

W. Wood,
Brick Machine.

N^o 23331.

Patented Mar. 22, 1859.

Fig. 1.

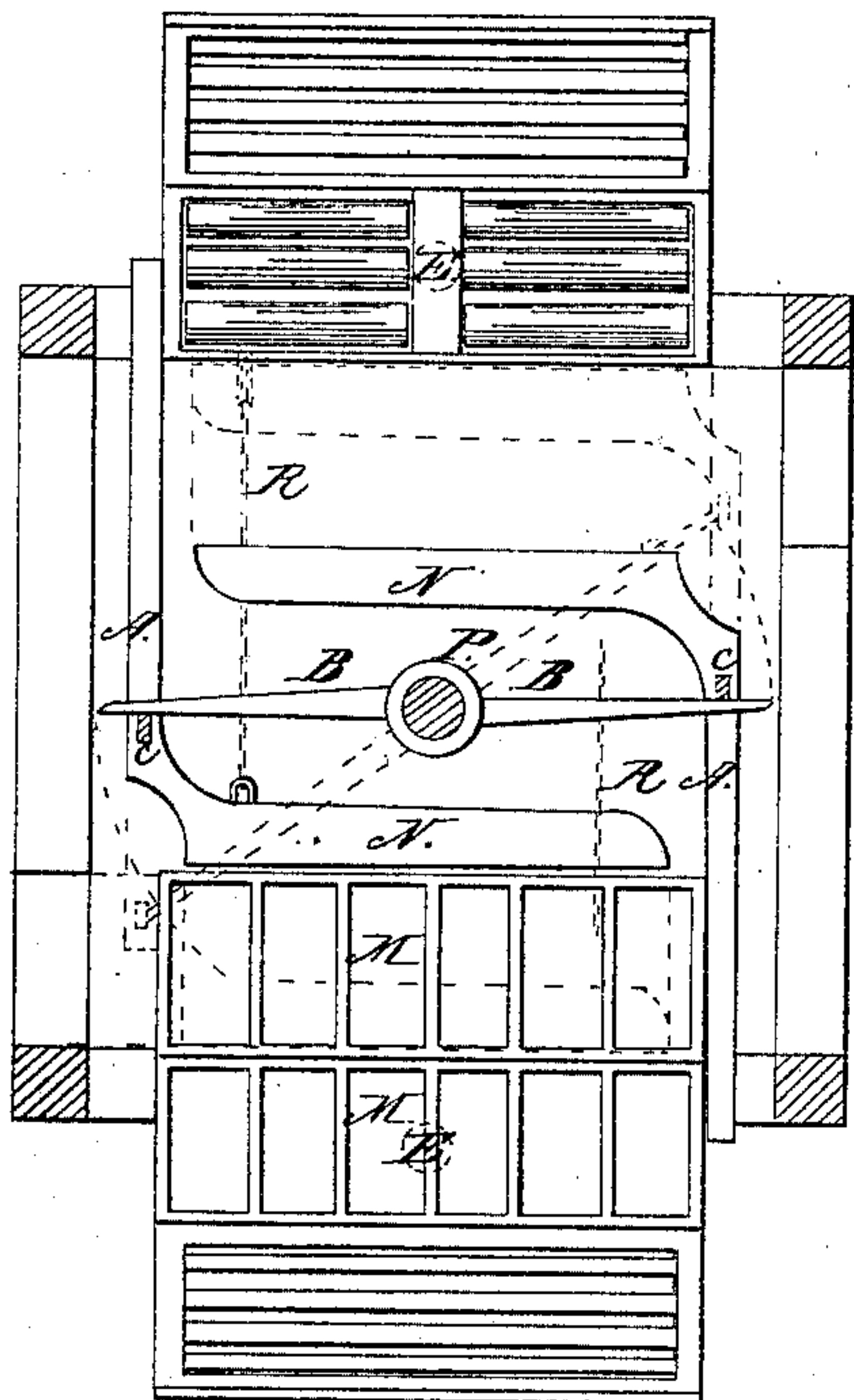


Fig. 2.

