

H. Chancey
Dressing Stone.

N^o 25,093.

Patented Aug 16, 1859.

Fig. 1.

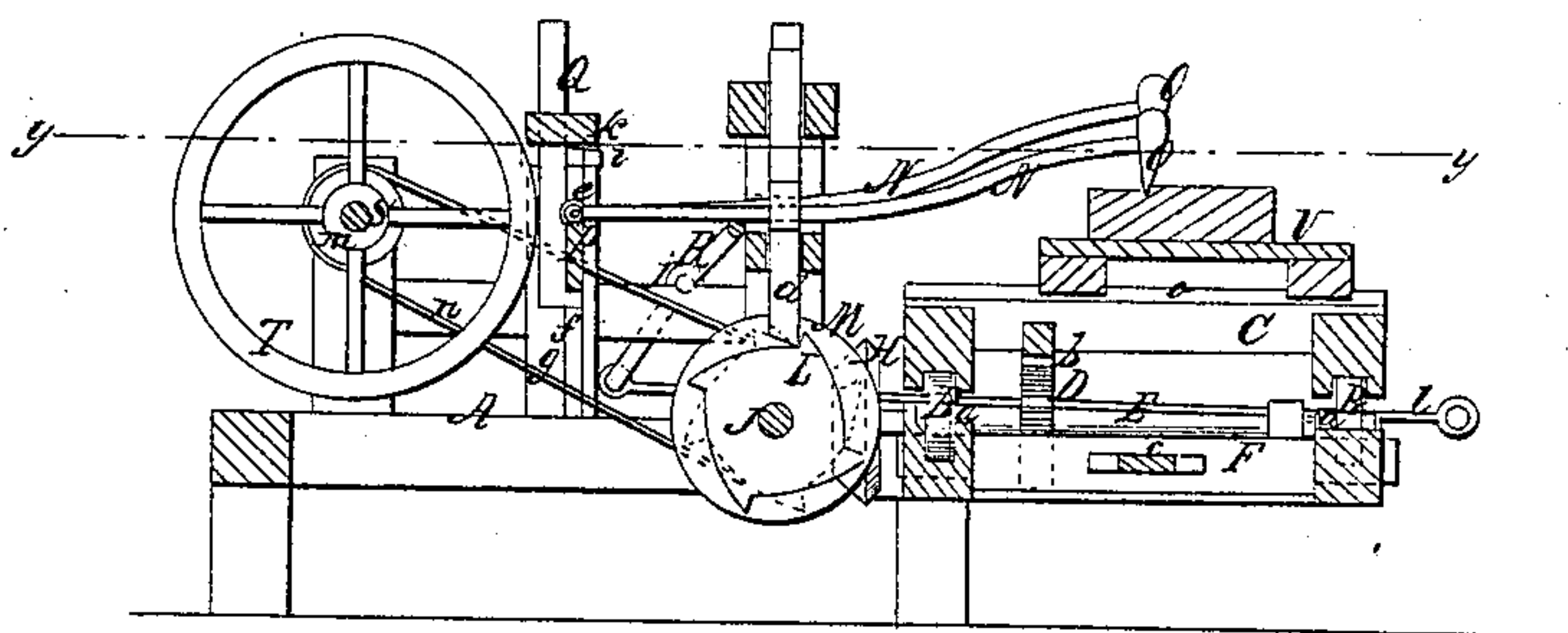
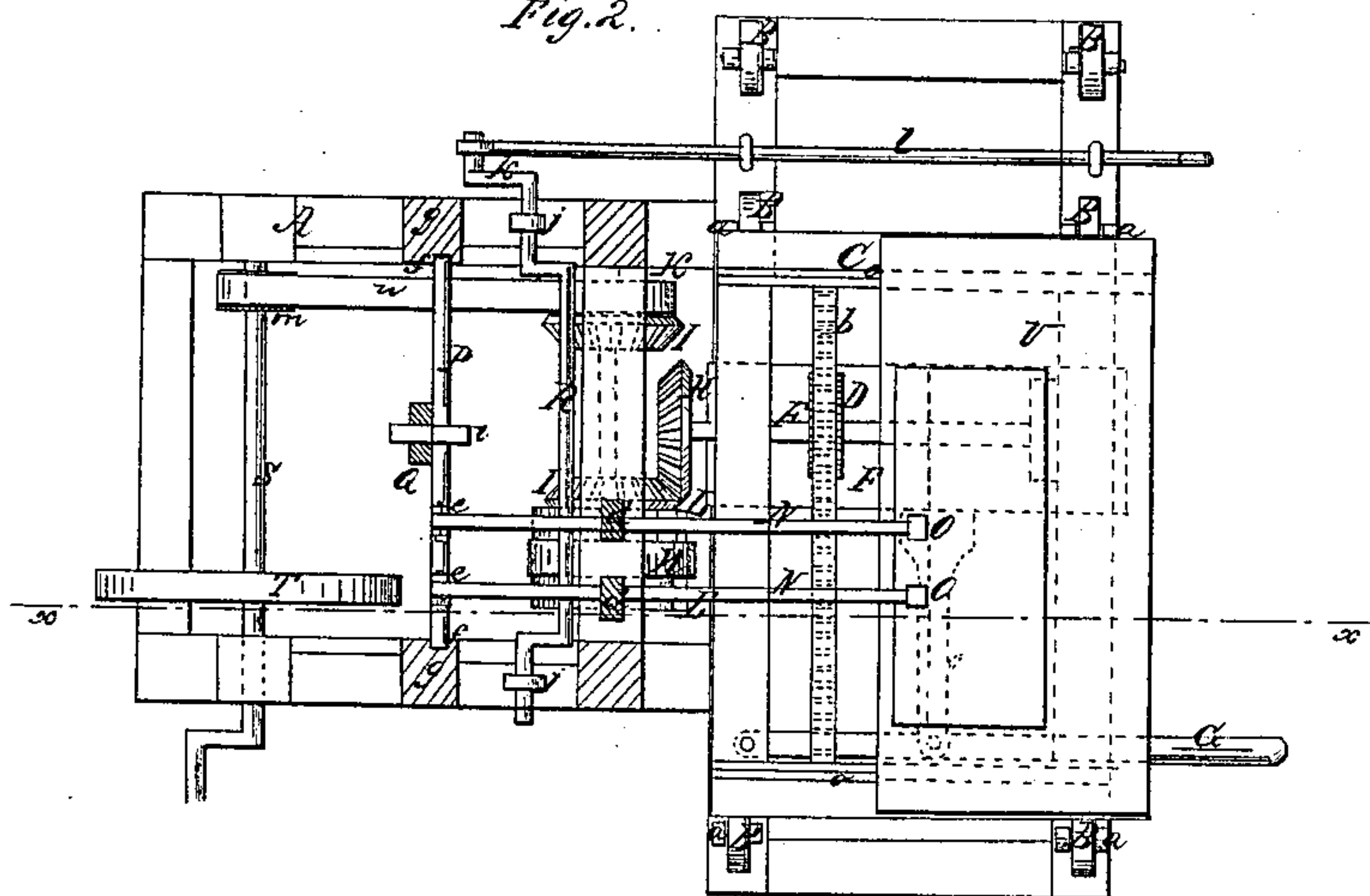


