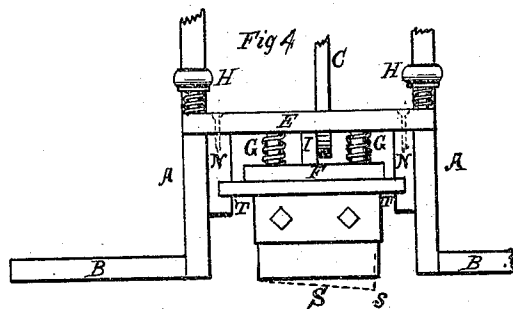
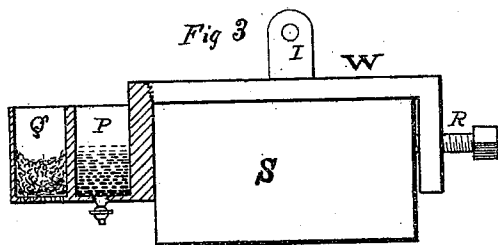
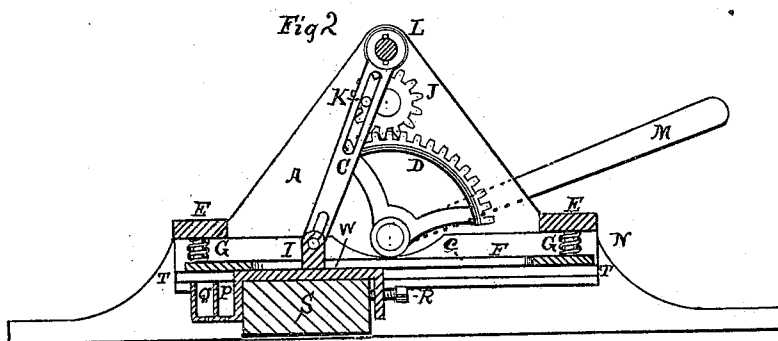
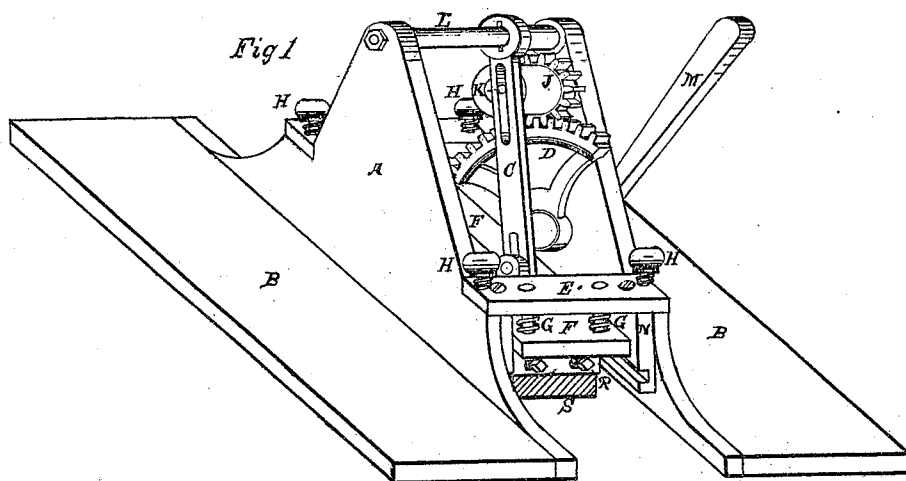


J. C. KEPLER.

APPARATUS FOR DRESSING MILLSTONE.

No. 175,566.

Patented April 4, 1876.



Attest:
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UNITED STATES PATENT OFFICE.

JACOB C. KEPLER, OF RICHMOND, INDIANA.

IMPROVEMENT IN APPARATUS FOR DRESSING MILLSTONES.

Specification forming part of Letters Patent No. **175,566**, dated April 4, 1876; application filed March 23, 1876.

To all whom it may concern :

Be it known that I, JACOB C. KEPLER, of Richmond, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Devices for Face-Dressing or Sharpening the Faces of Millstones; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1 is a view in perspective of a machine embodying the improvements in my invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a view of the burr block and frame and a sectional view of the burr-grit and water receptacles; and Fig. 4 is a partial end elevation of the machine.

