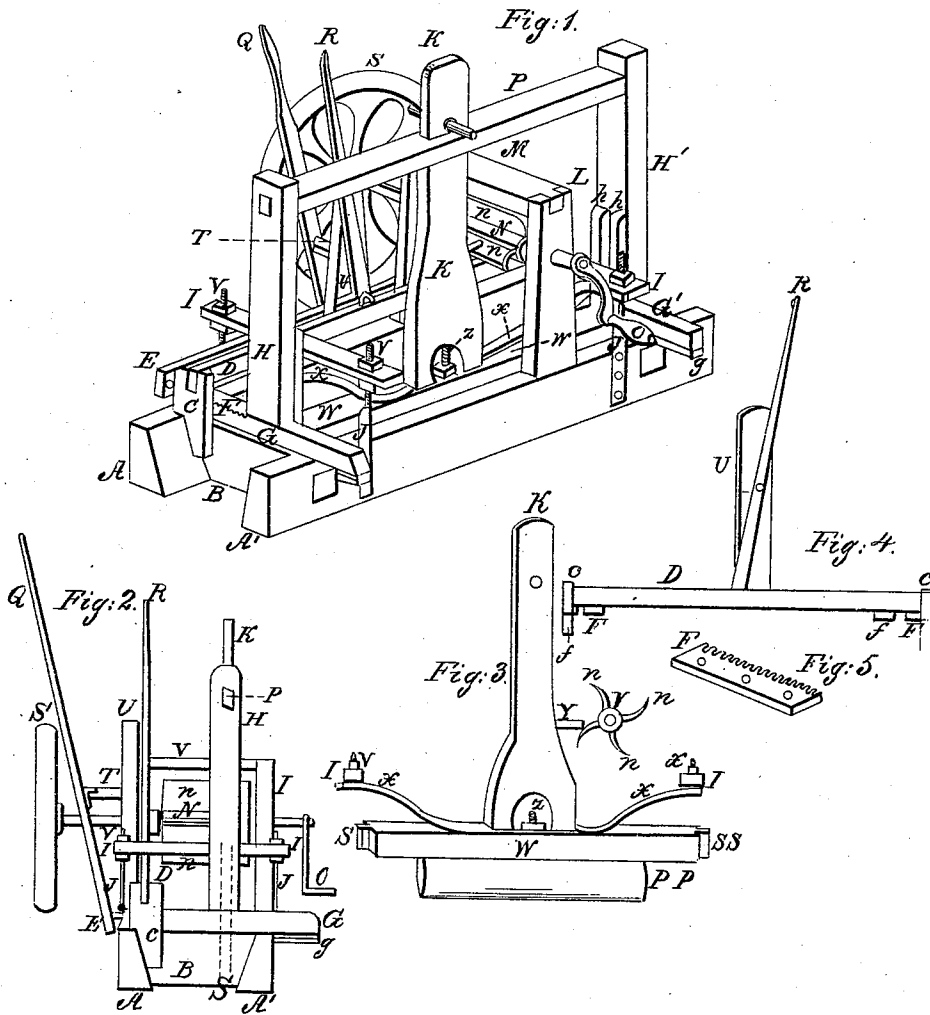


Dressing Millstones.

No. 85,948.

Patented Jan. 19, 1869.



Witnesses.

W. B. Miley
Jacob Stauffer

Inventor

Inventor.
H. C. McLaughlin

United States Patent Office.

WATSON A. McGLAUGHLIN, OF GREENLAND, PENNSYLVANIA.

Letters Patent No. 85,948, dated January 19, 1869.

IMPROVED MACHINE FOR DRESSING MILLSTONES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WATSON A. McGLAUGHLIN, of Greenland, in the county of Lancaster, and State of Pennsylvania, have invented a new and useful Improvement on Machines for Dressing Millstones; and I do hereby declare that the following is a full and clear description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine.

Figure 2, a vertical or end view.

Figure 3, the stock and pick-holder.

