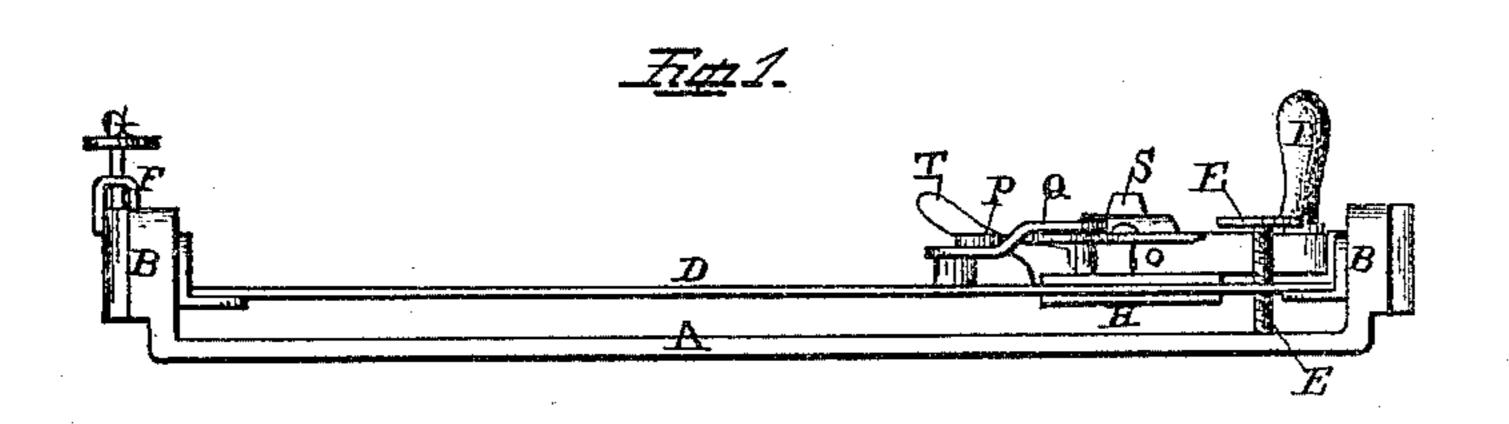
(No Model.)