This invention relates to certain improvements in devices for face-dressing or sharpening the faces of millstones; and it consists, first, in the process of employing dampened pulverized millstone or burr-grit to produce the necessary gritty surface or face-dress upon the millstone by rubbing or grinding the dampened burr-grit over the face of the millstone, a piece of millstone being passed over the dampened burr-grit upon the face of the stone for the purpose of producing the necessary gritty or sharpened surface upon the face of the millstone; and, secondly, of a frame adapted to receive a burr-block, and provided with a water-receptacle and a burr-grit receptacle, in a combination with a way, provided with springs which permit the said frame to yield to the inequalities of the surface of the millstone, and gearing to actuate the same upon the face of the millstone, for the purpose of face-dressing the millstone, all of which is hereinafter more fully described and shown.

In the drawing referred to, A designates the upright portions of the frame supporting the mechanism, and B the horizontal portions which rest upon the surface of the millstone. Between the said upright parts A is placed, in a horizontal position, the way F, having the pins or studs G projecting upward therefrom at each end thereof. Two cross-pieces, E, rest upon the upright parts A, as shown, and are connected thereto by the thumb-screws H, provided with spiral springs to permit a

slight yielding upward of the said cross-pieces E. The side pieces N, one being along each side of the way F, are secured to said cross-pieces E, and have grooves T formed therein, in which the frame W, holding the burr-block, moves, as shown in Fig. 3. The frame W is formed to receive the burr-block S, the said frame being open sidewise to allow a lateral depression and adjustment of the said block, as indicated at S, in Fig. 4, by which said block is brought to an angle so as to work in the surfaces of the grooves in the face of the millstone. The said burr-block is fixed in position, and adjusted laterally, when it is desired, by means of the set-screws R. The purpose of this lateral depression and adjustment of the block S is to work it in the grooves formed in the surfaces of millstones.

The block-holding frame W is further constructed with a receptacle, P, for water, and a receptacle, Q, for pulverized burr-stone, both of said receptacles being perforated, or having small outlets at the bottom for discharging the pulverized stone and water onto the surface of the millstone.

L designates a shaft, having its bearings in the uprights A, at the top of the machine, to which shaft is keyed the pitman C, at its upper end, the lower end of said pitman being coupled to the frame W, at I, as shown. As seen in Fig. 2, the projection I, on the top of frame W, passes through and moves in a slot, c, in the way F. The studs or pins G, upon the way F, project upward, working in apertures in the cross-pieces E, and have spiral springs, as shown in the drawing, to allow the way F a yielding motion upward, caused by the block S moving over an uneven surface.

The forward and backward movement of the frame W, holding the block S, is effected by moving the lever M, which actuates the toothed segment D, the latter engaging with spur-gear J, from which projects a pin, K, into a slot in pitman C, coupled as aforesaid to the frame W.

I am aware that sand, diamond-dust, iron-filings, &c., have been used to polish similar substances, but burr-grit or the pulverized natural French burr-stone is the only substance that will produce the necessary gritty surface upon the millstone, the others producing a polish instead of roughening the surface upon

which they are used. I therefore make no claim to the substances above enumerated; but

What I do claim is—

1. The process described of dressing the surface of a millstone, by applying dampened pulverized millstone or burr-grit to the face of a millstone, and rubbing or grinding the same thereon with a block of burr-stone until the face of the millstone is rendered sharp and gritty, as and for the purposes described.

2. In a machine for dressing the faces of millstones, the block-holding frame, provided with the perforated receptacles Q and P, and set-screws R, as and for the purposes set forth.

3. The slotted way, provided with the pins

or studs and springs, in combination with cross-pieces E, adjustably connected with up-rights A, as shown and described.

4. In combination, with the block-holding frame, provided with receptacles and set-screws, the slotted way provided with studs and springs, the cross-pieces E on the frame A, and grooved side pieces N, as shown.

In testimony that I claim the foregoing improvements, as above described, I have hereunto set my hand and seal.

JACOB C. KEPLER.

Witnesses:

T. MÜNGEN,

H. A. DANIELS.