

(No Model.)

G. F. LETELLIER.
Millstone Dressing Machine.
No. 236,049. Patented Dec. 28, 1880.

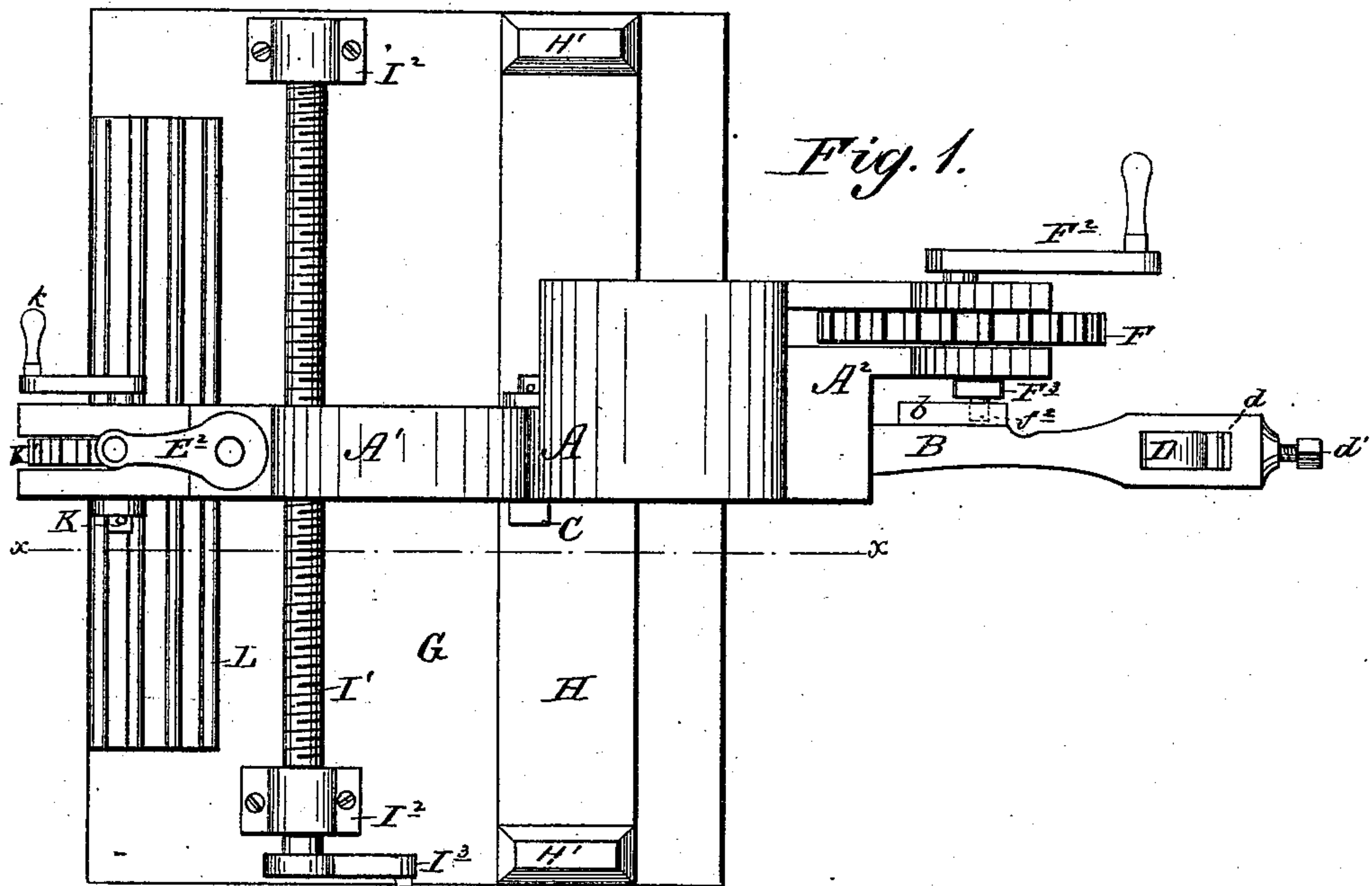
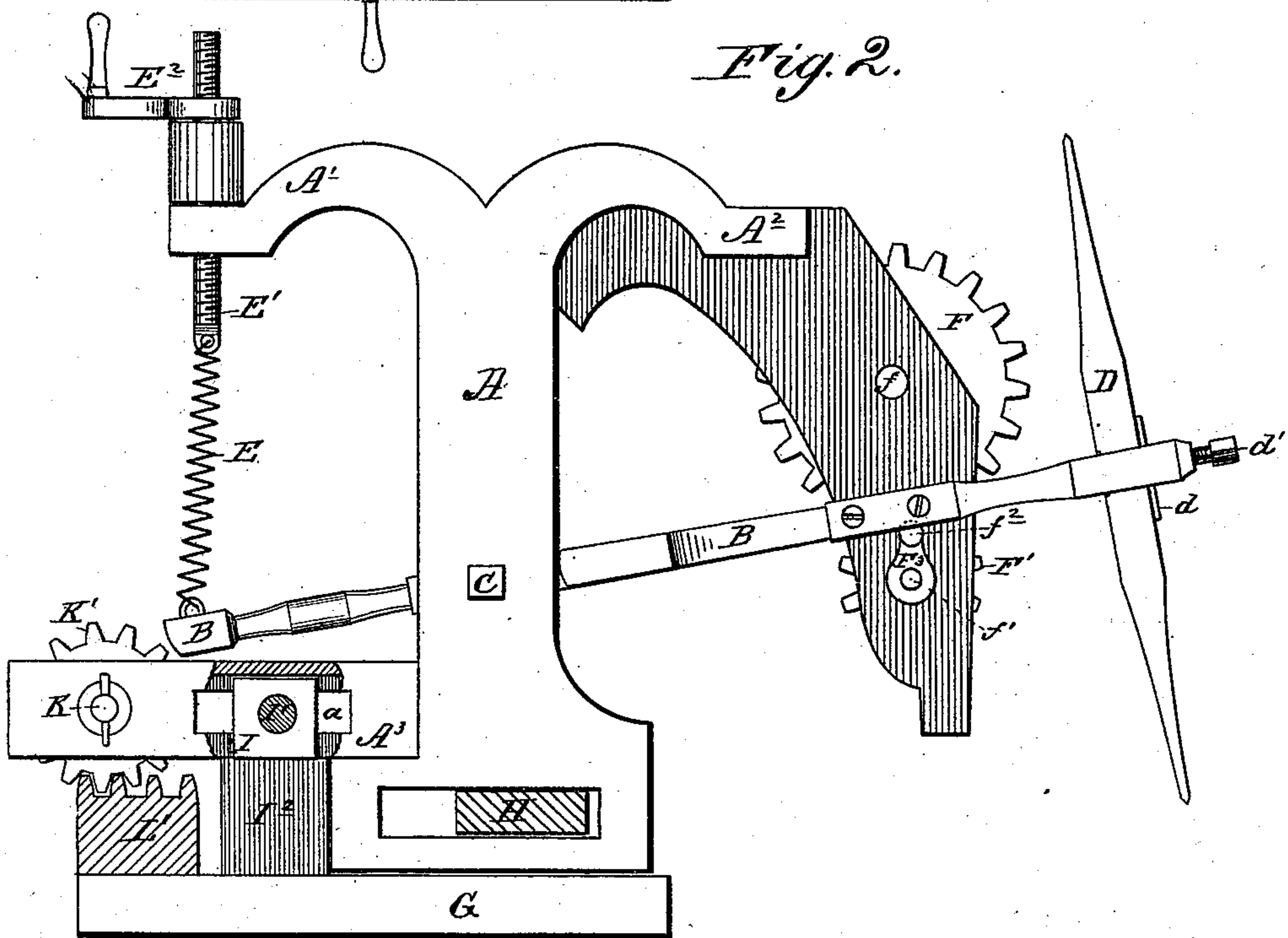