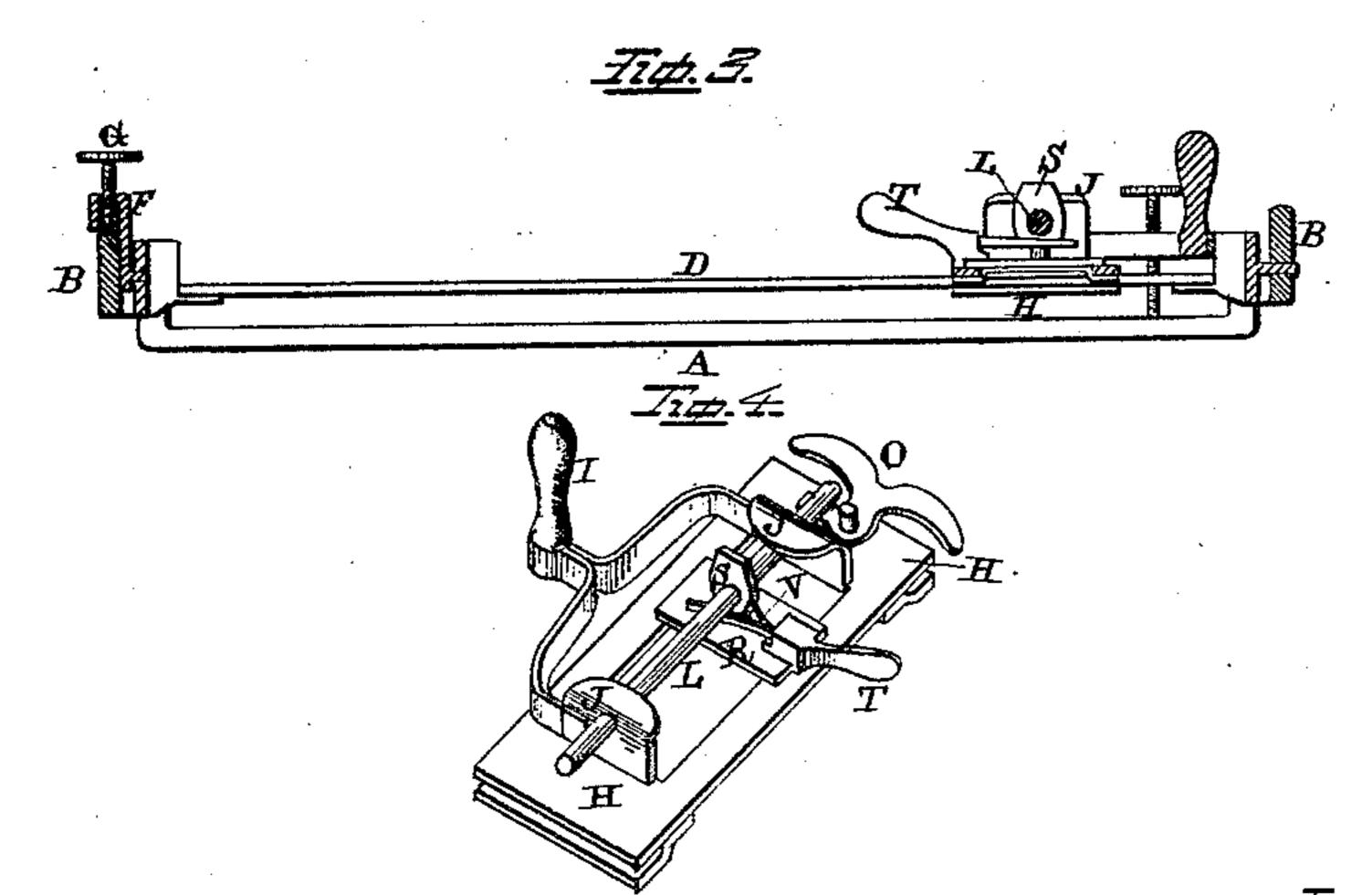
A. L. TEETOR.

Machine for Dressing Millstones.

No. 232,861.

Patented Oct. 5, 1880.





Witnesses-M. M. Mortimer. Chas. H. Isham Sehmann, att

## United States Patent Office.

ABE L. TEETOR, OF HAGERSTOWN, INDIANA.

## MACHINE FOR DRESSING MILLSTONES.

SPECIFICATION forming part of Letters Patent No. 232,861, dated October 5, 1880.

Application filed August 3, 1880. (No model.)

To all whom it may concern:

Be it known that I, ABE L. TEETOR, of Hagerstown, in the county of Wayne and State of Indiana, have invented certain new and 5 useful Improvements in Machines for Dressing Millstones; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make 10 and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in machines for dressing millstones; and it con-15 sists in a double cam-shaped lever which is connected to a rod which extends from end to end of the cross-head and passes through a friction - clamp, which causes the diamondholder to move back and forth, the double 20 cam-shaped lever being made to strike against a friction-roller on one side of the frame, and the friction-roller being made adjustable back and forth, so as to increase and decrease the movement of the rod, as may be necessary.

The object of my invention is to provide a millstone-dressing machine which can be made. to dress furrows as well as the face of the stone, and which can be tilted from side to side, to accommodate the dressing of the fur-30 rows of millstones which run either with or against the sun, and in which the cross-head carrying the cutting device can be automati-

cally moved from side to side.

Figure 1 is a side elevation of my invention. 35 Fig. 2 is a plan view of the same. Fig. 3 is a vertical longitudinal section. Fig. 4 is a perspective of the cross-head and its attachments.

A represents the bed-plate, which rests upon the surface of the stone, and which is made in 40 one solid piece. The ends B of this frame extend considerably above the side portions, so that the pivots upon which the tilting frame tilts from side to side can be raised high enough above the sides of the frame to allow the tilt-45 ing frame to tilt sufficiently to dress furrows. Pivoted in between these two ends B of the frame A is the tilting frame D, which tilts from side to side, so as to accommodate the kind of work being done, and which is adjusted 50 to any desired position by means of the two set-screws E. These set-screws pass through the frame and bear against the top of the

frame A, and thus cause the frame to assume any position that may be desired. One of the pivots in this tilting frame has its bearing in 55 the stirrup F, which catches over the top edge of one of the ends B, and which is made vertically adjustable by means of the set-screw G.

