O. G. VANDERHOOF.

Diamond Mill-Stone Dressing-Machine.

No. 166,570. Patented Aug. 10, 1875.

Fig. 1.

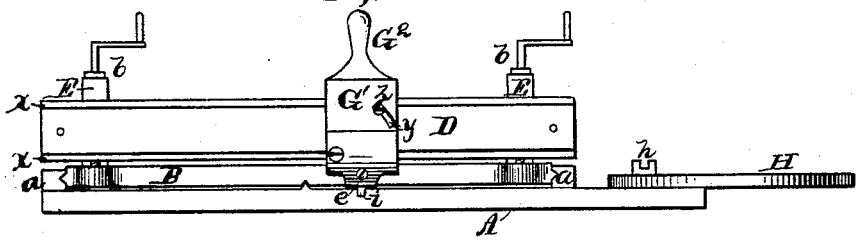


Fig. 2.

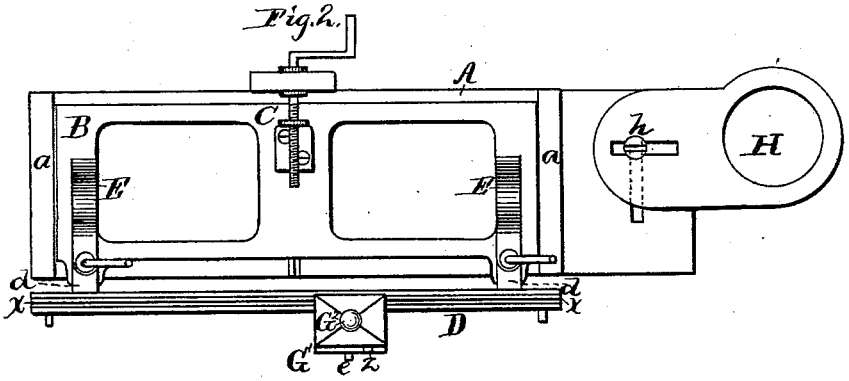
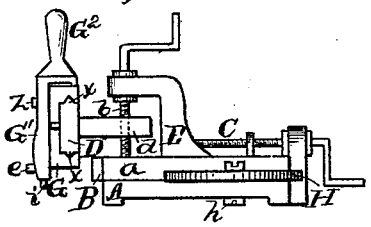


Fig. 3.



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ORSON G. VANDERHOOF, OF KNOXVILLE, TENNESSEE.

IMPROVEMENT IN DIAMOND MILLSTONE-DRESSING MACHINES.

Specification forming part of Letters Patent No. **166,570**, dated August 10, 1875; application filed July 13, 1875.

To all whom it may concern:

Be it known that I, ORSON G. VANDERHOOF, of Knoxville, county of Knox and State of Tennessee, have invented certain new and useful Improvements in Diamond Millstone-Dressing Machines, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of a diamond millstone-dressing machine, 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, which forms a part of this specification, and in which—

Figure 1 is a side elevation of my machine. Fig. 2 is a plan view, and Fig. 3 an end view, of the same.

A represents the bed-plate of my machine, on top of which are two guides or guide-bars, *a a*, secured thereto, and running crosswise of the plate. In these guide-bars is placed the sliding plate B, which is adjusted out and in by means of a screw, C. On top of the sliding plate B, at each end, is a bracket, E, through the front end of which is passed a vertical screw, *b*. These screws pass through arms *d d*, projecting from the rear of a bar, D. This bar thus moves with the sliding plate B, and may be adjusted up and down, as desired. Along the top and bottom edges of the bar D are V-shaped ridges or beads *x x*, over which the holder moves. The holder is made of two parts. The inner part G is made to fit over the front and top and bottom edges of the bar D, and is to have a plate and set-screw to take up the wear. The outer part G^1 is pivoted at the lower right corner to the sliding part G, and has a curved slot, *y*, with set-screw *z* passing through it, so that when the cut is finished the diamond can be raised off of the stone and brought back without cutting. The exterior part G^1 of the holder is provided with a handle, G^2, on top, and in its lower side is formed a socket for the insertion of the diamond *i*, which is held by a set-screw, *e*. At one end of the bed-plate A is a ring, H, to be placed over the spindle of the burr, so as to give the proper angle and to hold the machine in position. It is adjusted by means of a thumb-screw, *h*.

When desired, a level can be attached to the plate B, in front of the lateral adjusting-screw C, so that the face of the stone can be leveled up, the same as with a red staff.

When the machine has been placed at the proper angle on the stone the bar D is adjusted as desired, to make the diamond cut as deep as required. The operator then moves the holder back and forth, the diamond cutting while moving in one direction, but not in the other, as above described; and when one line is made the sliding plate is moved forward the desired distance for a new cut by means of the adjusting-screw D.

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

In a millstone-dressing machine, the combination of the bed-plate A, with guides *a a*, the sliding plate B, with brackets E E, the adjustable bar D, with arms *d d*, and the adjusting-screws C and *b b*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention, I hereunto affix my signature this 10th day of July, 1875.

ORSON G. VANDERHOOF.

Witnesses:
H. H. TAYLOR,
LEON JOUROLMON.