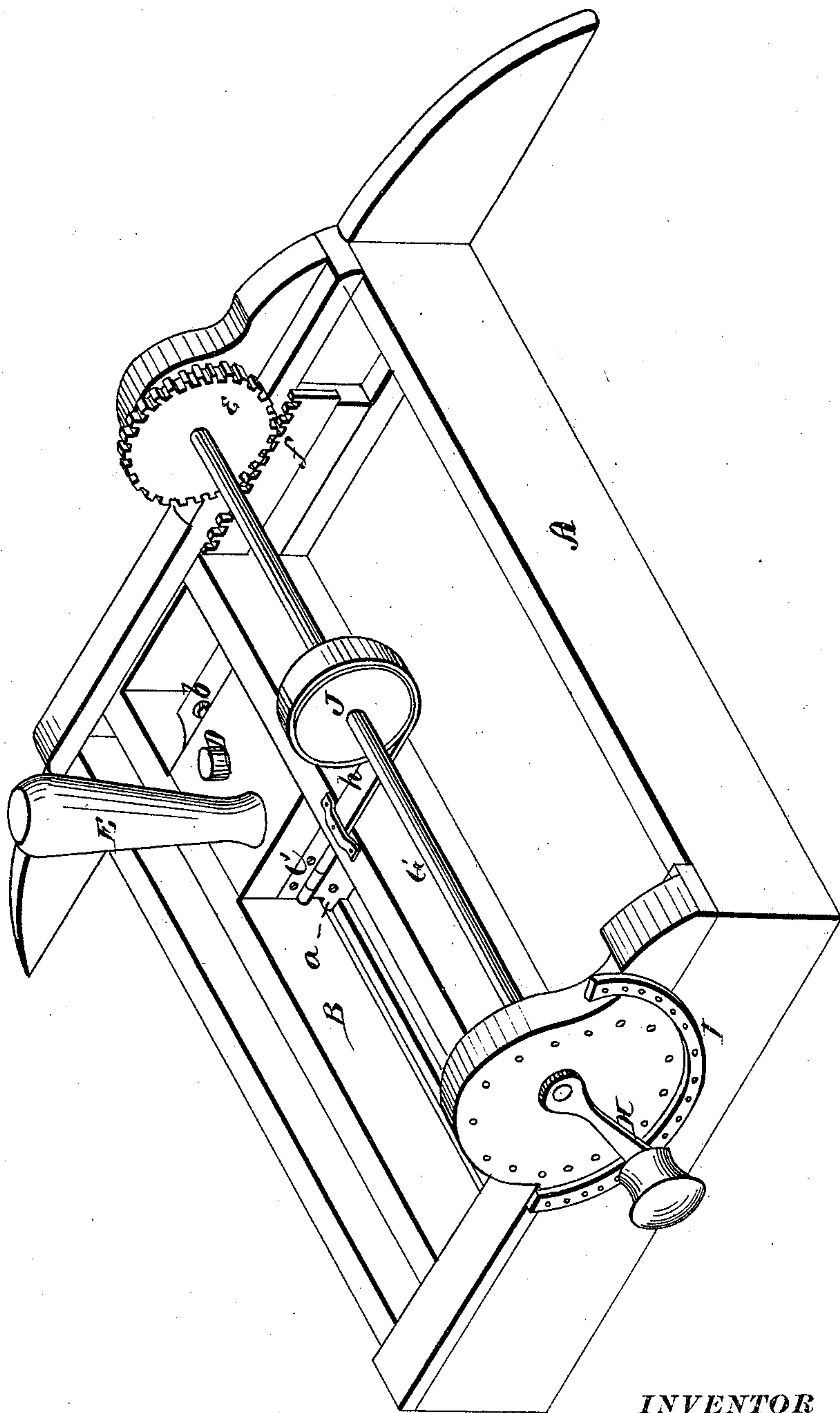


J. DAVIS.

Mill-Stone Dressing Machines.

No. 151,655.

Patented June 2, 1874.



WITNESSES.

*H. L. Ourand*  
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# UNITED STATES PATENT OFFICE.

JOEL DAVIS, OF DANVILLE, KENTUCKY.

## IMPROVEMENT IN MILLSTONE-DRESSING MACHINES.

Specification forming part of Letters Patent No. **151,655**, dated June 2, 1874; application filed April 4, 1874.

*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 Machines for Dressing Millstones; 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 arrangement of a machine for dressing millstones, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which the figure of the accompanying drawings is a perspective view.

A represents a rectangular frame of any suitable dimensions, in the sides of which slides a smaller frame, B. The sides of the frame B are grooved longitudinally on the inside, and in said grooves are inserted tongues or ribs *a*, formed on the sides of a head or carriage, C, the body of which fits between the sides of the frame B. The head or carriage C is made in two parts, as shown, hinged together at one end, and fastened at the other end by screws passing up from underneath, and the heads of which enter countersinks in the bottom of the head. Through the head C is a vertical hole for the passage of a stem, D, which is fastened by means of a set-screw, *b*, and has a diamond point attached in its lower end. This device is intended to make fine lines on the millstone, which is accomplished by moving the head C back and forth in the frame B by means of a handle, E, attached thereto. The diamond is adjusted as desired, and held by means of the set-screw *b*. The frame B is, at each end, provided with a projecting rack-bar, *f*, which gears with a pinion or cog-wheel,

*e*, upon a shaft, G, having its bearings in suitable boxes upon the end pieces of the main frame A. Upon one end of the shaft G, outside of the frame A, is attached a spring-crank, provided on its inner side, at the outer end, with a pin to enter recesses, depressions, or holes formed in a segmental bar, I, attached on the outside of the frame A. The holes or depressions in the bar I are made at regular intervals, so as to hold the frame B at the desired points and regulate the width of the distances between the lines to be cut. On the center of the shaft G is secured a pulley, J, and to this pulley is fastened one end of a rubber band or spring, *h*, which is wrapped around the pulley, and the other end fastened to the frame B. The object of this spring is to take up the loose motion of the cog-gearing.

In operating and adjusting the frame B by means of the cog-gearing, as described, there will invariably be some play laterally of the frame, and this will result in wabbling or wavy lines or grooves in the stone; but by the use of the rubber band this play or loose motion is taken up, and the frame held rigidly, so that the cutter can produce perfectly-straight grooves in the face of the millstone.

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

In combination with the shaft G, its cog-wheels *e e* on the main frame, and the rack-bars *f f* on the adjustable frame B, the pulley J upon the shaft, and the rubber band *h*, one end of which is connected to said pulley, and the other end to the adjustable frame B, for taking up the lost motion of the cog-gearing, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of February, 1874.

Witnesses:

JOEL DAVIS.

I. M. WALLACE,  
W. G. PROCTOR.