J. Bowman,

Dressing Millstones.

No. 28,553. Patented June 5, 1860.

Fig. 1.

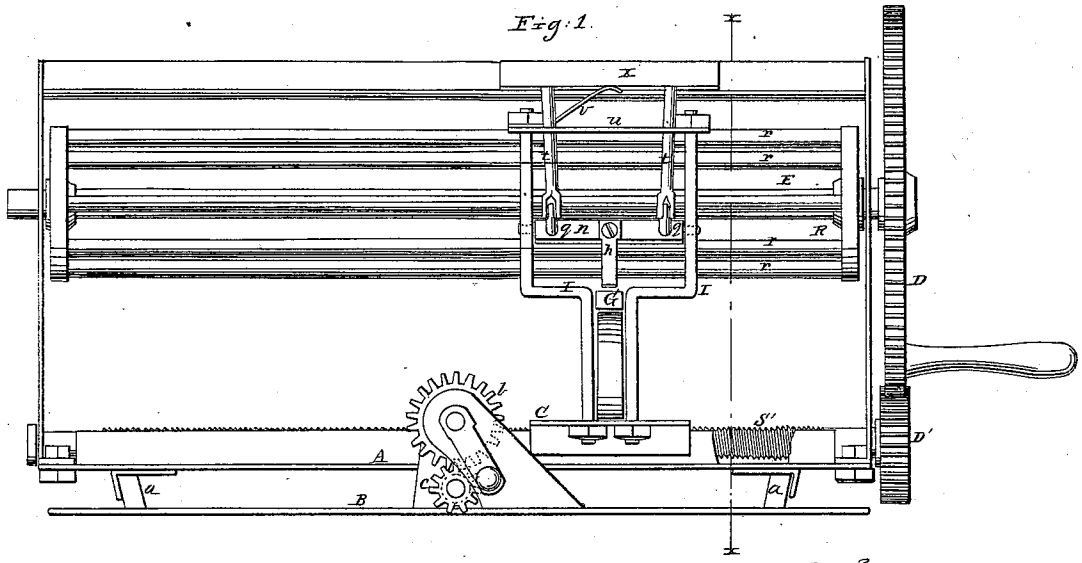


Fig. 3.

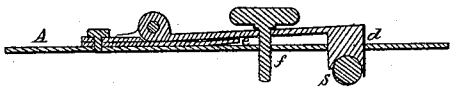
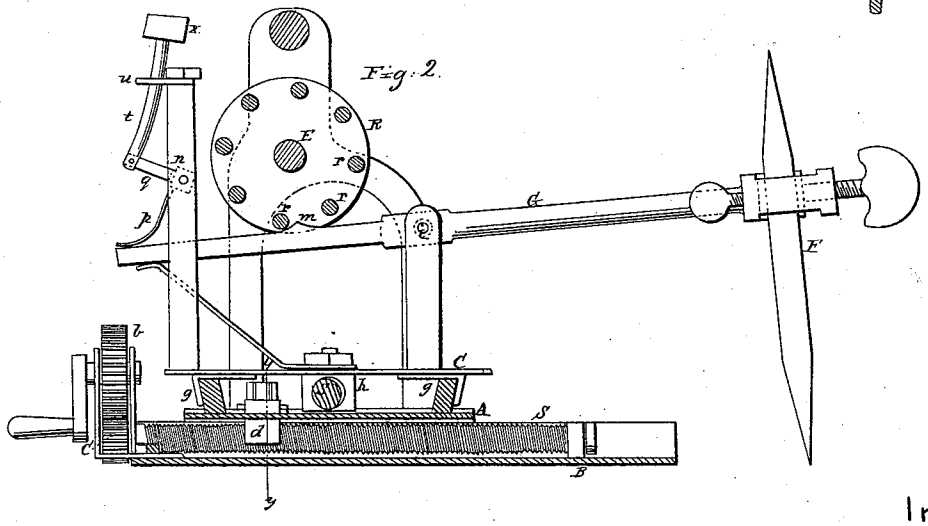


Fig. 2.



Witnesses:

Jas. D. Clary

L. McSutherland

Inventor:

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per Gotwalt Lew Atty.

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

JOEL BOWMAN, OF SOMERSET, OHIO.

DRESSING MILLSTONES.

Specification of Letters Patent No. 28,553, dated June 5, 1860.

To all whom it may concern:

Be it known that I, JOEL BOWMAN, of Somerset, in the county of Perry and State of Ohio, have invented a new and useful Improvement in Machines for Dressing Mill-Burs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part.

Figure 1 is a rear elevation of the machine. Fig. 2 is a vertical section on *x x* perpendicular to driving shaft. Fig. 3 is a vertical section on *y y*, showing manner of removing traversing nut.

The nature of this invention consists in combining with a dressing machine constructed as hereinafter to be set forth, a device whereby the depth of cut can be instantaneously regulated by the operator during the running of the machine; the details of construction and operation being as follows.

In the drawing B is the bed plate, with ways *a a* for the movement of upper platform A; this movement being effected by the turning of screw S through wheels *b* and *c*, the nut *d* being made to mesh with the thread by means of screw *f;* and remover therefrom by spring *e* when the pressure of said screw is removed, this being for feeding the chisel forward, and bringing the platform back to its starting point.

The platform A has longitudinal ways *g g* for the traversing of the carriage C. This is effected by screw S′ and nut *h;* the screw being turned by the gear connection D D′ with the main cam shaft E. The chisel F is secured in the head of lever G, held in bearings at *i*, and is operated by rods *r* acting on projection *m* of lever.

Secured to the carriage C, is a frame I, in which is hung a bar *n*, having a spring *p* reaching to the rear of lever G. This bar has also arms *q* jointed with rods *t*, running upward through a plate *u* on the top of frame I, and having a cross bar *x* upon the heads of said rods; a spring *v* keeping this movable frame t^{x}, sufficiently elevated so as not to interfere with the movement of lever G under the action of reel R. When however, this frame t^{x} is pressed down, spring *p* will prevent the chisel from making its full descent, and thus graduate the depth of cut. This is necessary when the chisel is over a soft spot in the stone which can be observed by the operator at the time the chisel is over it. He then presses upon the movable frame t^{x}, turning bar *n*, and bringing spring *p* into action as above stated. The removal of pressure permits the chisel to resume its regular stroke. The amount of this graduation is regulated by the amount of pressure on the sliding frame.

In other respects the operation of the machine does not differ materially from ordinary machines of this character.

What I claim and desire to secure by Letters Patent, is—

The application to the lever G of the graduating device consisting of rocking bar *n* with arms *q* connected with sliding frame t^{x}, in combination with springs *p* and *v;* the arrangement and operation being substantially as set forth.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

JOEL BOWMAN.

Witnesses:
GEO. PATTEN,
JOHN S. HOLLINGSHEAD.