No. 678,109. Patented July 9, 1901.

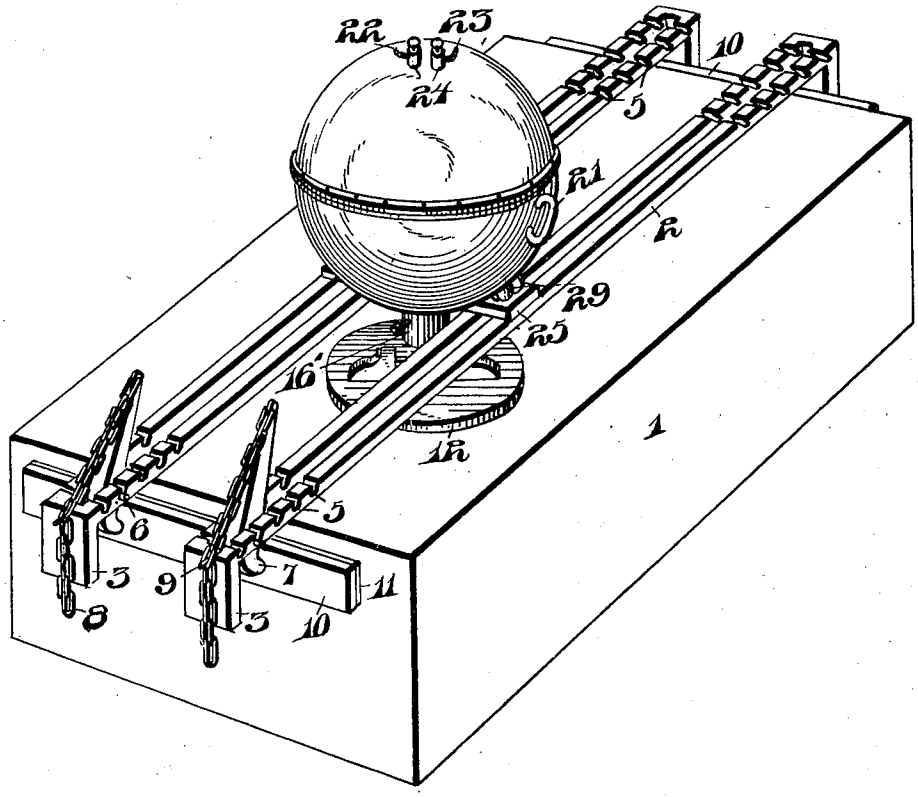
W. A. LINDSEY.

POLISHING MACHINE.

(Application filed Aug. 9, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.



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(No Model.) 2 Sheets—Sheet 2.

Fig. 2.

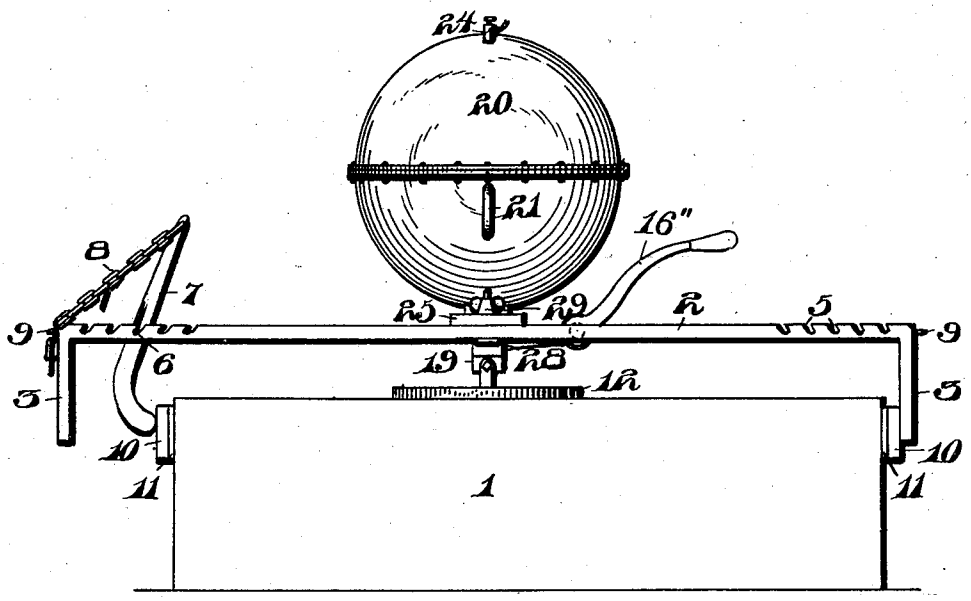


Fig. 4.

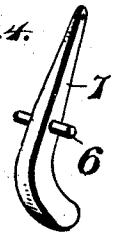


Fig. 3.

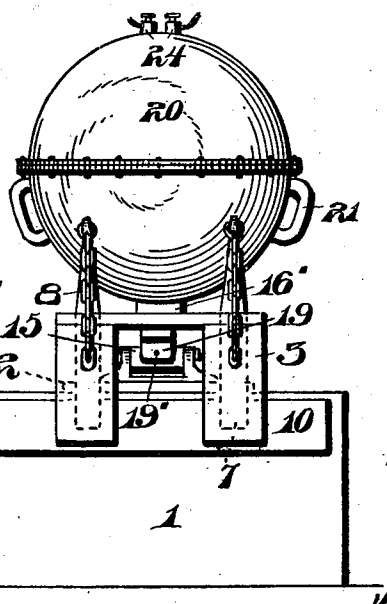


Fig. 5.