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE F. LETELLIER, OF TYE RIVER DEPOT, VIRGINIA, ASSIGNOR OF
ONE-THIRD TO CHARLES H. PERROW, OF SAME PLACE.

MILLSTONE-DRESSING MACHINE.

SPECIFICATION forming part of Letters Patent No. 236,049, dated December 28, 1880.

Application filed July 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. LETELLIER, of Tye River Depot, in the county of Nelson and State of Virginia, have invented a new and Improved Millstone-Dressing Machine; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to certain new and useful improvements in that class of millstone-dressing machines that employ a pick secured to the end of a pivoted lever, which may be vibrated to strike the face of the stone, and may be adjusted both from the eye to the skirt of the stone and across the furrows of the stone; and the improvement consists in certain details of construction for tripping the pick-lever, for regulating the force of the blow, and for adjusting the pick over the face of the stone to any required position, as will herein-
after appear.

In the accompanying drawings, Figure 1 is a plan view of my improved machine, and Fig. 2 is a sectional view in the line xx of Fig. 1, showing the parts in elevation.

A crane-shaped standard, A, carries a vibrating lever, B, that passes through a mortise in the post of the frame and is pivoted thereto by bolt C, and is provided at one of its ends with a pick, D, that passes through a mortise therein, and is secured thereto by a block, d , and set-screw d' . The other end of the lever B is secured to an overhanging arm, A', of the standard by means of a spiral spring, E, connecting the end of the lever with a screw, E', that passes up through the end of the arm, and is adjusted thereon by a nut, E², provided with a crank-handle. It will be seen that the tendency of the spring E is to hold the edge of the pick upon the stone with sufficient pressure to cause it to strike the stone with considerable force when the lever is tripped. This is done by the following-described means:

The longer arm A² of the standard is formed with an opening in its end to receive the intermeshing spur-gear F and pinion F', so that they may be inclosed and protected. A crank-handle, F², upon the axle f affords means for operating the wheel F, which, in turn, drives the pinion F'.

To the end of the pinion-shaft f' is attached a short crank, F³, the pin f^2 of which projects across a plate, b , secured to the pick end of the lever B in such manner that as the crank F³ is revolved it will pass beneath the plate and lift it, together with the end of the lever B, a sufficient height to give the required blow. The plate and crank F³ are arranged relatively to each other in such manner that when the lever B has been lifted to the full length of the crank the crank-pin f will leave the plate and allow the end of the lever and the pick to drop.

The standard A is secured to the base G by means of a flat horizontal guide-bar, H, that is secured to the base by standards H' at its ends, and passes through a slot in the lower end of the standard. The bar H is made to fit the slot in the standard snugly, so that the standard may be readily adjusted upon it, and also be held firmly in any position in which it may be placed. A horizontal arm, A³, is secured to the base of the standard, that is provided with a slot, a , the walls of which are grooved to form a guide for a nut, I, that is free to move from one end of the slot to the other, and is screw-threaded to fit the thread of a screw, I', that is arranged horizontally and in the same direction as the bar H. The screw I' is journaled to standards I², and is provided with crank-handle I³ upon its end, by which means the screw may be operated and the standard moved backward and forward upon the bar H over its entire length.

In order to secure a counter movement at right angles to that just described, by which means the pick may be adjusted to any point upon the surface of the stone, the arm A³ is slotted at its end and supports a shaft, K, and spur-wheel K', that may be operated by a crank, k , secured to the shaft. The spur-wheel K' meshes with a series of tooth-shaped bars, L, that are formed upon a horizontal block, L', secured to the base of the machine in a line parallel with the horizontal guide-bar H. By turning the crank-handle k the spur-wheel K' will roll over the tooth-bars L and move the standard in a line at right angles with the movement first described. As the nut I works freely in the slot a the screw I'

will not interfere with the counter movement of the standard, and as the rack L is formed of bars the full length of the direct movement of the standard the counter movement may be
5 made at any point along the line of its direct movement.

The base may be clamped to the face of the stone or attached to the eye thereof by any convenient means, so that in the direct move-
10 ment the pick will be caused to follow the furrows from the eye to the skirt of the stone, and the counter movement will permit the pick to cross the furrows to any required position.

By the above-described means the pick will
15 always fall in a perpendicular direction, and come in contact with the stone at right angles to its face, so that the glaze between the cracks on the face of the stone will not be broken, and the pick will not break and chip out par-
20 ticles from the face of the stone. This spring may be adjusted by means of the crank-handled nut so as to have any required tension, by which means the pick may be made to strike the stone with greater or less force, that
25 may at all times be conveniently adjusted.

What I claim as new is—

1. In a millstone - dressing machine, the standard A, in combination with the lever B, pivoted thereto by pin C, and vibrated by a
30 crank-pin secured to a shaft journaled at the front end of the standard, the pick D, secured

at the front end of the lever, and the rear end of the lever connected to the arm A' of the standard by a spiral spring, E, the tension of which is adjusted by means of a set-screw, E',
35 that passes through the end of the standard and serves to regulate the tension of the blow given to the pick, substantially as and for the purpose described.

2. In a millstone - dressing machine, the
40 standard A, carrying a vibrating pick-lever, and slotted at its base to form a loop that encircles the rectangular bar H, secured at its ends only to the base of the machine, and the screw I, arranged as described, and connected
45 with the standard A in the manner and for the purpose substantially as specified.

3. In a millstone - dressing machine, the standard A, carrying a vibrating pick-lever, D, and slotted at its lower end, in combina-
50 tion with the horizontal bar H, slotted arm A³, nut I', arranged to move in guides in the slotted arm, screw I, that passes through the nut I', spur-wheel K', and tooth-shaped rack-bars L, these parts being combined and
55 arranged for joint operation, substantially as and for the purpose described.

GEORGE FREMONT LETELLIER.

Witnesses:

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