J. A. DAYTON.

Feeding-Device for Polishing-Machines.

No. 165,074. Patented June 29, 1875.

Fig. 1.

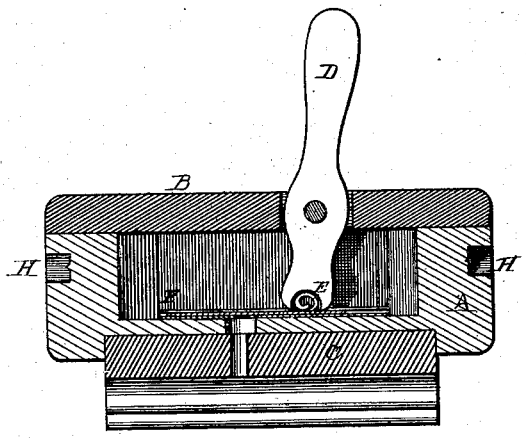


Fig. 2.

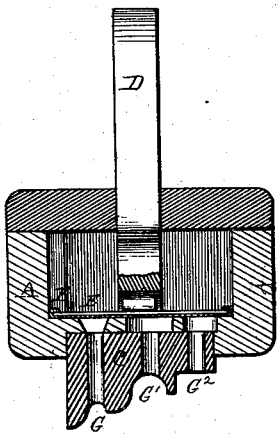


Fig. 3.

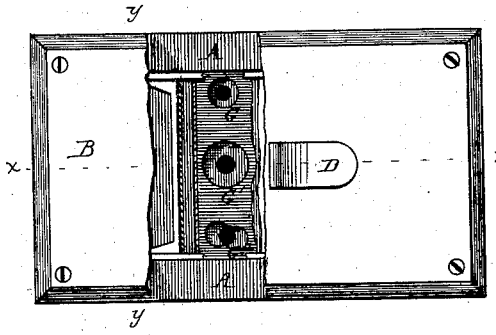
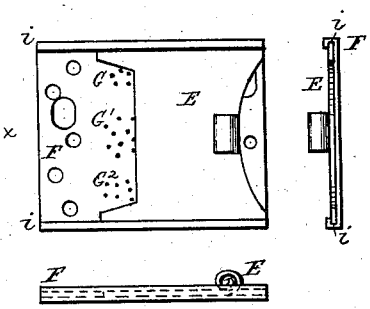


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN A. DAYTON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FEEDING DEVICES FOR POLISHING-MACHINES.

Specification forming part of Letters Patent No. **165,074**, dated June 29, 1875; application filed May 7, 1875.

To all whom it may concern:

Be it known that I, JOHN A. DAYTON, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Feeding Device for Polishing-Machines, of which the following is a specification:

This invention relates to an improved polishing device for polishing or scouring wood, metal, or other materials, adapted to be operated either by hand or machinery; the object being to provide a stock in which a quantity of polishing material may be stored, which can be readily distributed at intervals or continuously through its bottom, and the polishing-pad to the material being polished in any required quantities.

The invention consists in a hollow stock or box provided with a removable top and perforated bottom, to which a pad or polishing-rubber similarly perforated may be secured, the perforations in the stock being adapted to be opened or closed by means of a lever passing through the top in order to distribute the polishing material to the article being polished, as hereinafter fully described.

In the accompanying drawing, Figure 1 is a vertical longitudinal section of my improvement taken in the line *x x*, Fig. 3. Fig. 2 is a cross-section taken in the line *y y* of Fig. 3. Fig. 3 is a plan of machine. Fig. 4 is a plan of gate or slide.

A represents the box which contains the material to be sifted upon the molding or other article to be scoured or polished; B, the cover, which is fitted close, in order to keep the polishing material from sifting through, and is held in place by means of screws. The solid piece or block C, of abrasive material to suit the molding or other article, (which is described in Letters Patent No. 151,847, granted to George G. Cochran and myself June 9, 1874,) is let in the under part of box A, held in position by cement, screws, or otherwise. A lever, D, passes through cover B, and is pivoted in the same, and the part extending above the box A serves as a handle to adjust the openings, and the end which is inside the box is fitted to the gate or slide E in such a manner that it may be moved in a longitudinal direction to any point desired. F represents the stationary part of the frame, secured to the inside of the box A, with guides *i i* at each side to admit the adjustable gate or slide E. At the proper points are perforations or their equivalents G G^1 G^2, corresponding to openings through box A and polishing-block C. E is the slide, held in place by grooves *i i* at the sides of the stationary frame F, and operated by the lever D, of sufficient movement to cut the flow of grit to any amount desired, according to the case and condition of the work to be done.

This device may be used by hand, if necessary. When used on a machine it is held by means of centers at H H, as shown, at each end, the center line of which is parallel to the face of the polishing-block C.

The receptacle in the hollow stock is designed to contain the polishing-powder, which may consist of pumice-stone, flint, glass, emery, &c., properly pulverized, according to the nature of the material to be polished.

In operating this device, the cover D is removed, and the material to be used for polishing or scouring placed in the box A. The cover B is replaced, closing it completely, and the gate or slide E adjusted so as to give the desired amount of grit or other material used. The reciprocating motion agitates the material in the box A, and it causes it to work through the small perforations in plate F and through the openings G G^1 G^2 of the polishing-block C, between the same and the molding or other article being polished or scoured. Thus, with the necessary amount of pressure and reciprocating motion, the gritty substance being conducted through the openings G G^1 G^2, between the block C and the molding or other article, produces very fine results.

Any amount of feed can be given that is desired while the polishing-block A is in motion.

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

The polishing device consisting of a hollow stock for holding the polishing material,

having a removable top and perforated bottom, to the latter of which a perforated pad is secured, the perforations in the stock being adapted to be opened and closed by means of a sliding gate, operated by a lever extending through the top, in order to distribute the material to the surface of the article being polished, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand.

JOHN A. DAYTON.

Witnesses:
A. H. NORRIS,
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