By means of the stirrup and set-screw G one end of the tilting frame can be raised or 60 lowered at will, so as to cause the bosom or furrow at this point of the stone to be dressed more or less than at the skirt, as may be desired.

The cross-head H, which moves back and 65 forth in the tilting frame, is provided with a handle, I, for operating it, and the inner ends of the handle-frame are secured to the projections J, which extend a suitable distance above the top of the cross-head and have their upper 70 ends turned inward toward each other. These projections I form the bearings for a smooth, endwise-moving rod, L, which is attached at one end to a double cam-shaped lever, O, which lever is pivoted to one side of the rod. This 75 lever is shaped as shown at the outer end, so that as the cross-head is moved back and forth upon the tilting frame this lever will come in contact with the friction-roller P on the pivoted lever Q. This friction-roller is placed to one 80 side of the pivot upon which the lever turns, so that the lever can be moved so as to bring the roller nearer to or farther from the double cam-shaped lever, according to the amount of endwise movement it is intended to give the 85 smooth rod. By moving this lever inward, so that it stands almost in a line with the side of the tilting frame, this double cam-shaped lever strikes against it with both of its ends, and thus causes the smooth rod to be moved back 90 and forth through its bearings J.

Through the cross-head is made an opening, which extends at right angles to the opening through the tilting frame, and moving back and forth in this opening is the head R, which 95 carries the diamond or other stone-dressing device. The small cross-head or carrier for diamonds or other stone-dressing devices is provided with two stocks, which are vertically adjustable by hand-wheels on the screw, one 100 of the stocks being held at a fixed point laterally, while the other one is adjustable laterally, so that the cuts made by two diamonds can be regulated to be made at any distance apart.

The two diamonds or other stone-cutting devices can be employed at one time, thereby doing twice the usual amount of work that can be done with one diamond in the same time. 5 Projecting above the top of this head is the friction-clamp S, which can be inclined from side to side, and through which the smooth rod passes. This friction-clamp can be inclined from side to side by means of a lever T, which to has two springs, V, secured to its inner end, which springs catch on each side of the clamp, as shown. When this lever is moved toward one side of the tilting frame, this friction-clamp is inclined toward the opposite direction and 15 held in that position. While the friction-clamp is inclined toward one side, and the rod is made to reciprocate back and forth by means of the double cam-shaped lever, the frictional contact of this with the side of the rod causes the head

this ear it can be moved no farther in that direction; but the shifting-lever must be turned in the opposite direction, so as to incline the clamp toward the other ear or projection, when, by again moving the cross-head back and forth, the head R will be moved toward the opposite

20 R to move constantly toward that side of the

frame toward which the clamp is inclined un-

til the clamp strikes the turned-in end of the

ear or projection J. When the clamp strikes

30 side of the tilting frame each time that the cam-shaped lever is operated by the friction-roller.

This machine is adapted for dressing mill-

stones in every desirable manner, as can readily be seen by the different motions of the various 35 parts.

Having thus described my invention, I

claim—

1. In a machine for dressing millstones, the combination of the cross-head provided with 40 ears or projections through which passes a smooth rod, a mechanism for reciprocating this rod back and forth as the cross-head is moved back and forth in its frame, and a head carrying the stone-dressing device or tool, 45 which is connected to and operated by the smooth red, substantially as specified.

2. In a machine for dressing millstones, the head R, provided with the friction-clamp, which can be inclined from side to side, in combination with the adjusting-lever provided with the spring V, substantially as set forth.

3. The pivoted lever provided with the friction-roller and double cam-shaped lever, and passing through the ears or projections J in 55 the cross-head, whereby the rod may be given a greater or less motion, as may be desired, substantially as shown.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of 60

July, 1880.

ABE L. TEETOR.

Witnesses:

ZACHARIAH TEETOR, B. F. MASON.