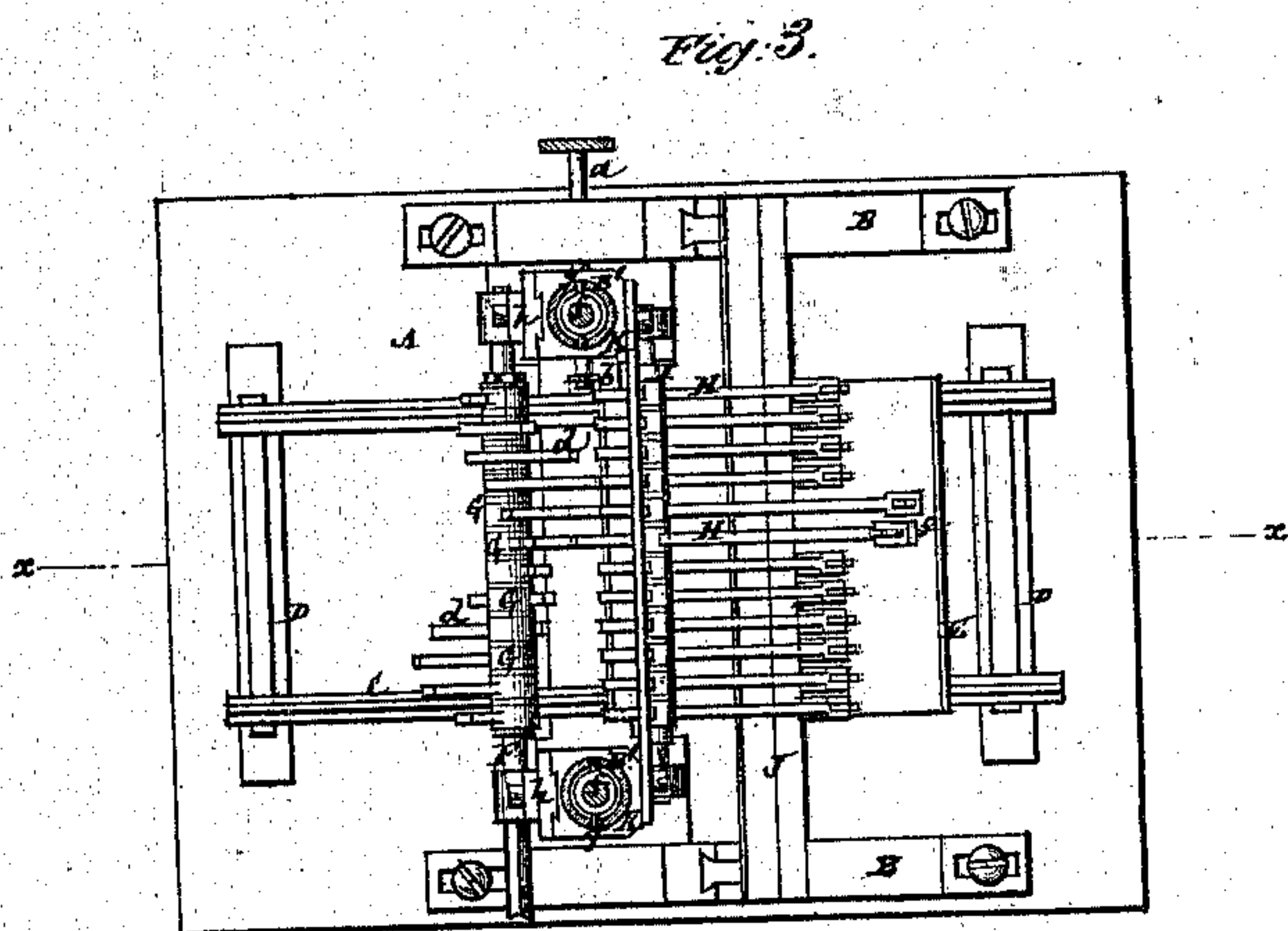