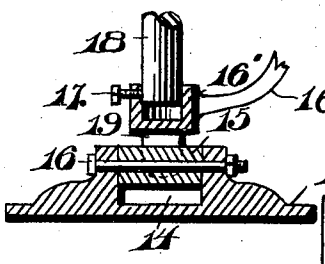


Fig. 6.

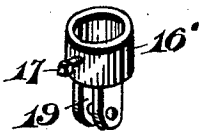


Fig. 7.



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UNITED STATES PATENT OFFICE.

WILLIAM A. LINDSEY, OF WILKINSBURG, PENNSYLVANIA.

POLISHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 678,109, dated July 9, 1901.

Application filed August 9, 1900. Serial No. 26,336. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. LINDSEY, a citizen of the United States of America, residing at Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Polishing-Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in rubbing, grinding, and polishing machines, and relates particularly to machines adapted for use in rubbing, grinding, and polishing marble, granite, stone, or glass.

The object of my invention is to construct a machine for this purpose that may be easily and quickly attached in position on the stone which is to be polished and which may be adjusted thereon along the length or face of the stone, so as to bring the polisher at different positions on said face.

Briefly described, the invention consists of two slotted bars, which constitute a track for the purpose of the polisher and its driving-motor, each of these bars carrying means for attaching to the stone being operated upon, together with the details of construction entering into the invention, as will be hereinafter more specifically described, and specifically pointed out in the claims.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference will be employed to designate similar parts throughout the several views, in which—

Figure 1 is a perspective view of my improved polisher attached in position on the face of a stone. Fig. 2 is a side view of the same. Fig. 3 is an end view thereof. Fig. 4 is a detailed perspective view of one of the clamps for securing the polisher in position on the stone to be polished. Fig. 5 is a cross-sectional view of the polisher and the joint which connects the same with the motor. Fig. 6 is a detailed perspective view of the collar which connects the shaft of the driving-motor with the polisher. Fig. 7 is a like view of one of the adjustable screws employed for securing the polisher and motor upon the track.

In the accompanying drawings I have shown the polisher secured in position upon a block of building-stone or the like, (indicated by the reference-numeral 1.) A track is secured to the stone and supports the polisher while in use, this track comprising a pair of slotted bars 2, having the angular or downturned ends 3 3, and each provided near their ends with a series of notches 5, which are inclined slightly toward the ends of the slotted bars. These notches are adapted to receive a pin 6, mounted in each of the clamp-arms 7, the latter operating in the slots in the bar 2 and having connected to their upper ends a chain 8, adapted for engagement with pins 9, carried by the bars. These clamp-arms are adapted to have their lower ends forced into engagement with the clamp-bars 10, which are or may be provided on their inner faces with a rubber strip 11, which engages the ends of the stone being operated upon.

The rubber, grinder, or polishing disk 12 may be composed of any desired material and is provided in its upper face with a seat 14, and which is secured in a block 15 by means of a bolt 16, passing through the rubber, grinder, or polishing disk, the seat being of a sufficient size so that the block will be free to rock a limited distance upon its bolt. A collar 16′ is connected by a set-screw 17 to the lower end of the motor-shaft 18 and carries a pair of lugs 19, which are fastened by pins 19′ to the sides of the block 15. The rubber-disk 12 may be elevated or lowered by the hand-lever 16″, which is loosely connected to the collar 16′, having first released the set-screw 17.

The driving-motor (not shown) may be driven by electricity, water, or compressed air and is preferably inclosed in a suitable casing 20, which, as shown, may be made in two sections, that the motor may be placed therein, and is provided with handles 21. The positive and negative wires 22 23 are connected to binding-posts 24, shown at the top of the casing, and lead to a suitable source of electrical supply. The motor and its casing are supported on a suitable cross-

bar 25, through which the motor-shaft 18 operates, this shaft being adjustable along the slotted bars and held in position as desired by set-screws 26, having the enlarged shoulders 27 to operate in the slots of the bars 2, and the heads 18 to engage the underneath face of said bars, these screws being held in position by winged nuts 29.

The operation of the polisher will be readily apparent, the bars secured to the stone to be operated upon, as shown in Figs. 1, 2, and 3, and the polishing-disk being adjusted along the bars to the position where the polishing-disk will engage the desired portion of the face. When it is desired to remove the polisher, the chains 8 are disengaged from the pins 9, thus releasing the clamping-bars 10 and polisher, and its track may be removed from the stone.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

1. A polishing apparatus, comprising slotted bars having angled ends and provided with notches on either side of said slotted portions adjacent to the angled ends thereof, a polisher held to and guided by said bars, combined with adjustable clamping means held in said notches and designed to hold said bars to a block of stone to be polished, as set forth.

2. The combination with the motor-shaft, and the polishing-disk pivotally connected thereto, of the slotted bars from which the polishing-disk is adjustably suspended, and means carried by said bars for securing the same rigidly to a block of stone or the like, substantially as described.

3. In a polishing apparatus, slotted parallel bars having angled ends, notches in the edges of said bars, adjacent to their angled ends, a cross-piece having sliding bolts passing through same, and designed to slide in said slotted bars, a rotatable polisher held by said cross-piece, clamping-levers having pins which are fulcrumed in the notches of said bars, and means for holding said levers in clamping relation against a stone to be polished, as set forth.

4. In a polishing apparatus, the combination with the slotted parallel notched bars having angled ends, the polisher held to and guided by said bars, the lugs on the outer faces of said angled ends, the clamping-levers with curved ends, the pins on the opposite sides of said levers designed to be fulcrumed in the notches of said slotted bars, chains secured to the straight ends of the levers, and adjustably engaged by said lugs, as set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

WILLIAM A. LINDSEY.

Witnesses:
LOUIS MOESER,
M. E. HARRISON.