Figure 4, the sliding lock-lever.

Figure 5, F, the lock-plate.

The nature of my invention consists in providing toothed plates, check-beam, and lever, in combination with a sliding frame, carrying a pick-shaft, and actuated by means of a crank-handle and lifter, so that the feed may not only be graduated in its motions back and forth, but also held stationary at any point, in order to cause repeated blows of the pick to fall on one spot when required.

To enable others skilled in the art to make and use my invention, I will more fully describe the construction and operation of the same.

A A' are two beams, perpendicular on their outer face, and bevelled on the inner, the better to observe the action of the blade P P, fig. 3.

These sills or beams A A' are joined, near the ends, by a cross-piece, B, which is provided on the upper and inner edge with a groove, for the sliding pieces g G, which support the frame H H' P.

The uprights H have side pieces h h below, on their inner face, so as to form a guide for the ends s s of the blade-holder W, which has a central shaft, K, entering through a slot in the cross-piece P, framed from H to H', to unite said uprights.

This shaft K has a lifting-pin, Y, by which it is actuated by the lifters n, on the shaft N, with its crank-handle O and fly-wheel S.

A pair of springs, X X, is on top of the blade-holder W.

These springs are compressed, when the shaft and holder K W are raised, by coming in contact with a cross-piece, I, supported on screw-shafts J, and made adjustable, by screw-nuts V, above and beneath the same.

The blade-holder W has a groove on the lower side to receive the blade P P, which is secured by a screw and nut, z, centrally on the holder, or otherwise attached, through a perforation in the same.

In order to feed the blade or pick back and forth, I provide a graduated toothed or cogged plate, F, fig. 5, which is affixed to the top of the sliding frame G, on the rear, one on each end of the machine, a longi-

tudinal bar, D, sliding in a slotted support, C, affixed to the base frame-work A B.

This sliding bar has on each end a plate, f, that engages into the teeth or cogs on the projecting edge of the graduated plate F, into which it locks or unlocks by sliding the same to the right or the left by its lever R, moving on a pivot in the upright, U, which latter is secured to the base-frame A B.

To slide the frame that supports the pick or blade-holder and shaft, I connect another longitudinal bar, E, to the back end of the sliding foot-pieces G.

This bar E is also provided with a lever-arm, Q, hinged to a fulcrum, T, connected to the upright, U, aforesaid, by which the pick-shaft and connections can be drawn back and forward, and by the lever R, locked from one tooth or cog to the other, to regulate the distance the grooves are to be cut apart, the force of the blow being governed by the springs, and the rapidity by the lifters, in making two, three, or four to each revolution of the crank-handle.

There is no novelty in the lifters and balance-wheel, nor simply in the action of shifting the cutter or pick.

I am aware that screw-shafts and cog-gearing are employed to effect the same object in dressing millstones, by machines made portable, and secured firmly to the stone while dressing the same.

The object in using a long blade is, that a more uniform and level dress is obtained, and inequalities in the face of the stone better or more easily rectified than when narrow blades are used. Besides, the blows can be repeated on the same spot, by my mode of locking the sliding car or frame, any number of turns, which is not the case when fed by a screw actuated by the turning-handle and gear connected therewith. Besides, while it can perform the same amount of work equally as well as if not better than the best machine in use for the purpose, it can be built cheaper, and last longer, than any I know of.

I am aware that I am necessarily confined to my arrangement, and do, therefore, not broadly claim any separate part of my machine.

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

1. The locking-beam and lever D R, in combination with the lock-plates F f, arranged and operating substantially in the manner and for the purpose specified.

2. Also, the arrangement of the lever Q, attached to a longitudinal bar, E, connected to the sliding foot-pieces G, provided with graduated plates F, in combination with the blade-holder W, armed with springs X X, bearing upon adjustable check-pieces I, in the manner and for the purpose set forth.

Witnesses: W. A. McGLAUGHLIN.

WM. B. WILEY,
JACOB STAUFFER.