are made any desired number of notches for the reception of V-shaped ribs *d* on the inner face of a washer, *e*, which is placed on the end of the screw or bolt *a*. A thumb-nut, *f*, is put on said screw or bolt to fasten the shaft, or rather the core-box G, at any desired point on the guides, thus

holding the shaft and stone at any desired angle. On the shaft C, immediately below the stone B, is placed a miter-pinion, I, which gears with a miter-wheel, J, attached on the inner end of a shaft, K, which is directly on a line with the shaft E. On the outer end of the shaft K is a crank, L, for turning the same, and thus imparting a rotary motion to the stone.

The adjustable movement, as above described, will allow the stone to be brought into any position, perpendicular, horizontal, or on an inclined plane. By this means the operator is enabled to adapt the stone to any bevel required, and by means of the notches cut in the guides or track and the use of the thumb-nut he can fasten the stone in any desired position, and at the same time have an ordinary grindstone by throwing the stone into a perpendicular position, thus exposing the edge of the stone, and while in this position any straight-edged tool may be ground, which could not be so readily done with the stone in any of the other positions.

The adjustable movement, as described, may be used for carrying a circular saw, or various other contrivances.

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

The shaft C carrying a grindstone or other device, and supported in the box D on the rocking shaft E, in combination with the core-box G, having square projection *b*, the notched guides H H, screw *a*, washer *e*, with ribs *d*, and thumb-screw *f*, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of June, 1872.

CHRISTIAN BURKHOLDER.

Witnesses:

H. S. STREET,
A. P. HULL.