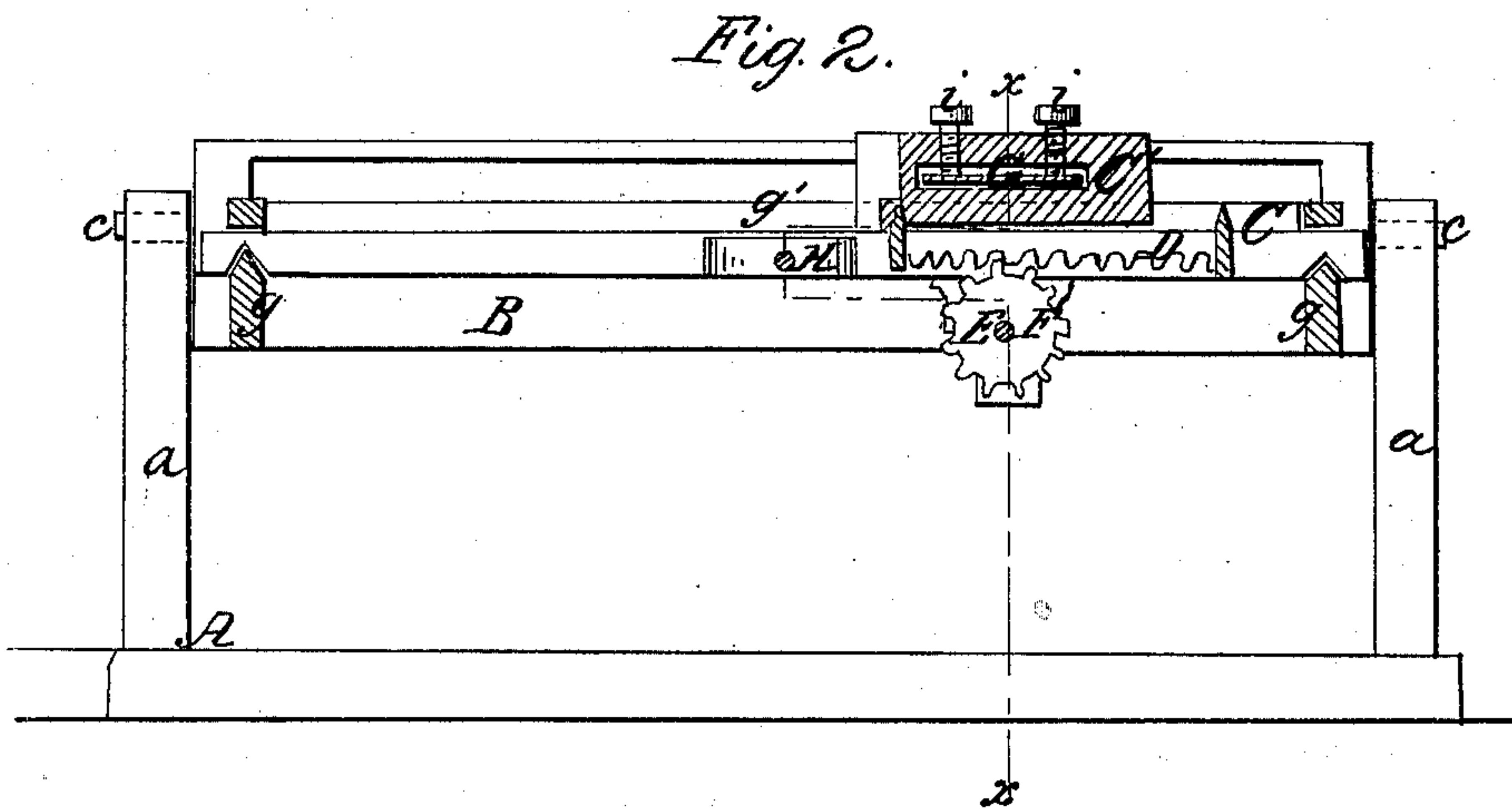
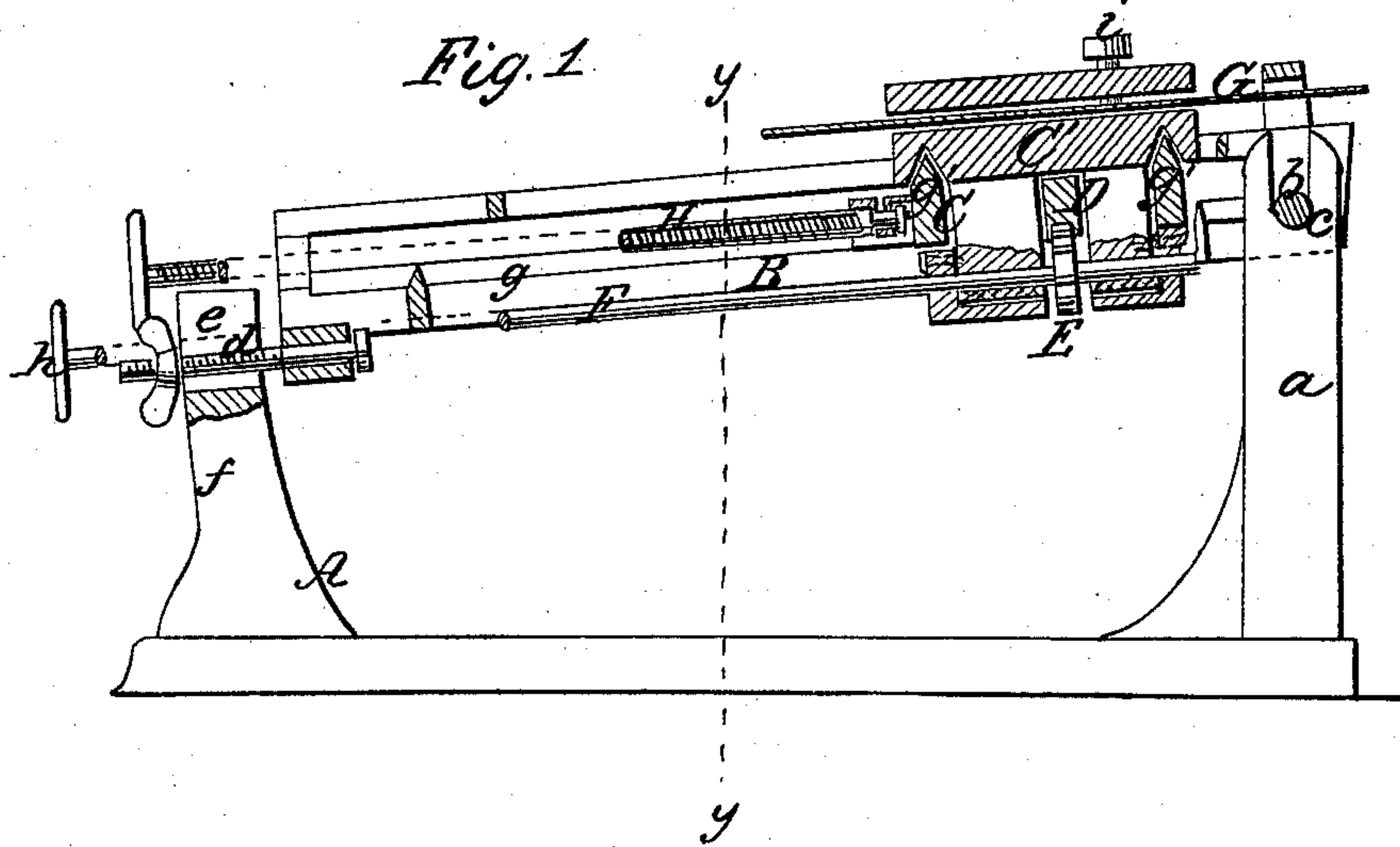