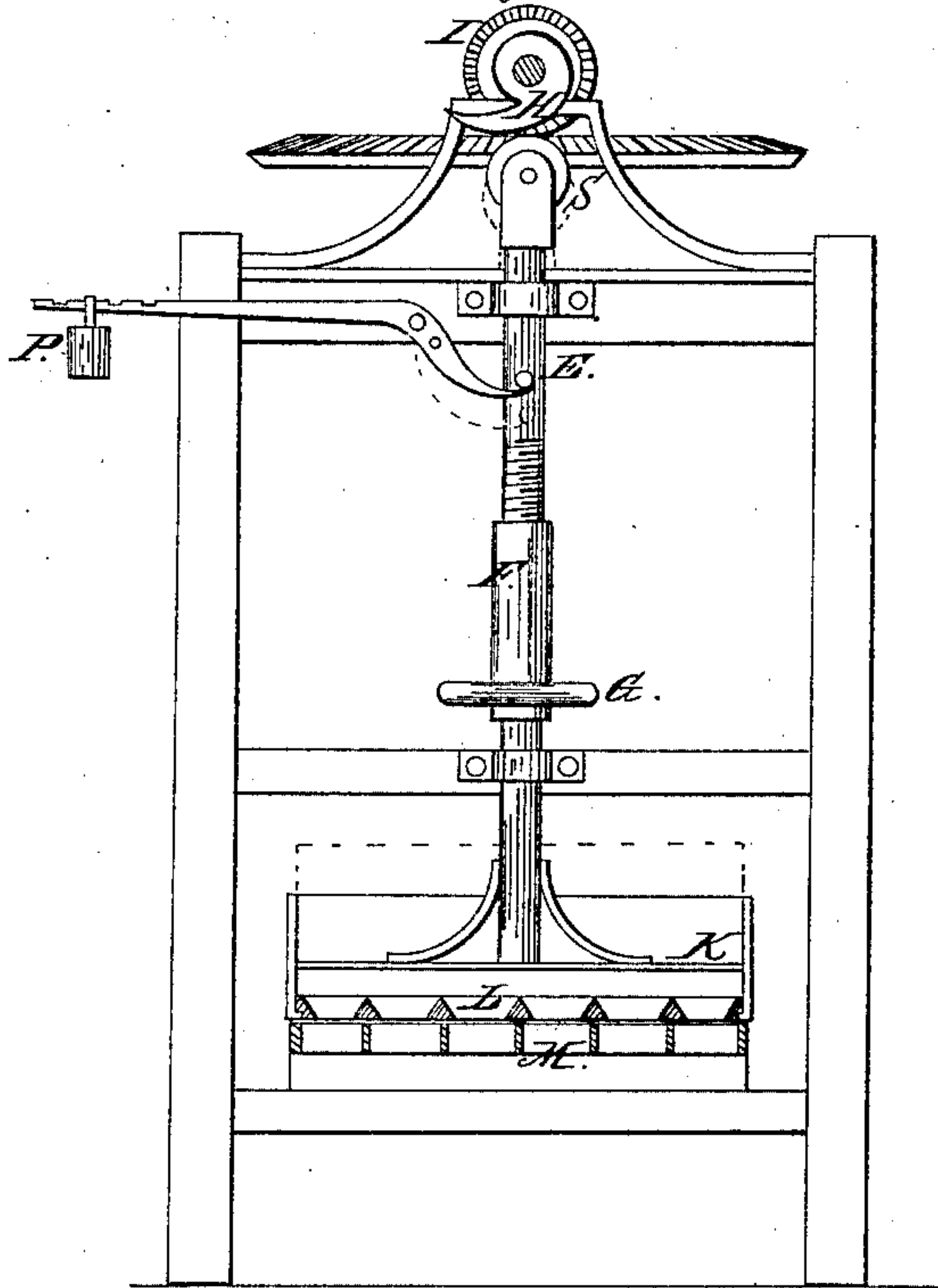


Fig. 4.

