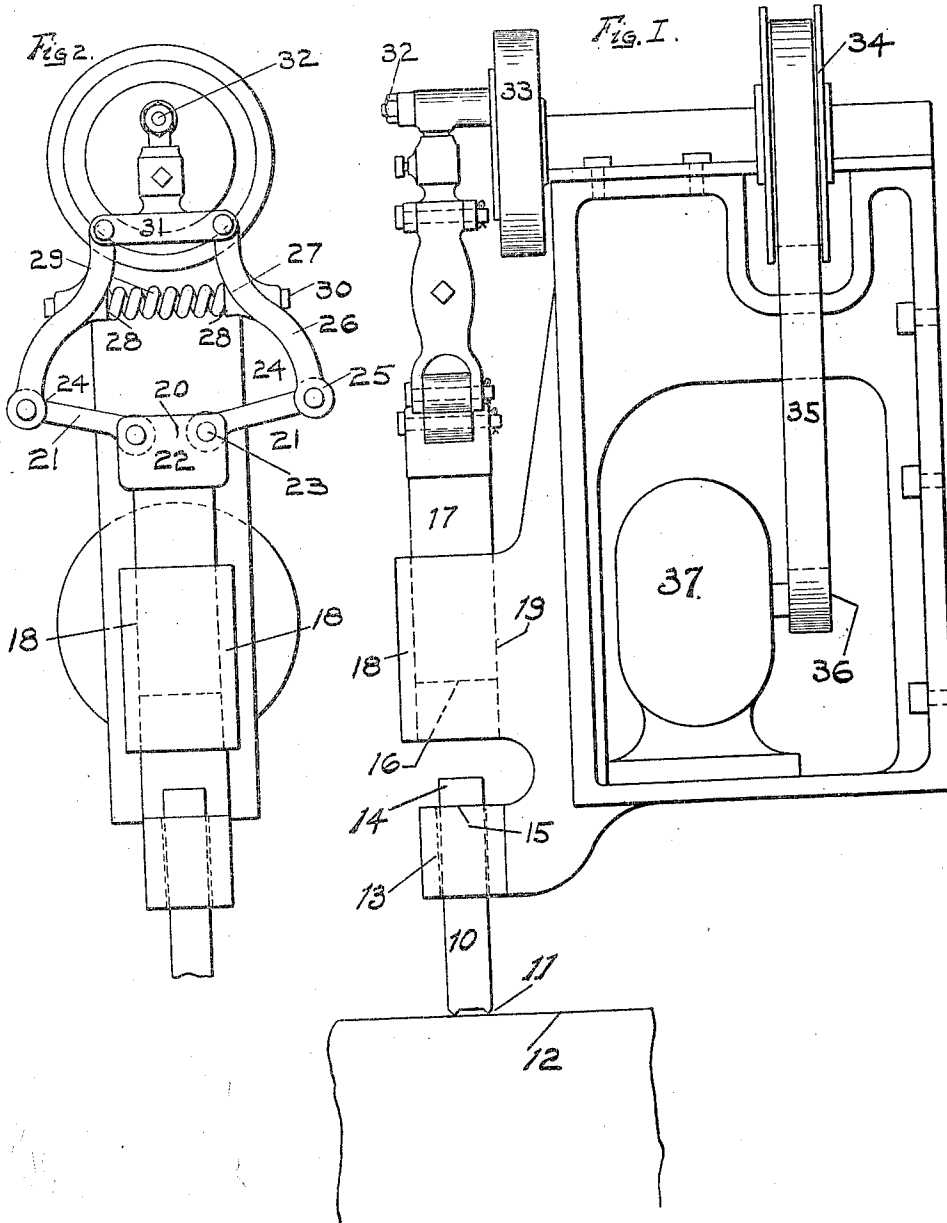


H. J. BECK.
STONE DRESSING MACHINE.
APPLICATION FILED NOV. 10, 1911.

Patented Mar. 3, 1914.

1,089,104.



WITNESSES

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HENRY J. BECK, OF ST. JOHNSBURY, VERMONT.

STONE-DRESSING MACHINE.

1,089,104.

Specification of Letters Patent.

Patented Mar. 3, 1914.

Application filed November 10, 1911. Serial No. 659,612.

