

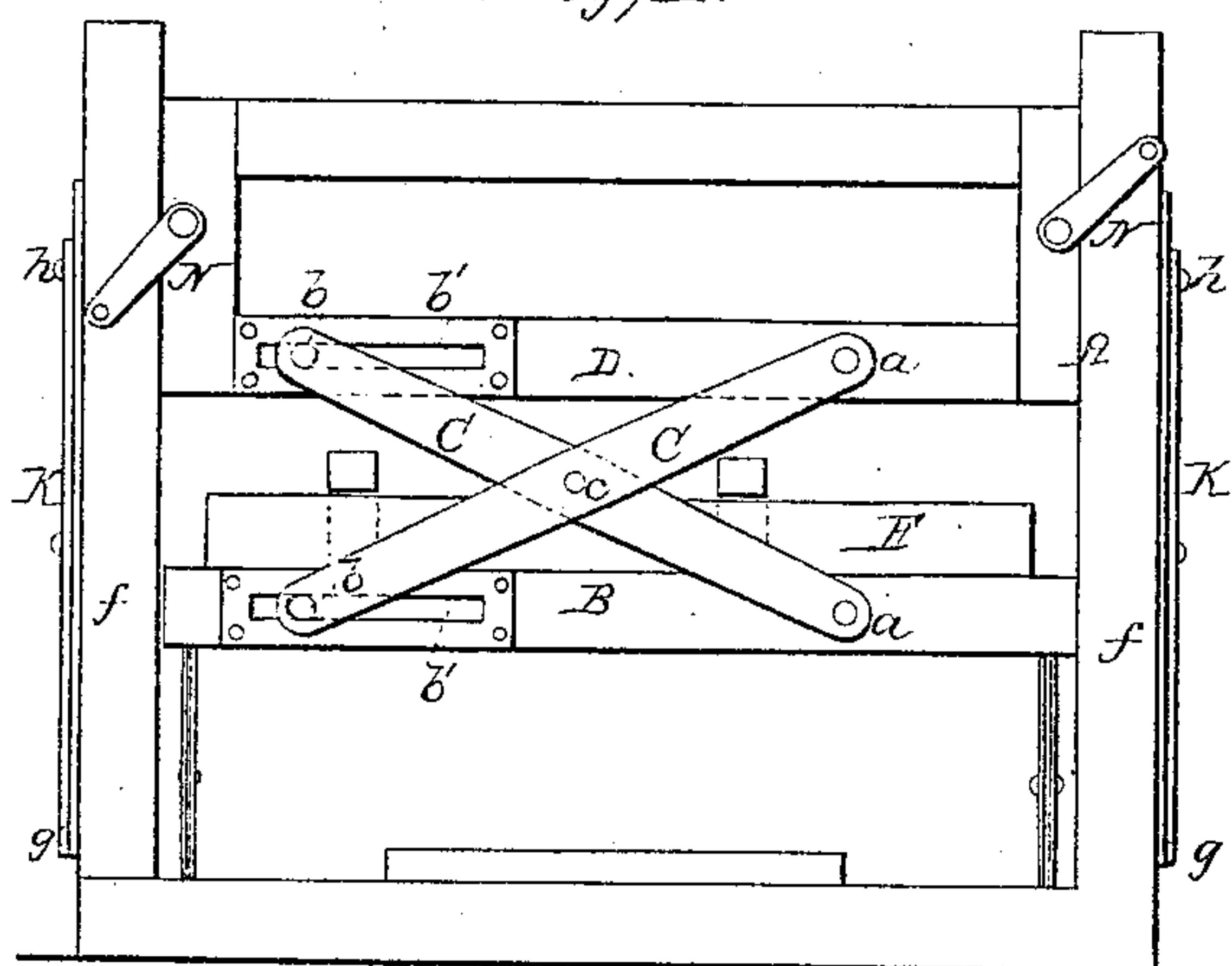
G. T. Pearsall,

Sawing Stone.