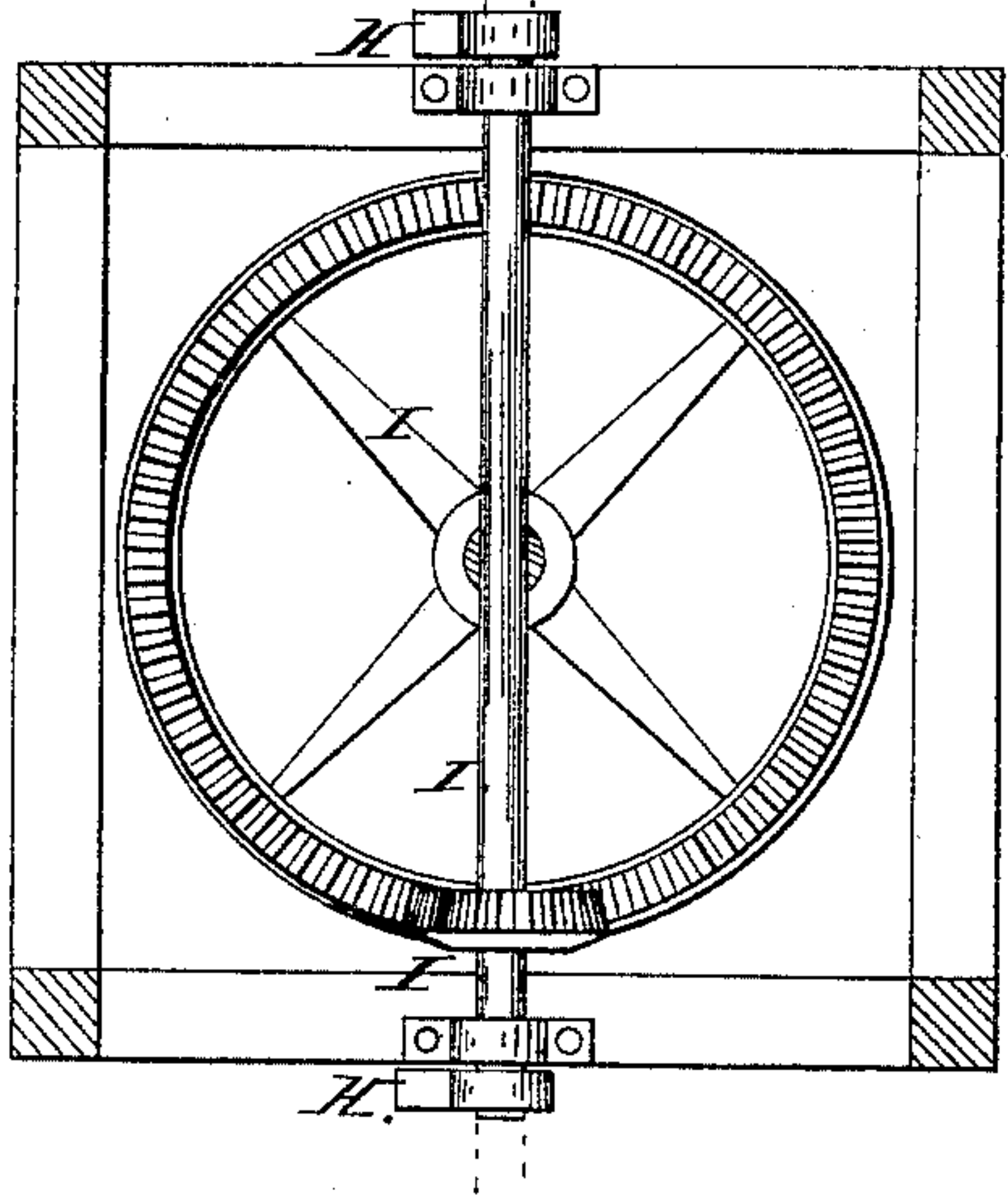
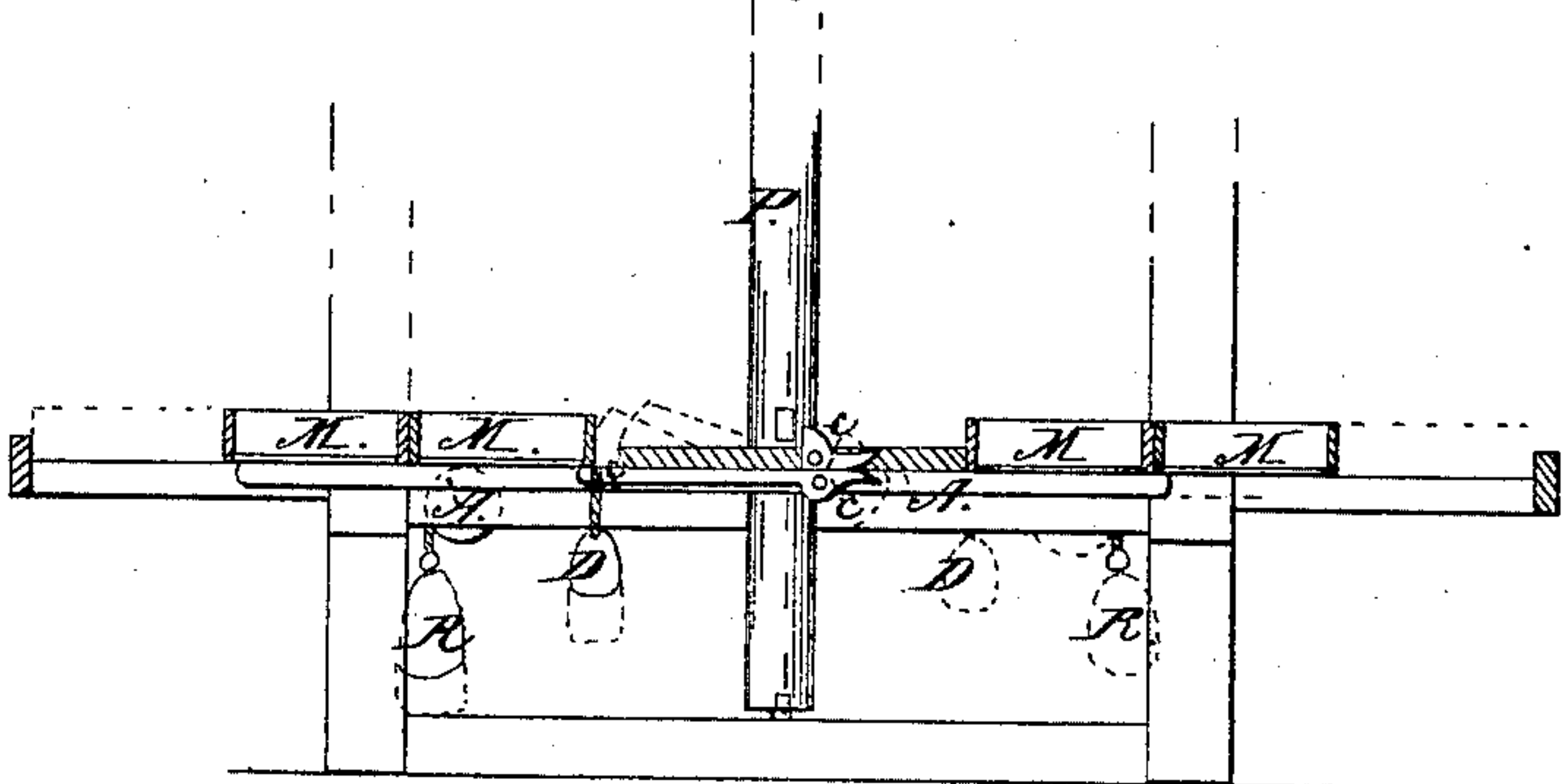