Fig. 2.



Witnesses:
H. B. Davis,
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Inventor;
H. Chancey

UNITED STATES PATENT OFFICE.

H. CHANCEY, OF PERRY, GEORGIA.

MACHINE FOR DRESSING STONES.

Specification of Letters Patent No. 25,093, dated August 16, 1859.

To all whom it may concern:

Be it known that I, H. CHANCEY, of Perry, in the county of Houston and State of Georgia, have invented a new and Improved Machine for Dressing Stone; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side sectional view of my invention taken in the line *x, x*, Fig. 2. Fig. 2, is a horizontal section of the same, taken in the line *y, y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a framing which may be constructed in any proper way to support the working parts.

B, are rollers or wheels fitted in the framing on permanent axes *a*, and on which a carriage C, is placed and allowed to move freely back and forth. To the under side of the carriage C, a rack *b*, is attached, and into this rack a pinion D, gears. This pinion is placed on a shaft E, the bearings of which are attached to a slide F, in the framing A, said slide being actuated when necessary by a lever G, which is attached to an arm *c*, connected with the slide at right angles, as shown by dotted lines in Fig. 2.

To the inner end of the shaft E, a bevel wheel H, is attached. This wheel is made to gear into either of two corresponding wheels I, I, which are placed on a shaft J, in the framing, said shaft also having a pulley K, placed on it and two cams or wiper wheels L, L, which are attached to opposite sides of a wheel M. On the faces of the cams or wiper wheels L, L, the lower ends of upright rods *d, d*, rest one on each. These rods are allowed to rise and fall freely in the framing A, and through each rod a pick or hammer shaft N, passes. The front ends of these rods have each a hammer or pick O, attached, of proper construction and the back ends are attached by joints *e*, to a traverse bar P, the ends of which are fitted in vertical grooves *f*, in uprights *g*, of the framing. The traverse bar P, has an upright Q, attached to it, and this upright passes through a crosspiece *h*, of the framing, is slotted and by means of keys *i*, pass-

ing through the slot, the bar P, may be adjusted to any desired height within the scope of its movement.

On the frame A, a shaft R, is placed, said shaft between its bearings *j, j*, being bent in crank form as shown clearly in Fig. 2. This shaft R, is placed directly under the pick or hammer shafts N, N, and one end of the shaft has an arm *k*, attached to it at right angles, said arm having a rod, *l*, connected to it.

S, is a driving shaft which is placed on the framing A, and has a fly wheel T, placed on it, and also a pulley *m*, the latter having a belt *n*, passing around it from pulley K.

On the upper surface of the carriage C, two ways or guides *o, o*, are secured transversely.—On these ways or guides a platform or bed U, is placed or fitted and allowed to slide thereon and consequently move laterally on the carriage.

The operation is as follows:—The stone to be operated upon, shown in red outline is placed on the bed U, and the shaft S, is rotated by any convenient power. As the shaft S, rotates, motion is communicated to the shaft J, by the belt *n*, and the cams or wiper wheels elevate the uprights and consequently the pick or hammer shafts, which fall by their own gravity on the stone as the prominent portions of the cams or wiper wheels pass from underneath the uprights. The cams or wiper wheels are so adjusted on their shaft as to act alternately on the uprights. As the picks or hammers O, act on the stone the latter is moved along underneath them in consequence of one of the wheels I, gearing into the wheel H, thereby communicating motion to shaft F, and pinion D, which moves the carriage C, by gearing into rack *b*. When the upper surface of the stone has been acted upon its full length, the bed U, is moved laterally on the carriage C, a distance equal to the length of the picks or hammers and the movement of the carriage is reversed by adjusting the slide E, so that the wheel H, on shaft F, will gear into the other wheel I, on shaft J, and the picks or hammers then act on a fresh surface of the stone. This operation is repeated until the whole of the upper surface of the stone is dressed, the bed U, being moved laterally at the termination of each stroke or movement of the carriage and the movement of

the carriage reversed as above described. When one surface of the stone is dressed it is turned on the bed and another surface placed uppermost to be acted upon in the
5 same way as before, that is, if more than one surface is to be dressed. The picks or hammers may be thrown upward above the stone at any time by actuating the rod *l*, and thereby turning the shaft *R*, which ele-
10 vates the shafts *N*, *N*. By this means also the force of the blows of the picks or hammers may be graduated. The length of the stroke of the picks or hammers may be regulated by adjusting the traverse bar *P*,
15 and the picks or hammers also by the said means elevated or depressed to suit the height of the stone.

I am aware that hammers have been so arranged as to be operated by cams or
20 wiper wheels in connection with their own

gravity and I therefore do not broadly claim such device.—Nor do I claim the reciprocating carriage provided with a laterally moving bed, for these devices have been in various machines for similar or analo- 25
gous purposes; but,

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

The arrangement of the pick or hammer 30 shafts *N*, *N*, adjustable shaft *R*, and adjustable traverse bar *P*, when combined or used in connection with the reciprocating carriage *C*, and laterally moving or adjustable bed *U*, in the manner and for the purpose 35 herein set forth.

H. CHANCEY.

Witnesses:

H. B. DAVIS,
ZINA DOOLITTLE.