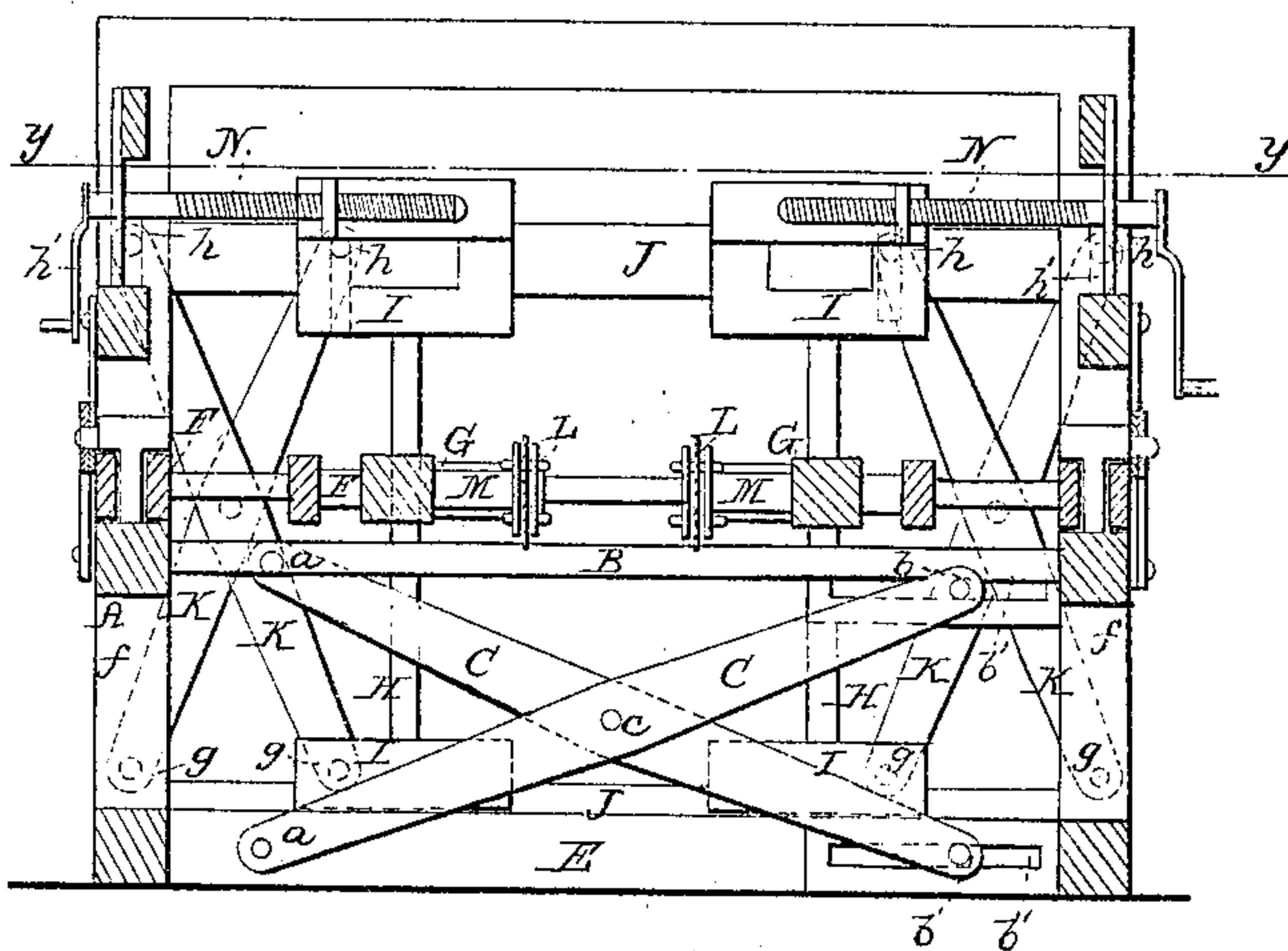
N^o 13,916.

Patented Dec. 11, 1855.

