

J. C. MATEER.

Improvement in Machine for Polishing Marble and Wood.

No. 132,404.

Patented Oct. 22, 1872.

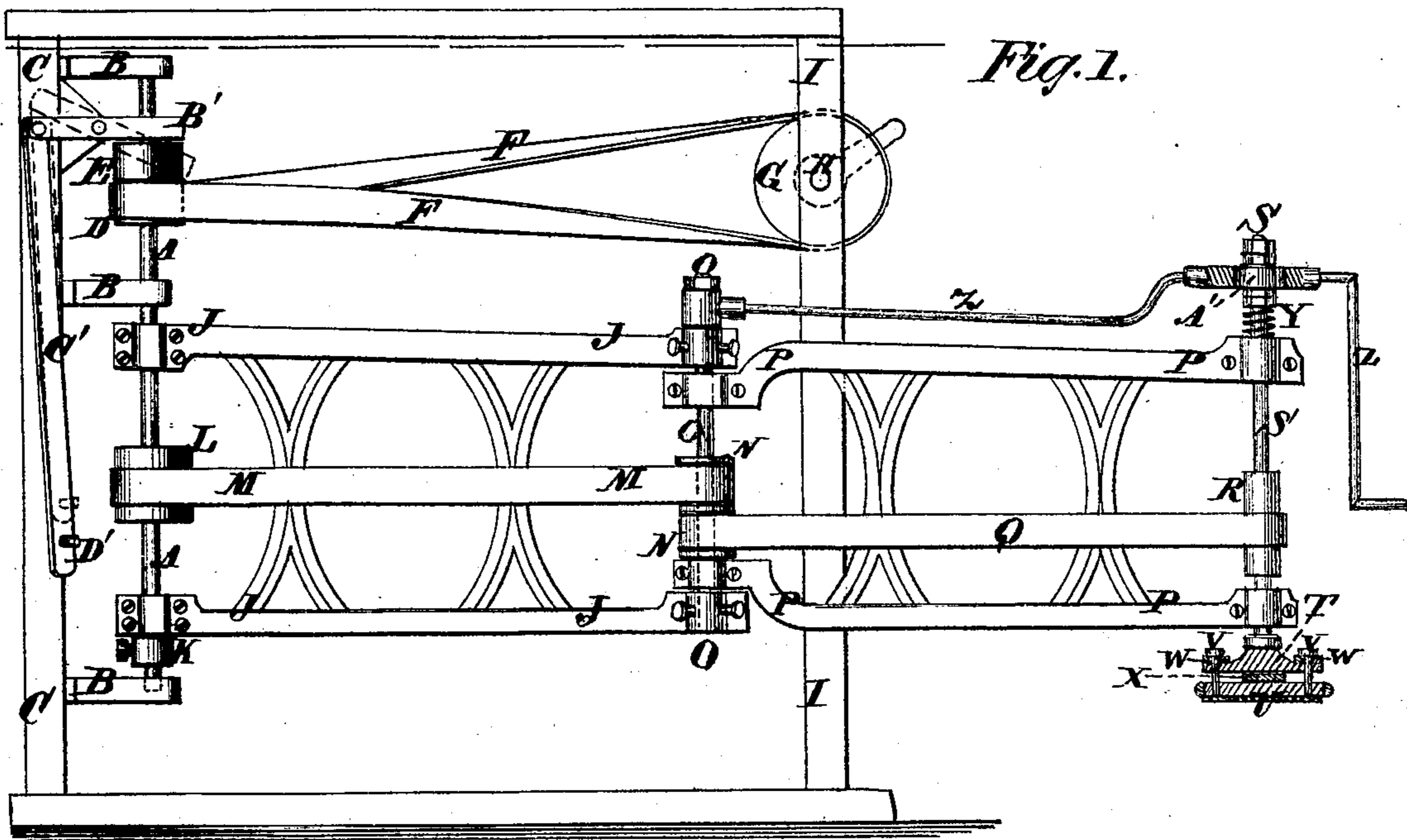


Fig. 1.

