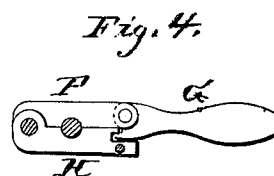
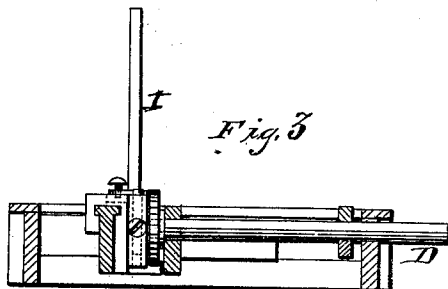
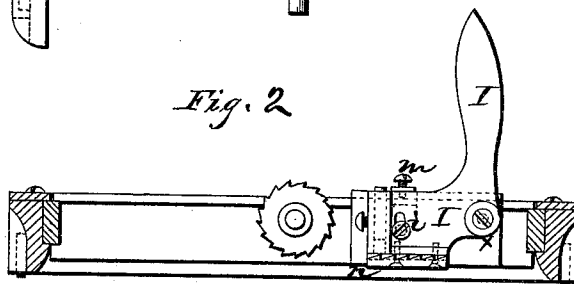
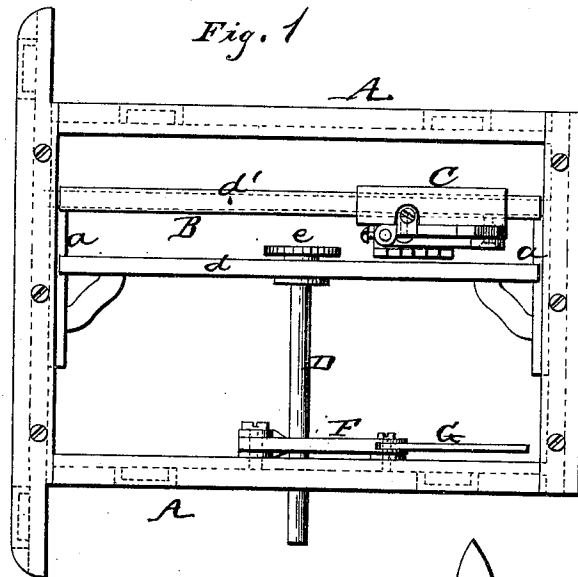


J. DAVIS.
BURR-DRESSER.

No. 175,045.

Patented March 21, 1876.



WITNESSES

W^m A. Skinkle.
C. L. Ewer

By

INVENTOR

Joel Davis,
Alexander Watson

Attorney

UNITED STATES PATENT OFFICE.

JOEL DAVIS, OF DANVILLE, KENTUCKY.

IMPROVEMENT IN BURR-DRESSERS.

Specification forming part of Letters Patent No. **175,045**, dated March 21, 1876; application filed September 11, 1875.

To all whom it may concern :

Be it known that I, JOEL DAVIS, of Danville, in the county of Boyle and in the State of Kentucky, have invented certain new and useful Improvements in Burr-Dressers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification :

The nature of my invention consists in the construction and arrangements of the several parts of a burr or stone marking machine, whereby I am enabled to chase lines upon it with great ease and dispatch, and with perfect regularity.

In the annexed drawings, making part of this specification—

Figure 1 is a plan view; Fig. 2 a longitudinal section, Fig. 3 a cross section, and Fig. 4 a detached view, of the screw-clamp.

In the figures, A represents a rectangular frame of any suitable dimensions, which has interior grooves in its end pieces. B represents an interior frame, composed of the cross-bars *d d'*, and the end pieces *a a*, which act as slides, fitting in the grooves in the outer frame. C represents a box-slide, which plays upon the cross-bar *d'*. Pivoted to this slide C is an elbow-lever, I. To the under side of the lower end of this lever is secured a metallic plate, *n*, which projects a little beyond the side of the lever, said plate being provided upon its upper side with gear-teeth, which take, when desirable, into the teeth of a wheel, *e*, on screw D.

The diamond or point with which the marks upon the stone are made is secured to this plate on its under side. The lever I is provided near its lower end with a slot, through which a set-screw, *i*, passes to the box-slide C. By means of this groove or slot the lower end of lever I is allowed to rise and fall at the will and convenience of the operator. M represents a set-screw in an arm of the lower end of the lever I, to prevent said end from falling only so far as is necessary in its work. D is a screw-shaft, which has bearings in the cross-bar *d* of the inner frame and in one side of the outer one. F, G, and H represent three parts of a screw-clamp and socket. The part H is secured to the outer frame permanently, while the part F is only

pivoted to it, and part G pivoted to part F. The screw D lies in a smooth, half-round box in part H, which is made to fit it snugly. The part F has a half-round bearing in it for the screw, and in this bearing screw-threads are cut to correspond with those of the screw. G acts as a handle, and is provided, as seen, with a lug, which takes into a recess in the end of piece H, where the two parts clamp the screw, and thus prevent the parts from separating while the operator is using the machine.

To operate this machine the frame A is placed upon the face of the stone, and the slide C adjusted over the point where it is designed to commence work. The clamp F is then brought down upon the screw and confined by handle G. By means of the handle I the slide C is moved along the cross-bar *d*, and the diamond under the forward end of plate *n* is made to mark a line upon the stone. When the operator starts to draw the handle I back, the forward end of said lever rises so as to free the cutter and at the same time cause the teeth of plate *n* to engage with those of the wheel *e*. This causes the wheel to make a partial revolution, and thus the screw D feeds the frame B a short distance forward. By repeating this operation a series of fine lines, equidistant apart, are made upon the face of the stone.

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

1. The lever I, connected to the slide C, and constructed and operated substantially as and for the purpose set forth.

2. The combination of the lever I with the block or box-slide C, the toothed plate *n*, and the toothed wheel *e* upon the screw D, as and for the purpose set forth.

3. The screw-clamp, composed of the parts H, F, and G, in combination with the screw D and the moving frame B, as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of August, 1875.

JOEL DAVIS.

Witnesses :

J. M. WALLACE,
WM. G. PROCTOR.