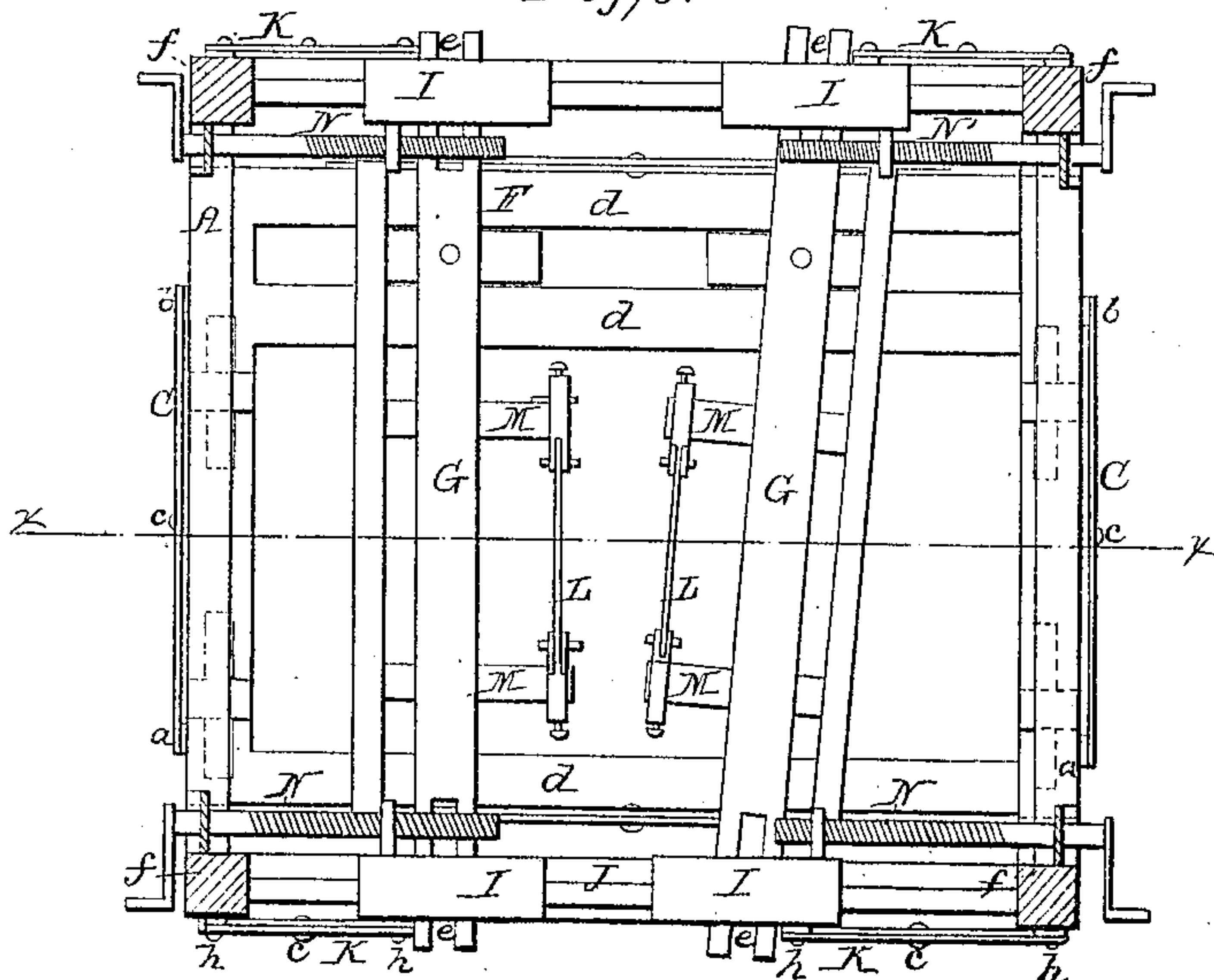
Fig; 1.



Fig; 2.



Fig; 3.



UNITED STATES PATENT OFFICE.

GEO. T. PEARSALL, OF APALACHIN, NEW YORK.

MACHINE FOR SAWING MARBLE, &c., IN TAPER FORM.

Specification of Letters Patent No. 13,916, dated December 11, 1855.

