

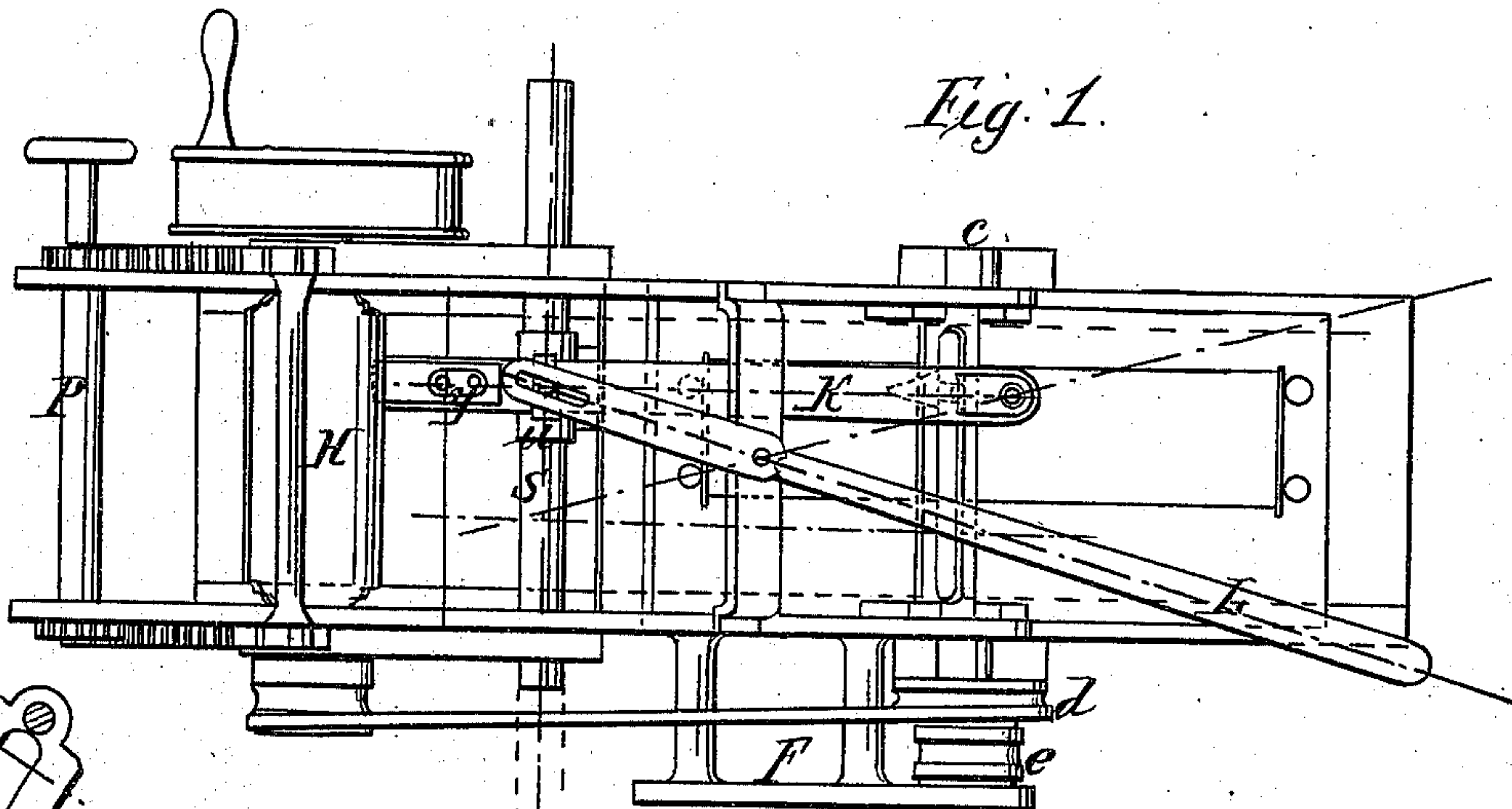
*A. M. George.*

*Dressing Stone.*

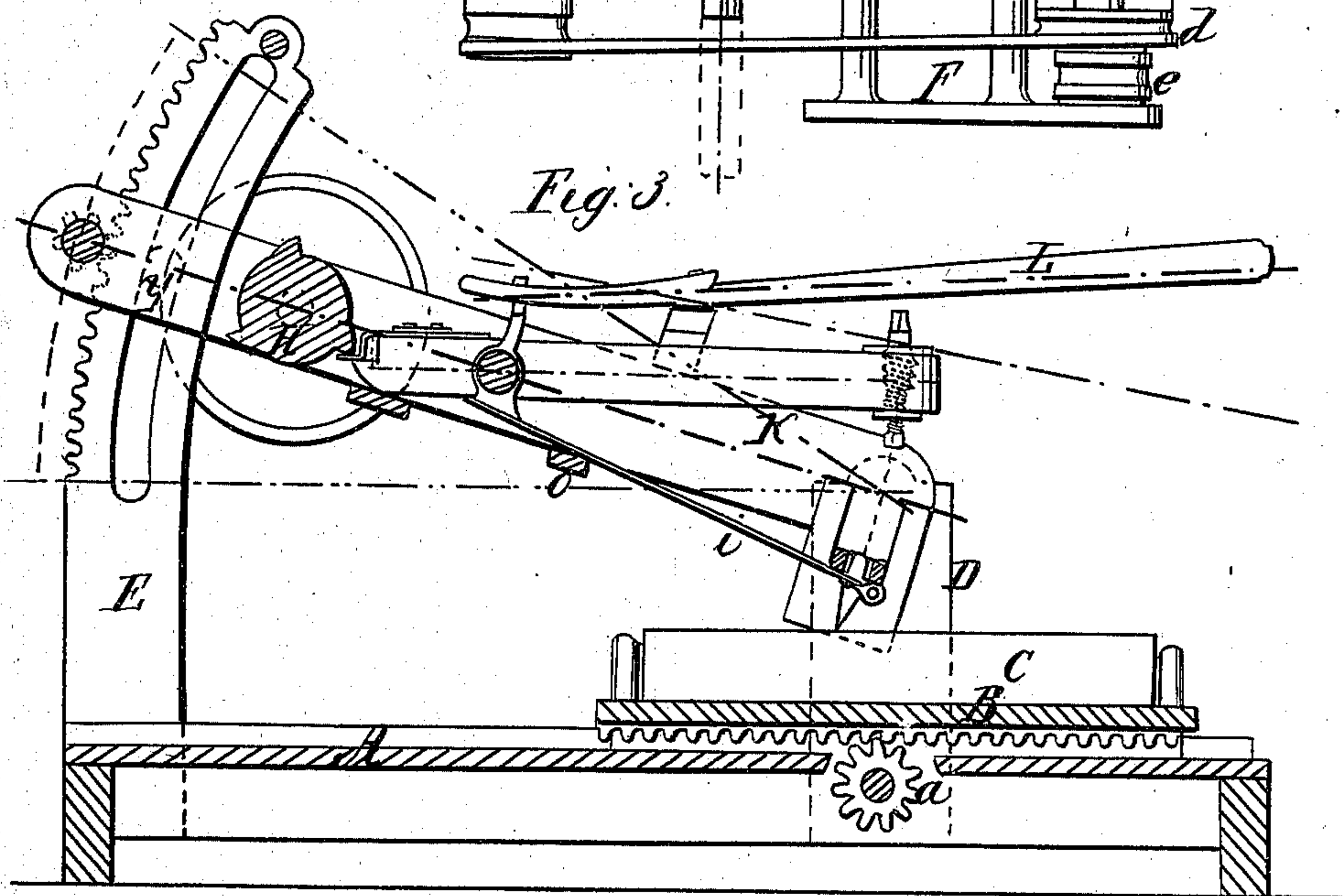
*Nº 87,483.*

*Patented Mar. 2, 1869.*

*Fig. 1.*



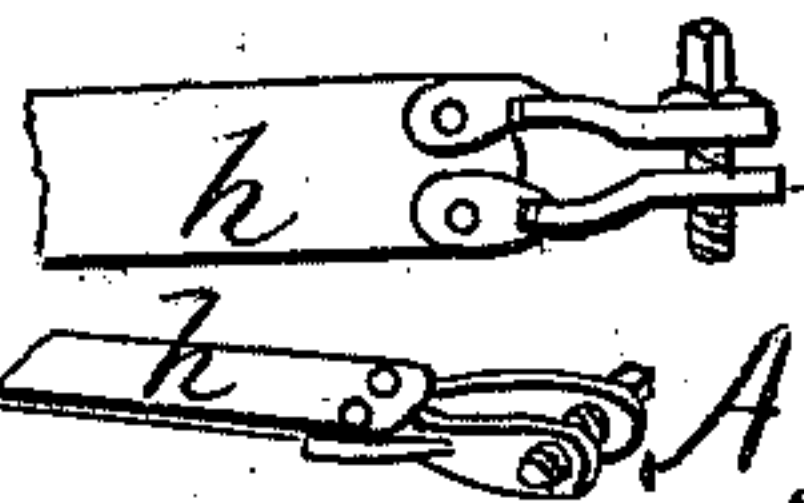
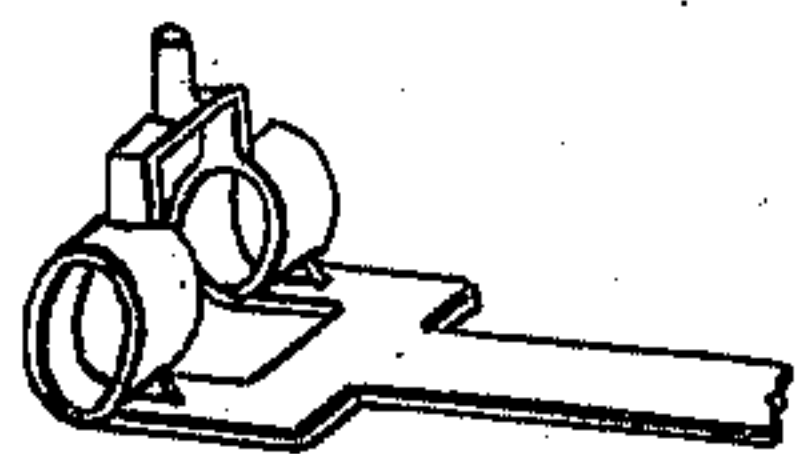
*Fig. 3.*



*Witnesses;*

*James P. Green*

*Paul J. Meenberger*



*Fig. 1.*

*Inventor,*

*A. M. George.*

*Chipman Hosmer & Co  
attys*



# United States Patent Office.

A. M. GEORGE, OF NASHUA, NEW HAMPSHIRE, ASSIGNOR TO HIMSELF AND B. F. GEORGE, OF SAME PLACE.

*Letters Patent No. 87,483, dated March 2, 1869.*

## IMPROVED STONE-DRESSING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, A. M. GEORGE, of Nashua, in the county of Hillsborough, and State of New Hampshire, have invented a new and valuable Improvement in Stone-Dressing Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a plan view of my stone-dresser.

Figure 3 is a sectional view thereof, and

Figure 2 shows details.

My invention relates to machines for dressing the surface of stones; and

It consists mainly in constructing and arranging devices by which a trip-hammer is made to perform the work of an ordinary hammer upon such stone-surfaces.

It also consists in providing novel and efficient means for regulating the movements and position of a trip-hammer upon the stone, and of moving the stone itself.

The letter A of the drawings represents a base-board or platform, upon which the stone-carriage is moved.

Letter B is the carriage, and

C, the stone placed thereon for dressing.

