T. McFEELY.

MILLSTONE DRESSING-MACHINE.

No. 192,270. Patented June 19, 1877.

Fig 2

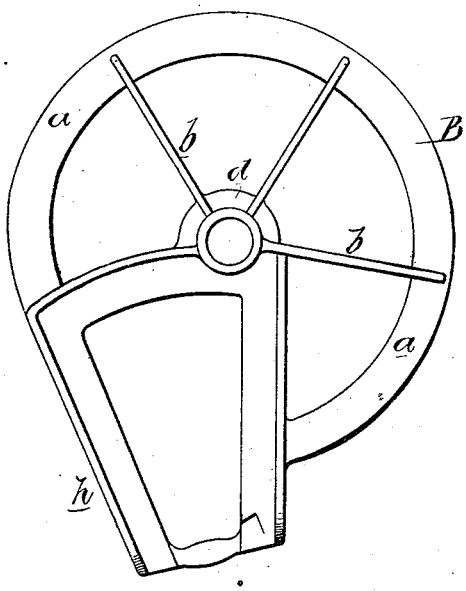


Fig 1

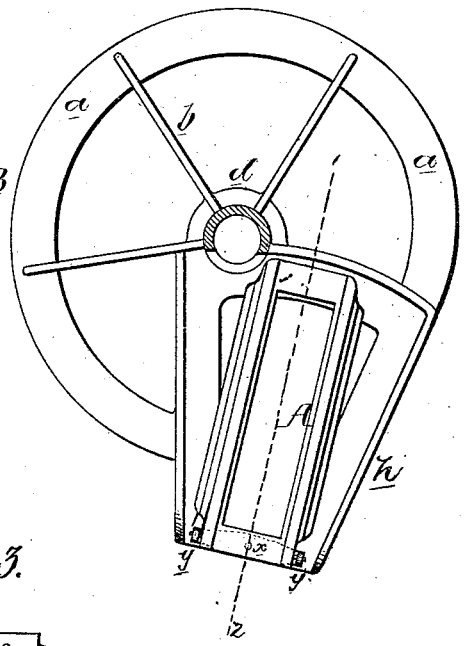


Fig 3.

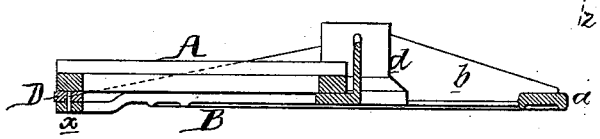


Fig. 5.

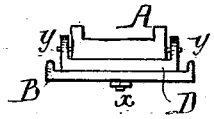
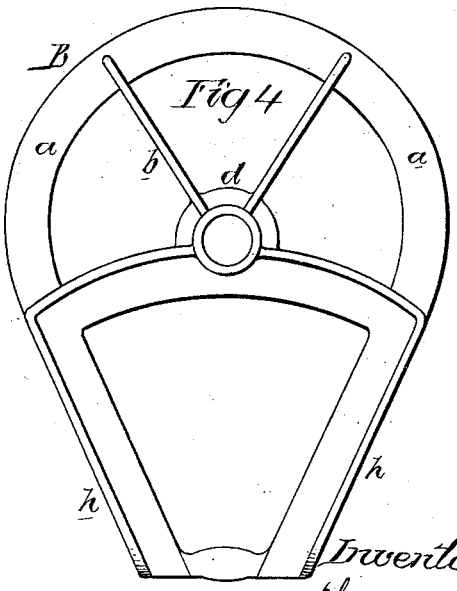


Fig 4



Witnesses.

Richard L. Gardiner

Harry Smith

Inventor

Thomas McFeely

by his Attorneys

Howson & Howson

UNITED STATES PATENT OFFICE.

THOMAS McFEELY, OF MARION, INDIANA, ASSIGNOR TO SAMUEL E. GRISCOM, OF POTTSVILLE, PENNSYLVANIA.

IMPROVEMENT IN MILLSTONE-DRESSING MACHINES.

Specification forming part of Letters Patent No. **192,270**, dated June 19, 1877; application filed March 21, 1877.

To all whom it may concern:

Be it known that I, THOMAS McFEELY, of Marion, Grant county, Indiana, have invented a new and useful Improvement in Millstone-Dressing Machines, of which the following is a specification:

The object of my invention is to so connect the guide-base of a diamond dressing-machine to a plate for resting on the stone that the said guide-base can be adjusted laterally, as well as tilted to any desired inclination, without disturbing the uniform bearing of the plate on the stone.

In the accompanying drawing, Figure 1 is a plan view of the plate and guide-base for one millstone; Fig. 2, a plan view of the plate for another millstone; Fig. 3, a vertical section on the line 1 2, Fig. 1; Fig. 4. modified form of plate.

A represents the base of a millstone-dressing machine, the said base having guides adapted to the carriage, by reciprocating which a diamond is made to act on the surface of the stone and impart the desired dress to the same, or to cut the furrows.

It has not been deemed necessary to illustrate the carriage, as it may be similar to those in present use; that of D. Larer, for instance, for which Letters Patent No. 144,851 were granted November 25, 1873.

B is a plate, preferably made in the form of a ring, *a*, with radial arms *b*, and a central hub, *d*, the eye in which is large enough to freely admit the mill-spindle. Forming part of the plate B is a projection, *h*, on which and on the plate bears the guide-plate A, the latter being connected to the outer end of the projection *h* through the medium of a plate, D, Fig. 5, this plate being pivoted, by a pin or bolt, *x*, to the projection *h*, and the guide A being pivoted by pins *y* to the said plate D, so that the guide-base can be adjusted horizontally on its pivoted center to such a position as the dress and furrows of the stone may suggest, and so that the outer end of the guide-base may be elevated or depressed and its guides adjusted to such an inclination as the desired difference in the depth of the dress at the eye and that at the skirt of the stone may suggest.

It will, of course, be understood that provision must be made for securing the base, after adjustment, to the plate B; but as different devices for this purpose will readily suggest themselves, it has not been deemed necessary to illustrate them in the drawing.

Different plates B will be required for right and left hand dressing, the difference of the arrangement of the bearings for the base on the two plates being indicated in Figs. 1 and 2.

One plate, however, may be made for service in connection with both plans, as shown in Fig. 4, which will be readily understood without explanation.

In carrying out my invention it is essential that the plate should have an extended bearing on the stone, and should not be influenced as regards its position by any local elevations or depressions.

Hence the annular form of the plate, which, however, I do not desire to claim *per se*.

After a part of the stone has been dressed, while the plate is in the position Fig. 1, the plate carrying the base A is turned to a proper position for dressing another section of the stone, and this is continued until the dressing is complete, the vertical position of the plate, no matter what point it may be turned to, being determined by the general surface of the stone and not by local depressions and elevations, the diamond in its course cutting to the greatest depth where the latter occur; hence, while the diamond reduces the stone to a uniform surface by leveling local irregularities, the surface retains the general "truth" it had acquired by wear.

I claim as my invention—

1. The combination of the bed-plate B, provided with a projection, *h*, and adapted to the surface of the stone, as described, with the guide-base A, connected to the said projection, all substantially as set forth.

2. The combination of the bed-plate of a millstone-dressing machine with the base-plate A, adapted to be both tilted vertically and adjusted horizontally on said bed-plate, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOS. McFEELY.

Witnesses:

HERMANN MOESSNER,

HARRY SMITH.