To all whom it may concern:

Be it known that I, G. T. PEARSALL, of Apalachin, in the county of Tioga and State of New York, have invented a new and useful Machine for Sawing Marble Blocks in Polygonal Taper Form; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a side view of my improvement. Fig. 2, is a transverse vertical section of ditto, (*x*), (*x*), Fig. 3, showing the plane of section. Fig. 3, is a horizontal section of ditto, (*y*), (*y*), Fig. 2, showing the plane of section.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of my invention consists in the employment or use of cross levers attached to the saw frame guides, and also to the horizontal frame on which the saw frame works as will be presently shown and described, for the purpose of causing the saw frame guides to be moved laterally in a perfectly vertical position and the horizontal frame to work up and down in a horizontal position.

To enable others skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents a rectangular framing in which a horizontal frame B, is placed. To each side of the frame B, there are attached levers C, two to each side. The lower ends of the levers C, at two opposite sides of the frame B, are attached to the sides of the frame B, one lever being attached by a pivot (*a*), and the other being secured to the side of the frame by a button or guide pin (*b*), which works in a groove (*b'*), in the side of the frame, see Fig. 1. The upper ends of the levers C, are connected to bars D, of the framing A, in a similar manner, one lever being connected to the bar D, by a pivot and the other by a button fitting in a slot or groove. The levers C, C, at each side of the frame B, cross each other and are connected where they cross each other by a pivot (*c*). The front and back ends of the frame B, have the upper ends of levers C, attached to them one lever by a pivot (*a*), and the other by a

button or guide pin (*b*), working in a groove (*b'*), the lower ends of the levers C, being attached in a similar manner to the lower cross pieces E, of the framing A.

F, represents a saw frame which rests upon the horizontal frame B. This frame has longitudinal bars G, placed in it through the ends of which the front and back end pieces (*d*), (*d*), of the saw frame pass, the bars G, being allowed to slide freely on the end pieces. The ends of the bar G, have vertical slots (*e*), cut in them in which vertical bars H are fitted. The upper and lower ends of the bars H, are attached to sockets I, which work or slide on cross pieces J, J, of the framing A. To the sockets I, and to the uprights (*f*), of the framing A, there are attached levers K. The lower end of one lever K, is attached by a pivot (*g*), to the lower socket, and the upper end of said lever is attached to the upright (*f*), by a button or guide pin (*h*), which works in a groove (*i*). The lower end of the other or opposite lever K, is attached by a pivot (*g*), to the lower part of the upright (*f*), and the upper end of the lever is attached to the upper socket by a button or guide pin (*h*), which works in a groove (*h'*). The levers K, cross each other and are connected by a pivot (*e*), the same as the levers C.

L, L, are the saws which are attached to projections M, on the inner sides of the bars G, see Figs. 2 and 3.

N, are the screw rods which pass through plates (*j*), attached to the sides of the framing A. The inner ends of the screw rods work in nuts (*k*), attached to the inner sides of the upper sockets I.

A reciprocating motion is given the saw frame F, in any proper manner.

The marble block to be sawed is placed underneath the saws L, L, and the screw rods N, N, are turned so as to operate the vertical bars H, which are fitted in the slots (*e*), of the bars G, the bars G, and saws L, are thereby moved so as to be in oblique positions corresponding to the taper intended to be given the sides of the marble block. The frame B, which was previously raised, is then allowed to descend till the saws rest upon the marble block, and motion is given the saw frame and the saws will cut two opposite sides of the marble block

at the same time, and in taper form, the
saws feeding themselves to their work in
consequence of the weight of the saw frame
F. The cross levers C, C, allow the frame
5 B, to move up and down in a perfectly hori-
zontal position, and the cross levers K, K,
cause the vertical bars H, to be moved later-
ally in a perfectly vertical position.

10 I do not claim the adjustable bars H, ir-
respective of the mode of operating them,
nor do I claim the laterally moving saws
placed within a reciprocating saw frame,
for they have been previously used, but

What I do claim as new and desire to se-
cure by Letters Patent, is,

15 The employment or use of the levers C, K,
the levers K, being connected to the sockets
I, of the bars H, and the uprights (f), of
the framing A, and the levers C, being at-
tached to the frame B, and the framing A, 20
substantially as shown for the purpose speci-
fied.

G. T. PEARSALL.

Witnesses:

O. D. MUNN,
J. W. COOMBS.