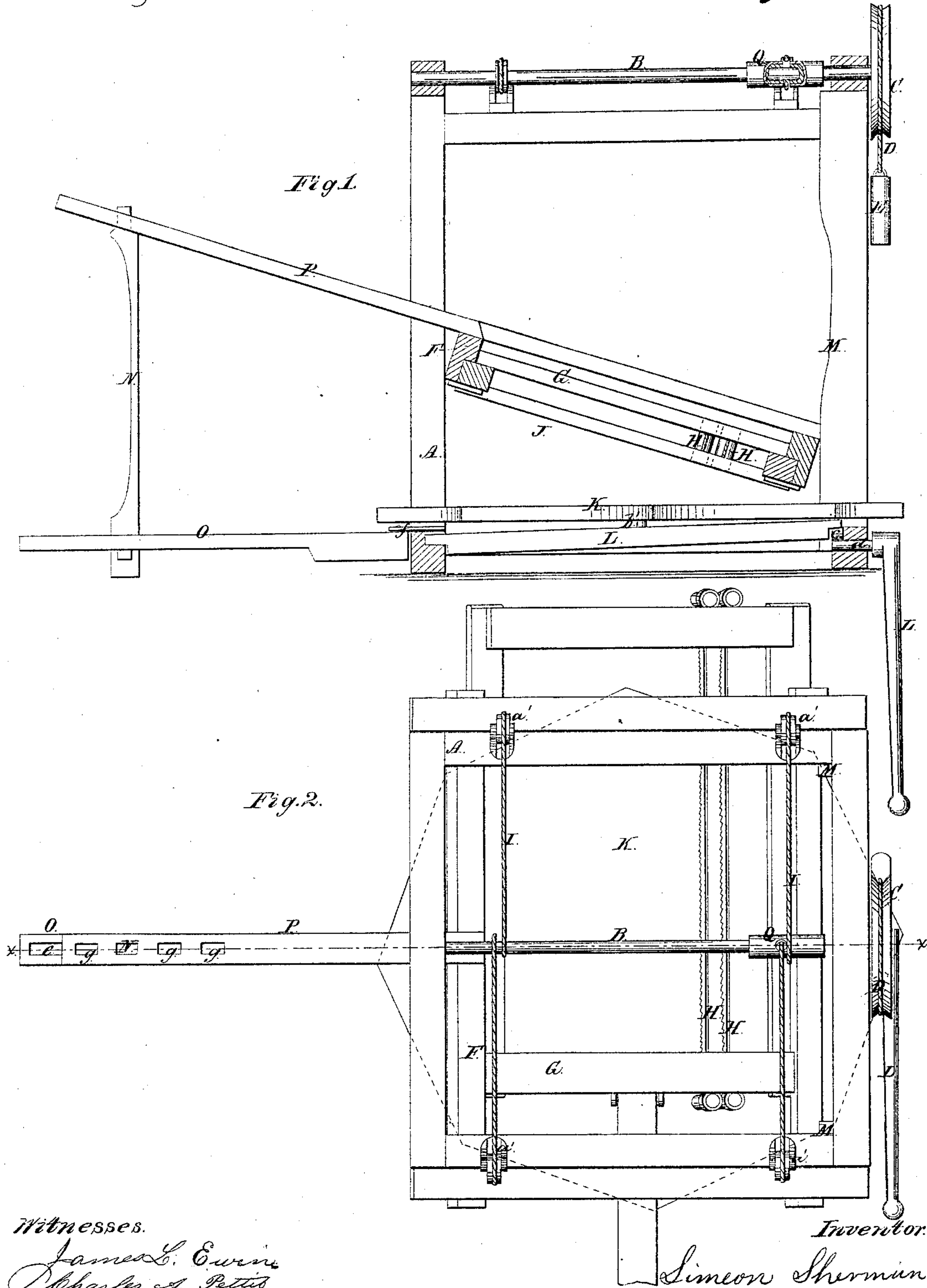


*Patented Aug. 28, 1866.*



# UNITED STATES PATENT OFFICE.

SIMEON SHERMAN, OF WESTON, MISSOURI.