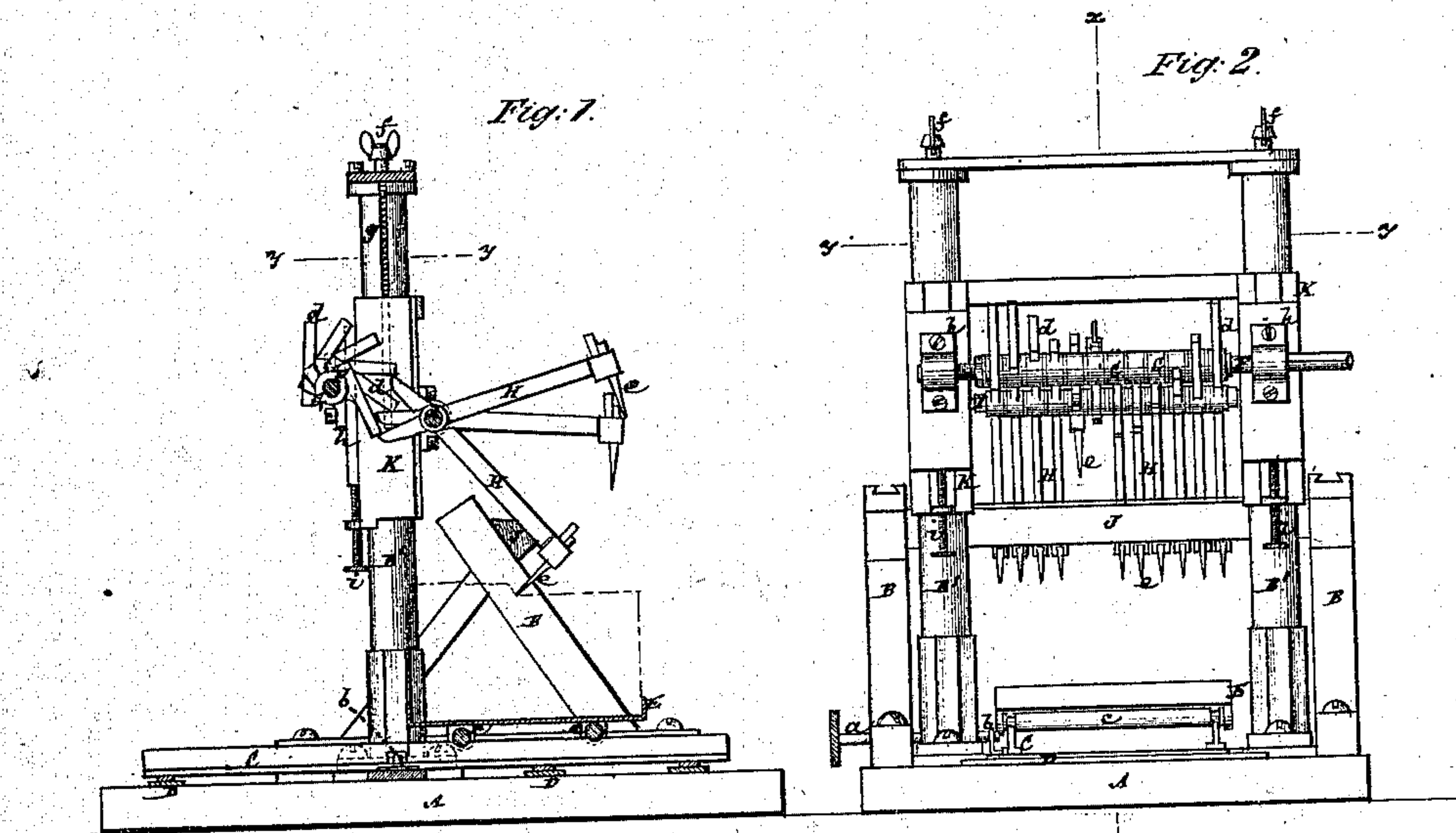