To all whom it may concern:

Be it known that I, HENRY J. BECK, a citizen of the United States, residing at St. Johnsbury, in the county of Caledonia and State of Vermont, have invented certain new and useful Improvements in Stone-Dressing Machines, of which the following is a specification.

This invention relates to stone dressing machines, and has for its object improved means for holding as well as striking the cutting tool that engages the surface of the stone.

The primary object of this device is to provide mechanical means for dressing stone, thus obviating the arduous use of the mallet and chisel usually resorted to for dressing stone.

Another object of this device is to provide means for holding the cutting tool on the face of the stone in such manner that when the blow from the striking element is delivered to the top of the tool, the re-bound of the tool will be sufficient to enable the operator to advance the tool such that a new surface is engaged by the cutting tool, at the next blow from the striking element.

With these and many other objects in view, which will be more readily apparent, as the nature of the invention is better understood, the same consists of the novel construction, combination and arrangement of parts as will be hereinafter fully pointed out, illustrated and claimed.

The essential features involved in carrying out the objects above indicated are susceptible to a wide range of structural modification, without departing from the spirit or scope of the invention, but a preferred and practical embodiment thereof is shown in the accompanying drawings, in which--

Figure 1 is a side elevation of my improved stone dressing machine, showing also the relation of the dressing tool to the stone to be dressed. Fig. 2 is an end elevation of the parts shown in Fig. 1.

Similar numerals of reference refer to similar parts throughout the several figures of the drawings.

In this improved stone dressing machine I provide a cutting tool designated by the numeral 10, the cutting edge 11, of which engages the stone 12. The tool 10 is held in a vertical position by the tool guide 13, the top 14 of the tool protruding above the surface 15 of the guide, such that when the

blow is delivered by the rectangular reciprocating hammer, the bottom or the engaging face 16, will not engage the surface 15 of the guide. The reciprocating hammer 17 is slidably arranged between vertical guides 18 and 19, and preferably operated through a spring spaced toggle designated in its entirety by the numeral 20, and consists essentially of links 21, adapted to be connected to the top 22, of the reciprocating hammer 17, by pins 23, while the opposite ends 24 of the links connect, by pin connections 25 to the arms 26 of the toggle, which are provided at their inner intermediate points 27, with a spring seat adapted to receive the ends 28, of the spring 29, which is held in place by a through bolt 30, which limits the outward thrust of the arms. The upper ends of the arms are provided with means, through pin connections, for attaching to the cross-head 31, which in turn is provided with means for adjusting the stroke of the hammer 17.

The reciprocating action of the hammer 17 is provided by the pin 32, eccentrically positioned in the crank disk 33, which is connected through suitable shafting, to the pulley 34, which is preferably connected by the belt 35, to the motor pulley 36, of the motor 37, shown located on the frame 38 of the machine.

From the above description it will be obvious that my improved machine provides novel means for dressing the surfaces of stone, and the entire mechanism can be readily suspended above the stone to be surfaced, or means can readily be provided to pass the stone beneath the tool in a stationary machine.

Without further description and elaboration, it is thought that the many advantages of the herein described stone dressing machine are readily apparent and

What I claim, and desire to be secured by Letters Patent is:

1. A stone dressing machine comprising in combination a substantially rectangular frame adapted to be secured to a support, a shaft arranged in suitable bearings upon the top of the frame, a pulley on said shaft, a crank disk also on the said shaft at one end thereof, a bifurcated arm carried by the frame at one side and integral therewith, a portion thereof extending below the plane of the lower edge of the frame, the upper and lower members of the arm having a

hammer guide and a tool guide respectively, a hammer eccentrically suspended from the crank disk and slidable in the hammer guide in the arm, a stone dressing tool adapted to rest in the tool guide in the path of the hammer, and a motor seated within the said rectangular frame and adapted to transmit power to the pulley on the shaft.

2. A stone dressing machine including in combination a substantially rectangular frame adapted to be secured to a support, a shaft having a pulley thereon suitably journaled in said frame, a reciprocating hammer device carried and actuated by said shaft, a

bifurcated arm carried by the frame at one side, a portion thereof extending below the plane of the lower edge of the frame, the upper and lower members of said arm having a hammer guide and a tool guide respectively, and a motor seated within the said rectangular frame having operative connection with said shaft.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY J. BECK.

Witnesses:

LOTHAR C. BECK,

H. WILLIAM SCOTT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."