The under side of the carriage B is provided with cogs, as shown in fig. 3, and the letter *a* is a pinion working therein.

Two upright posts D are adjusted to the side of the platform at the points indicated, and two long curved slotted posts, with a ratchet on their rear curved sides, are adjusted to the sides of the rear end of the platform.

These last-named posts are marked E on the drawings.

The letter *c* is a shaft adjusted under the platform, upon which the pinion *a* is attached, and to which, also, is affixed a belt-drum on its outer end.

I construct a side frame, F, and attach it to the side of the main frame of the machine.

In this side frame, I affix a shaft, and adjust thereon the drums *d* and *e*, as represented.

These last-named drums are designed to hold and actuate belts, by which they are connected with the drum on the end of shaft *c*, and the drum on the end of shaft H, hereinafter mentioned.

The letter K is a trip-hammer, adjusted as shown, and letter *i* is a spring extending from a point near the rear of the hammer-handle to a point opposite the front end thereof, passing over the cross-bar *o*, by means of which its elastic office is secured in raising the hammer or chisel from the stone in a sharp, quick movement.

The working-hammer or chisel is attached to the front end of this spring by means of clamps and screw, as shown by letter *h* in fig. 2, while the hammer proper,

on the front end of the handle, is adjusted immediately over the top thereof, and strikes it with each downward movement.

The letter *s* is a round bar that passes through the handle of the hammer, and upon which said handle may be moved sidewise in either direction, as hereinafter mentioned.

The letter *u* is a clasp fitted over the bar *s*, on each side of the hammer-handle, and has an upright stem, to which the lever L is attached, as hereinafter stated.

The lever L is pivoted upon a cross-bar raised above the main frame, as shown, and is constructed with a slot in its rear end, adapted to receive and actuate the stem of clasp *u*, above described.

To move the hammer either to the right or left upon the stone, the operator moves the lever to the right or left, as the case may require, thereby moving the hammer-handle upon the bar *s*.

The letter H is a shaft, having a belt-drum on its rear end, and another main drum or driving-wheel on its front end, or it has a crank on its front end, as the case may be.

That portion of this shaft between the sides of the main frame is fluted, as shown in fig. 3, and adapted to catch upon the rear end of the hammer-handle with each fluted bar, and serves to press the same downward, and thereby raise the hammer from the stone.

When these fluted bars, respectively, have pressed the rear end of the hammer downward to the point at which contact is passed, the hammer falls on the stone and performs its work.

This process is repeated ordinarily four times at each revolution of the shaft H, but the number may be increased or diminished, at will, by increasing or diminishing the number of fluted bars on the shaft.

The side pieces of the main frame of the machine are hinged at their forward ends, while in their rear ends I adjust a shaft and pinion, P, which operate with the ratchets on the rear sides of curved posts E, as shown in the drawings.

These last-named shaft-pinions and ratchets serve as means for raising or lowering the frame, at the will of the operator, and thereby adjusting it to the necessities of the case.

For the purpose of regulating the distance of the rear end of the hammer-handle from the shaft H, I construct an adjustable plate, and attach it to the rear end of said handle, passing it over the same, and adjusting it with set-screws passing through a slot in said plate, as shown at *y* in fig. 1.

This plate forms a second or false end for said hammer-handle, and is adjustable at will.

The slots in the standards E are designed to hold and operate with the guide-pins *y'*, and thereby secure regularity in the movements of the frame either up or down.



The spring *i* is attached to the clasp *u*, and is always moved, with the hammer-handle upon its arbor, by the lever *L*.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. Raising or lowering the frame of a stone-dressing machine by means of ratchets and pinions, substantially as set forth.

2. The bar *s*, clasp *u*, and lever *L*, constructed, arranged, and operating substantially as and for the purposes herein specified.

3. The trip-hammer herein described and shown, when working in combination with the bar *s*, clasp *u*, and lever *L*, substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses.

A. M. GEORGE.

Witnesses:

JOSEPH GREELEY,  
B. F. GEORGE.