T. P. BENTON.

Millstone Dresser.

No. 201,865. Patented April 2, 1878.

Fig. 1.

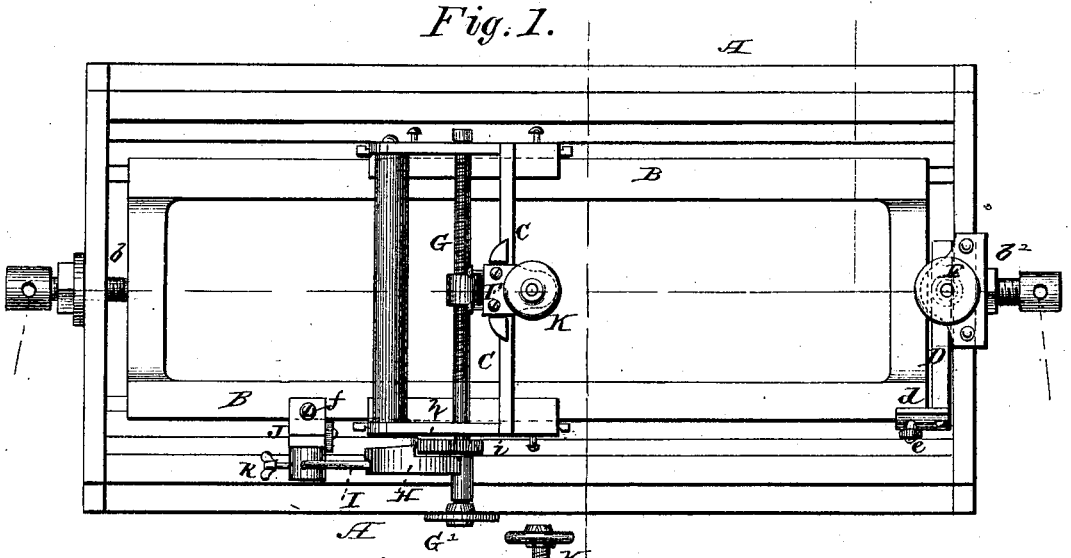


Fig. 2.

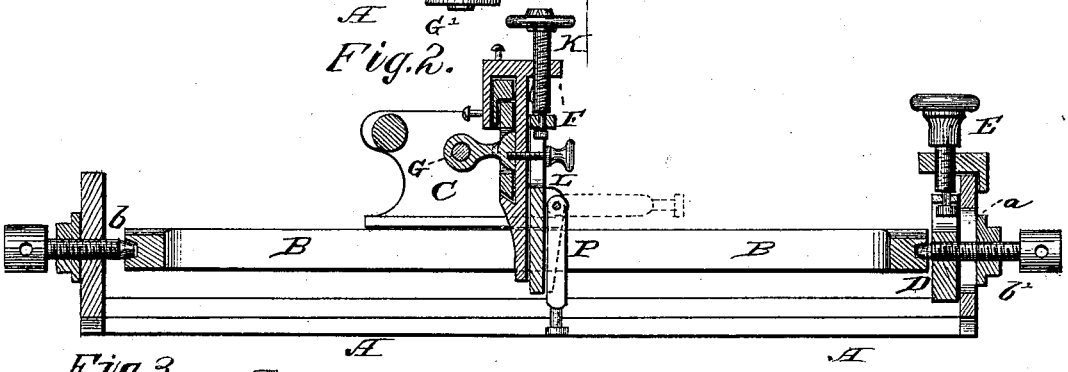


Fig. 3.

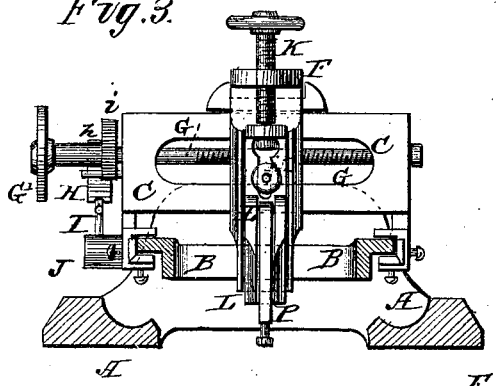


Fig. 4.