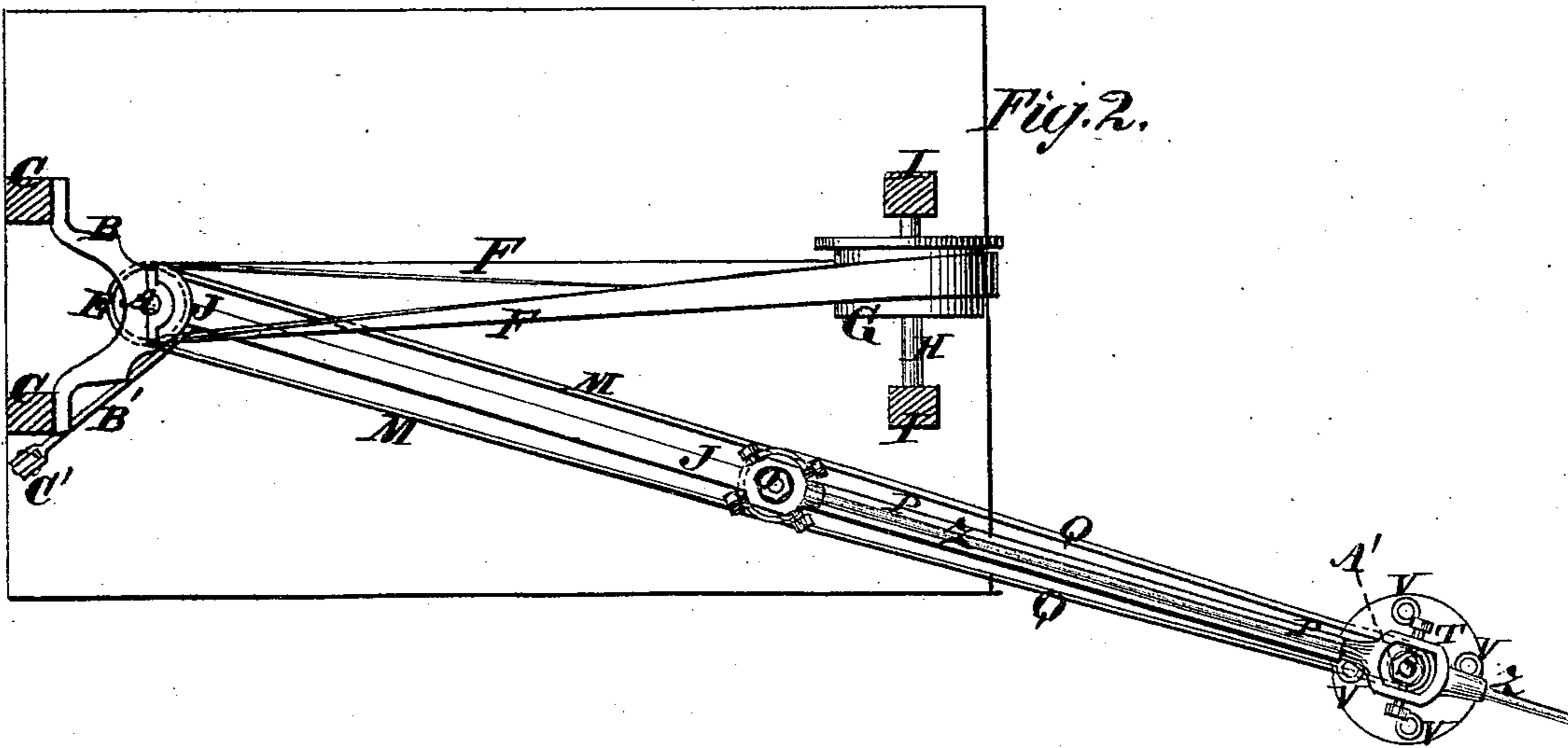


Fig. 2.

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JOHN C. MATEER, OF KANKAKEE, ILLINOIS.

IMPROVEMENT IN MACHINES FOR POLISHING MARBLE AND WOOD.

Specification forming part of Letters Patent No. 132,404, dated October 22, 1872.