C.F. Schlickeysen,

Dressing Stone.

No. 107,820.

Patented Sept. 27, 1870.



Witnesses:

Fred. Haynes
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CARL FRIEDRICH SCHLICKEYSEN, OF BERLIN, PRUSSIA.

Letters Patent No. 107,820, dated September 27, 1870.

IMPROVEMENT IN STONE-WORKING MACHINES.

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, CARL FRIEDRICH SCHLICKEYSEN, of Berlin, in the Kingdom of Prussia, have invented certain new and useful Improvements in Machines for Working, Forming, and Profiling Sandstone, Marble, Granite, and other stones and materials, of which the following is a full clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a sectional side view, taken as indicated by the line *x x*, in figs. 2 and 3, of a machine constructed in accordance with my invention;

Figure 2 is an end or rear elevation of said machine; and

Figure 3, a sectional plan, taken as indicated by the line *y y* in figs. 1 and 2.

Similar letters of reference indicate corresponding parts.

This improved machine is more especially designed for the working of freestones, and has for its object greater adaptability of the machine to work materials varying in nature or quality. To these ends,

The invention consists in various combinations of devices, including intermittently-acting picks or cutters, having a swinging or hammer-like action, with differently adjustable arrangements of the parts of the machine to provide for work of different kinds.

In the accompanying drawing the machine is represented as adjusted or arranged to effect a mere leveling action on the stone, but various dresses may be made and different profiles formed by suitably adjusting the fall, both as regards extent and order, relatively to each other, of the several picks, chisels, or cutters, and feed of the stone while being dressed.

In said drawing—

A represents a bed or foundation, on which is mounted the frame B and B' of the machine.

C is a rail track, resting loosely on transoms D, and made capable of adjustment laterally by means of a screw, *a*, and connecting-shackle *b*, which latter is attached, by a vertical pivot, to the rail track, whereby the latter is capable of being swiveled horizontally on said pivot of the shackle.

This double adjustment of the rail track provides for both special and general adjustment of the stone under the pickers or cutters, the lateral adjustment by the screw *a* providing for the adjustment of the stone to vary its lines of cut as effected by the pickers or chisels operating at distances apart, and whereby the stone may, by repeated travels of it under the cutters, be dressed over its entire surface.

The stone is supported on a truck or carriage, E, which rests and travels, by rollers *c c*, on the rails of the track C, and which may be operated to and

fro thereon by any suitable means or application of power.

F is the driving-shaft that operates the cutters, and which may be revolved by any suitable means. On this shaft are arranged and secured, so as to rotate with it, any desired number of toe-carriers, G, lying side by side, and armed with toes or lifters, *d*, differently set or disposed, so that they will act successively, either in regular or irregular order, on sledges H, loose upon a rod or shaft, I, to raise the front portions of said sledges, which carry picks, chisels, or cutters, *e*, and so that when said sledges are released from the toes they will descend by their weight and project the cutters into the stone in a curvilinear or slanting direction relatively to its face.

The cutters may be of any desired form, according to the dress or profile to be cut, and the sledges which carry them may have their drop varied relatively to each other, or certain of them be worked in more rapid succession than the others, to secure different depths or extents of cut.

A beam, J, adjustable up or down the portion B of the frame, is here shown as serving to arrest and regulate the striking action of the sledges, so that the cutters are restrained from entering beyond a given depth into the stone, and whereby the sledges are retained in proper position for the lifting action of the toes on them.

This beam may be of any desired configuration on its upper surface to secure a varied action to the sledges and their cutters relatively to each other.

The slide or truck E, which carries the stone, may be run either forward or backward under the picks or cutters as the stone is operated on by the latter.

To adapt the machine to operate on different thicknesses of stone, and to do different kinds of work, and to adjust it generally and specially, in certain respects, to different kinds of stone or qualities of material being worked, the shaft I, on which the sledges H rock, and the revolving shaft F, which carries and rotates with it the toe-carriers G, and their toes *d*, are hung in boxes, carried by slides K, arranged so as to be capable of up-and-down adjustment on the posts B' of the frame by means of screws, *f*, made to fit boxes in the slides within the posts, that may have slots, *g*, in them, for the guidance of the slides and their connection with the adjusting-screws *f*.

The boxes *h*, that carry the shaft F, are also made separately adjustable up and down the slides K by a dovetail or sliding fit of said boxes within the slides K, and adjustment of the same by screws *i*, or other suitable devices.

By this latter adjustment, the toes *d* are made to act sooner or later, and with a longer or shorter throw

on the sledges, while the adjustment of the slides K by the screws *f* effects a bodily or combined regulation of the operating toes and sledges relatively to the surface of the stone being dressed.

What is here claimed, and desired to be secured by Letters Patent, is

1. The combination of the slides K, the revolving toes *d*, and sledges H, carrying their cutters *e*, substantially as specified.

2. The combination of the independently-adjustable

sliding boxes *h*, which carry the revolving toes or shaft operating the same, with the slides K and the sledges H, essentially as described.

This specification signed by me this 20th day of April, 1870.

CARL FRIEDRICH SCHLICKEYSEN.

Witnesses:

H. KREISMANN,

LEOPOLD MACHSCHEFER.