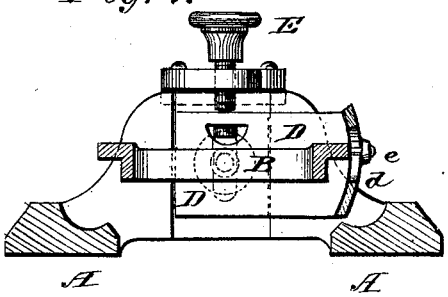
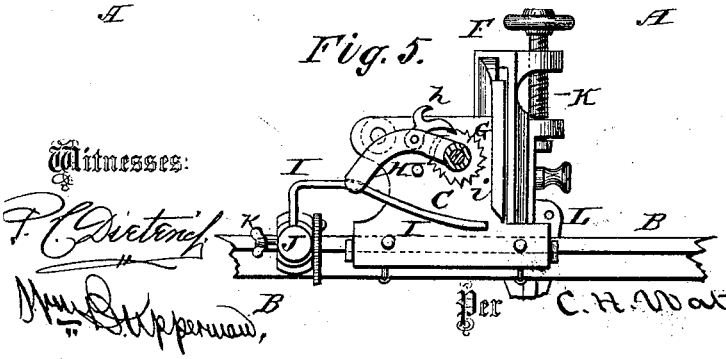


Fig. 5.



Witnesses:

P. C. Dieterich

Wm. D. Upperman,

Inventor:

Thomas P. Benton.

Per C. H. Watson & Co Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS P. BENTON, OF PRAIRIE DU SAC, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO J. K. MANSFIELD, OF EAU CLAIRE, AND DAVID MANSFIELD, OF BARABOO, WISCONSIN.

IMPROVEMENT IN MILLSTONE-DRESSERS.

Specification forming part of Letters Patent No. **201,865**, dated April 2, 1878; application filed February 25, 1878.

To all whom it may concern:

Be it known that I, THOMAS P. BENTON, of Prairie du Sac, in the county of Sauk and State of Wisconsin, have invented certain new and useful Improvements in Millstone-Dressers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form 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 the annexed drawing, to which reference is made, and which fully illustrates my invention, Figure 1 is a plan view of my machine. Fig. 2 is a longitudinal vertical section of the same. Figs. 3, 4, and 5 are detailed views of parts thereof.

A represents the bed-frame of my millstone-dresser. B represents the frame forming the ways upon which the carriage or slide C moves back and forth. The frame B is hung upon two central pivots, *b b'*, at its ends, which admits of the frame or ways being inclined to the right or left, for the purpose of furrowing a right or left millstone. The screw or pivot *b* is screwed through the end piece of the frame A at one end, while the pivot *b'* passes through a vertical slot, *a*, in the end piece at the other end, and screws through a slide, D, which may be raised and lowered, as desired, by means of a set-screw, E, and the frame or ways B thus be adjusted higher at one end than at the other, and thus cause the diamond to cut deeper at the eye of the stone.

At the end of the slide D is a slotted flange, *d*, through which a screw, *e*, is passed into the edge of the frame B, for holding the same at any inclination desired, either right or left.

The carriage C is provided with suitable flanges and gibs, fitting over the side edges of the frame B, so as to slide thereon without any wobbling. On the front of the carriage is a slide, F, movable laterally thereon by means of a screw-shaft, G, which is operated either by hand or automatically. On one end of the screw-shaft is a knob, G', for turning the same, and for automatic movement there is a lever, H, hung loosely on the shaft, and to the side of this lever is pivoted a pawl, *h*, which takes into a ratchet-wheel, *i*, made fast on the shaft.

On the side of the frame B is fastened a clamp, J, by means of a screw, *f*, and in this clamp is, by a set-screw, *k*, fastened an inclined wire or arm, I. As the carriage is moved back the lever H strikes and rides up on the arm I, whereby the pawl *h*, operating on the ratchet-wheel, is made to turn screw G, and thus move the slide F a certain distance. This distance is easily regulated by the adjustment of the clamp on the frame, and of the wire or arm in the clamp.

In the slide F is a vertically-adjustable holder, L, operated by a set-screw, K, and in this holder is pivoted the pin P, which carries the diamond. This pin, being pivoted as shown, causes the diamond to clear the stone on returning, and cut only with the forward movement.

The clamp J is provided with a rubber cushion for relieving the machine of jar and secure a correct set of the diamond.

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

1. The combination of the carriage C, slide F, adjustable holder L, and pivoted pin P, substantially as and for the purposes herein set forth.

2. The combination of the bed-frame A, the frame or ways B, hung upon central end pivots *b b'*, the slide D, adjusted vertically by the screw E, and provided with the slotted flange *d*, the set-screw *e*, the sliding carriage C, and the laterally-movable slide F, carrying the dresser-tool, and operated by the screw-shaft G and the feed devices, substantially as herein described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOMAS P. BENTON.

Witnesses:
JOHN E. DALTON,
MARY D. J. BENTON.