P. Leonard,

Dressing Grindstones.

N^o 79,990.

Patented July 14, 1868.



Witnesses;
H. C. Culisett
J. A. Morgan

Inventor;
P. Leonard
per Wm. H. [Signature]
attorneys

United States Patent Office.

PHILIP LEONARD, OF SHARON, PENNSYLVANIA.

Letters Patent No. 79,990, dated July 14, 1868.

IMPROVED MACHINE FOR DRESSING GRINDSTONES, MINERALS, &c.

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, PHILIP LEONARD, of Sharon, in the county of Mercer, and State of Pennsylvania, have invented a new and improved Machine for Dressing Grindstones; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved machine for dressing grindstones, and wheels or cylinders of any mineral composition for grinding, polishing, &c.

The invention consists in having a cutting-tool, fitted in a suitable stock, placed on parallel ways, and arranged in such a manner that the tool-stock may be moved in a direction parallel with the axis of the stone to be dressed, and the ways placed in a frame arranged in such a manner that the tool-stock may be moved towards and from the stone, all arranged as hereinafter fully shown and described, whereby a grindstone may have its face dressed very expeditiously and in a perfect manner.

In the accompanying sheet of drawings—

Figure 1 is a longitudinal vertical section of my invention, taken in the line *x x*, fig. 2.

Figure 2, a transverse vertical section of the same, taken in the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

A represents a frame, provided or formed at its front with two uprights, *a a*, having vertical slots, *b*, in their upper ends, in which journals *c*, at the front end of a frame, B, are fitted, the rear end of said frame being provided with screws *d d*, one near each side, said screws passing through oblong slots, *e*, in the upper parts of uprights *f* of frame A. This arrangement admits of the frame B being adjusted at a greater or less angle of inclination, as may be desired, and which will be fully understood by referring to fig. 1.

The frame B has two parallel ways, *g g*, attached, on which a frame, C, is fitted, and allowed to slide freely in a forward and backward direction. On this frame C there are two parallel ways, *g' g'*, on which is placed a stock, C', having a pinion, E, fitted in its lower part, said pinion being attached to a shaft, F, which extends back to the rear of frame A, and has a thumb-wheel, *h*, on its rear end. The pinion E gears into a rack, D, which extends the entire length of frame C. By turning this shaft F, the stool-stock C' may be moved from one side of frame C to the other.

The tool G may be of steel or sheet iron, and is secured in the stock C' by a set-screw, *i*.

The frame C is moved forward and backward on frame B by means of a screw-shaft, H.

By this arrangement, it will be seen that the tool G may be adjusted towards and from the periphery of the stone to be dressed, and also moved laterally across the face of the same, and, the stone being hung on an axis parallel with the ways *g' g'* of the tool-stock C', the stone, as it is rotated, and the tool G properly moved or adjusted, must cause the face of the stone to be dressed perfectly smooth and parallel with the axis of the stone.

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

The adjustable frame B, fitted in a frame, A, as shown, in combination with the sliding frame C, provided with the tool-stock C', arranged for a lateral movement, substantially as and for the purpose set forth.

The above specification of my invention signed by me, this 14th day of April, 1868.

PHILIP LEONARD.

Witnesses:

ABNER APPLEGATE,
E. T. HIGGS.