## IMPROVED MACHINE FOR SAWING STONE.

Specification forming part of Letters Patent No. 57,586, dated August 28, 1866.

*To all whom it may concern:*

Be it known that I, SIMEON SHERMAN, of Weston, Platte county, and State of Missouri, have invented a new and Improved Machine for Sawing Stone; 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, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved machine for sawing stone or rock into blocks with parallel sides and with plane surfaces, or with curved sides, the mechanism being arranged in such a manner that the sides of the block may be sawed to any desired angle and the block of stone adjusted in proper relative position with the saws without moving it on its bed.

A represents a rectangular framing, which may be constructed in any proper manner to support the working parts, and B is a shaft placed horizontally on the framing A, and having a pulley, C, at one end, around which a cord or chain, D, passes, having a weight, E, suspended to it.

F is a frame, of rectangular form, fitted in the framing A, and having the saw-frame G placed within it, the sides of the frame F serving as guides for the saw-frame, which has a reciprocating motion imparted to it by any convenient power.

The saw-frame G is provided with a series of saws, H, composed of steel blades serrated or toothed like an ordinary saw, and secured in the frame G in such a manner that they may be adjusted laterally in their frame, as circumstances may require.

When the machine is used for sawing stone in a vertical direction the frame G is suspended by cords or chains I from the shaft B, the weight E serving as a counterpoise, so that the saws may feed themselves properly to their work by virtue of their own gravity, the cords or chains I passing over pulleys *a'* on the framing A.

The stone J to be sawed is placed upon a bed, K, which has a pivot-journal, *b'*, attached centrally to its under side, said journal being stepped in a cross-bar, L, in the bottom of the framing A, one end of said cross-bar resting on an eccentric, *c*, on a small shaft, *d*, having a handle, *L*, attached to its outer end.

It will be seen that by this arrangement the bed K may be turned or rotated, and by turning the eccentric *c* the bed inclined from a horizontal plane and the stone J adjusted relatively with the saws, as circumstances may require, an angular or oblique cut being obtained by adjusting the bed out of a horizontal plane, and by turning the bed the different sides of the stones may be presented consecutively to the saws.

In order to saw a stone with curved or irregular sides, patterns M are attached to the side of the framing A, and the frame F is pressed against these patterns by a spring, N, the lower end of which is fitted in an oblong slot *e* in a bar, O, attached to the lower part of the framing A by a pivot, *f*, the upper end of spring *f* being fitted in any of a series of holes *g* made in a bar, P, the inner end of which is pivoted to the frame F. By this arrangement the frame F, and consequently the frame G and saws H, will be moved laterally, in accordance with the patterns M, as the frame F works down in the framing A, and the sides of the stone sawed to correspond in form to the patterns.

A curved cut of the saws may also be obtained by having the cords or chains I at one end of shaft B pass around a sleeve, Q, on said shaft, the enlarged diameter of which over shaft B will cause one side of the frame F to pass down more rapidly than the opposite side. By applying sleeves Q of different diameters the sides of the blocks may be sawed with any desired curve; and in certain cases the cords or chains I may be dispensed with and the frame F allowed to rest upon the stone in a more or less inclined position by adjusting the spring N in the slot *e* of the bar O. (See Fig. 1.) By this means oblique or angular cuts may also be made.

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



1. The bed K, hung or arranged, substantially as shown and described, to admit of being turned, and also of being adjusted out of a horizontal plane, for the purpose specified.

2. The spring N and patterns M M, in combination with the frame F and the frame G, provided with the saws H, substantially as and for the purpose set forth.

3. The sleeve Q, applied to the shaft B, in

combination with the cords or chains I, counterpoise E, and suspended frame F, containing the saw-frame G, substantially as and for the purpose specified.

SIMEON SHERMAN.

Witnesses:

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