Fig. 3.



UNITED STATES PATENT OFFICE.

WM. WOOD, OF HARTFORD, CONNECTICUT.

BRICK-MACHINE.

Specification of Letters Patent No. 23,331, dated March 22, 1859.

To all whom it may concern:

Be it known that I, WILLIAM WOOD, of the city of Hartford, county of Hartford, and State of Connecticut, have invented new and useful Improvements in the Mode of Constructing Brick-Machines; and I do hereby declare that the following is a correct description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in the application of slides of peculiar construction and rotating arms to throw forward the brick molds when filled in the manner hereinafter described.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

The drawing: Figure 1 a plan view showing arms levers &c.; Fig. 2 a view in front with piston &c.; Fig. 3 a side view section of arms &c.; Fig. 4 a plan of wheel, cams and box.

The construction of my brick machine frame, clay box, and usual arrangements of the various parts, are about the same as usual.

Fig. 1 represents the plan of the machinery under the bottom of the clay box. A A are the slides extending along the sides at right angles with the brick molds M the arms N running along the back of the same to force forward the brick molds when filled. B B are drums attached to the main driving shaft P rotating with the same and striking against the pin of the levers *c, c*. These levers *c* are held in position by the weight D regulated by so much power that will be required to hold the pin *c*, firm enough to force forward the brick molds, and if any obstruction occurs by a stone or other cause, the pressure of the cam shape of the pin *c*, raises the weight D and lever *c*, allowing the arm B to pass over the pin *c*, without moving forward the mold thus preventing any damage or breakage in consequence of the obstruction. The drawing represents only one set of brick molds in their place ready for being forced forward the other side is left open to show the space, rollers &c. The slides A A are drawn back after deliver-

ing the mold by means of the chain and weight R.

Fig. 2 represents the piston rod and press box with grate L, and brick molds M with the mode of regulating the degree of pressure the nature of the clay may require. E is the piston rod made in two lengths and joined together by means of the cylinder F, with a female screw, and swivel movement actuated by the hand regulating wheel G the action of the screw on the upper part of the piston rod E is to raise and lower the same so that the rotating cam H will sometimes strike full on the wheel S, and can be graduated by the cylinder movement till the pressure will diminish to nothing and the cam pass over the wheel without touching the same. O is a lever similar to a steelyard with weight T, to regulate the same, this lever is intended to raise up the piston rod and plate after the operation of pressing is performed and the cam H points, have passed the wheel S, the lever then suddenly raises the piston and it remains up while the cam H revolves, so long as to allow the clay to fill the press box from the clay box ready for another pressure.

Fig. 3 is a side sectional view of the slides and levers, with brick molds in, ready to be forced forward, with the weight R for drawing back the slides.

Fig. 4 represents the main gear wheel and pinion for operating the whole arrangement. The main shaft P, passes down through the clay box having the cutting and force knives attached, also the rotating arms B. Every revolution of the main shaft P, and the attachments, produces two molds of bricks, containing six bricks each.

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

The arms B B, in combination with the slides A, A, provided with the lever C' and tappet *c*, for operating the molds M', as described.

W. WOOD.

Witnesses:

WM. VINE,
EDWARD GOODMAN.