To all whom it may concern:

Be it known that I, JOHN C. MATEER, of Kankakee, in the county of Kankakee and State of Illinois, have invented a new and useful Improvement in Machine for Polishing Marble, Wood, &c., of which the following is a specification:

In the accompanying drawing, Figure 1 is a side view of my improved machine, partly in section, to show the construction, and Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved machine for polishing marble and wood, and which may also be used for operating a bit or drill for boring purposes, doing its work well and thoroughly, and adjusting itself to the surface to be operated upon; and it consists in the construction and combination of various parts of the machine, as hereinafter more fully described.

A is a vertical shaft, which revolves in brackets B or other bearings attached to posts C or other suitable supports. Upon the upper part of the shaft A is placed a fast pulley, D, and a loose pulley, E, to receive the driving-belt F, which also passes around the driving-pulley G attached to the shaft H, which revolves in bearings attached to the posts I or other suitable supports, and which is driven by any convenient power. J is a frame, to the rear ends of the top and bottom bars of which are attached bearings in which the shaft A revolves, so that the said frame J may be supported by the said shaft A. The frame J is supported in position by a collar, K, placed upon the lower part of the shaft A, and adjustably secured in position by a set-screw. To the shaft A, between the bearings of the frame J, is attached a long pulley, L, around which passes a band, M, which also passes around a long pulley, N, that runs loosely upon the shaft O, which is secured to the forward ends of the top and bottom bars of the frame J by set-screws. P is a frame, to the rear ends of the top and bottom bars of which are attached bearings which work upon the shaft O, between the forward ends of the top and bottom bars of the frame P. Around the long pulley N also passes a band, Q, which passes around a long pulley, R, keyed or other-

wise secured to the shaft S, which revolves in bearings attached to the forward ends of the top and bottom bars of the frame P. Upon the lower end of the shaft S, which projects below the bottom bar of the frame P, is screwed or otherwise detachably secured a head or plate, T, to which is secured the rubber U for polishing marble, or the sand-paper holder for polishing wood, or the tool-holder for boring or drilling. The rubber U is secured to the head or plate T by three or more screws or bolts, V, which have thick rubber washers W placed upon their upper ends, upon the upper side of the plate T. A rubber block, X, is also interposed between the centers of the plate T and holder or rubber U, as shown in Fig. 1. This construction allows the rubber to adjust itself to the surface to be operated upon. Upon the shaft S, above the bearing in the forward end of the top bar of the frame P, is placed a coiled spring, Y, the lower end of which rests against the said bearing, and its upper end rests against a collar or washer placed upon the upper part of the said shaft. The spring Y allows the rubber to rise should it encounter an obstruction or uneven portion of the surface being operated upon. Z is a rod, the rear end of which is attached to the upper end of the shaft O. The forward part of the rod Z has an eye formed through it to receive the upper end of the shaft S and the sleeve A', to which sleeve it is secured by set-screws B'. The sleeve A' is secured from longitudinal movement upon the shaft S by collars or washers placed upon the said shaft, above and below the said sleeve. The forward end of the rod Z is bent into crank form, as shown in Fig. 1, to bring it into convenient position to be grasped by the operator to guide the rubber over the surface of the wood or stone to be operated upon. The rod Z also enables the operator to press the rubber down upon the work with any desired force. This construction enables the swinging frames to be conveniently raised and lowered to adjust them to the thickness of the material to be operated upon. B' is a shipper for moving the belt F back and forth upon the fast and loose pulleys D E, and securing it in place when adjusted. The shipper B' is operated by a bar, O', which extends down along the post C into such a position that it may be con-

veniently reached and operated, and which is secured in place when adjusted by a pin, D', or other suitable means.

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

1. The arrangement of the driving-belt F, fast and loose pulleys D E, shaft A, frame J, adjustable collar K, pulley L, band M, pulley N, shaft O, frame P, band Q, pulley R, and working shaft S, with respect to each other, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the plate or head T,

rubber or holder U, bolts V, three or more, rubber washers W, and rubber block X, with each other and with the lower end of the working shaft S, substantially as herein shown and described, and for the purpose set forth

3. The combination of the rod Z and sleeve A' with the shafts O S and swinging frames J P, substantially as herein shown and described, and for the purpose set forth.

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Witnesses:

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