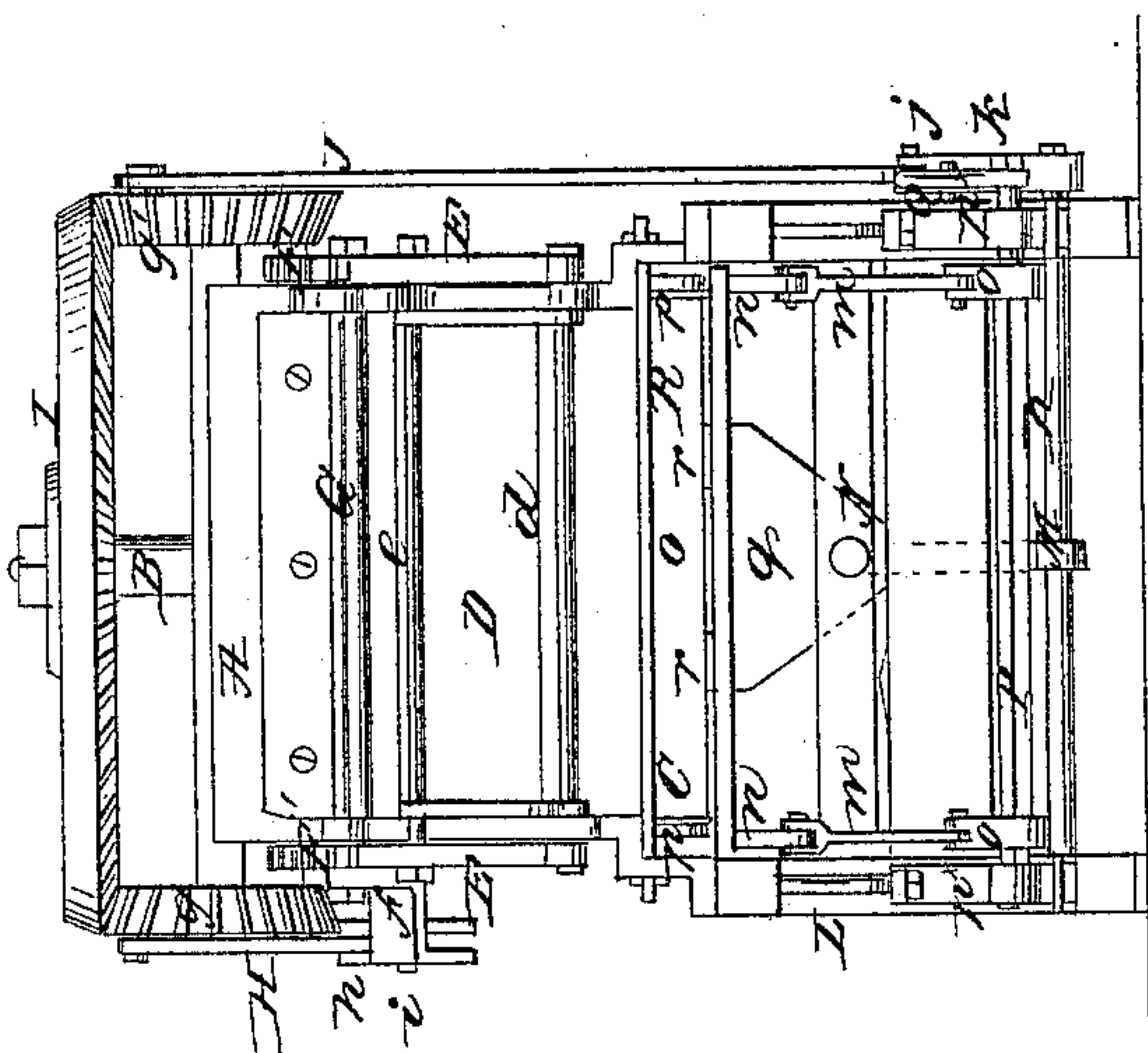


*T. Forbes,*  
*Brick Machine.*

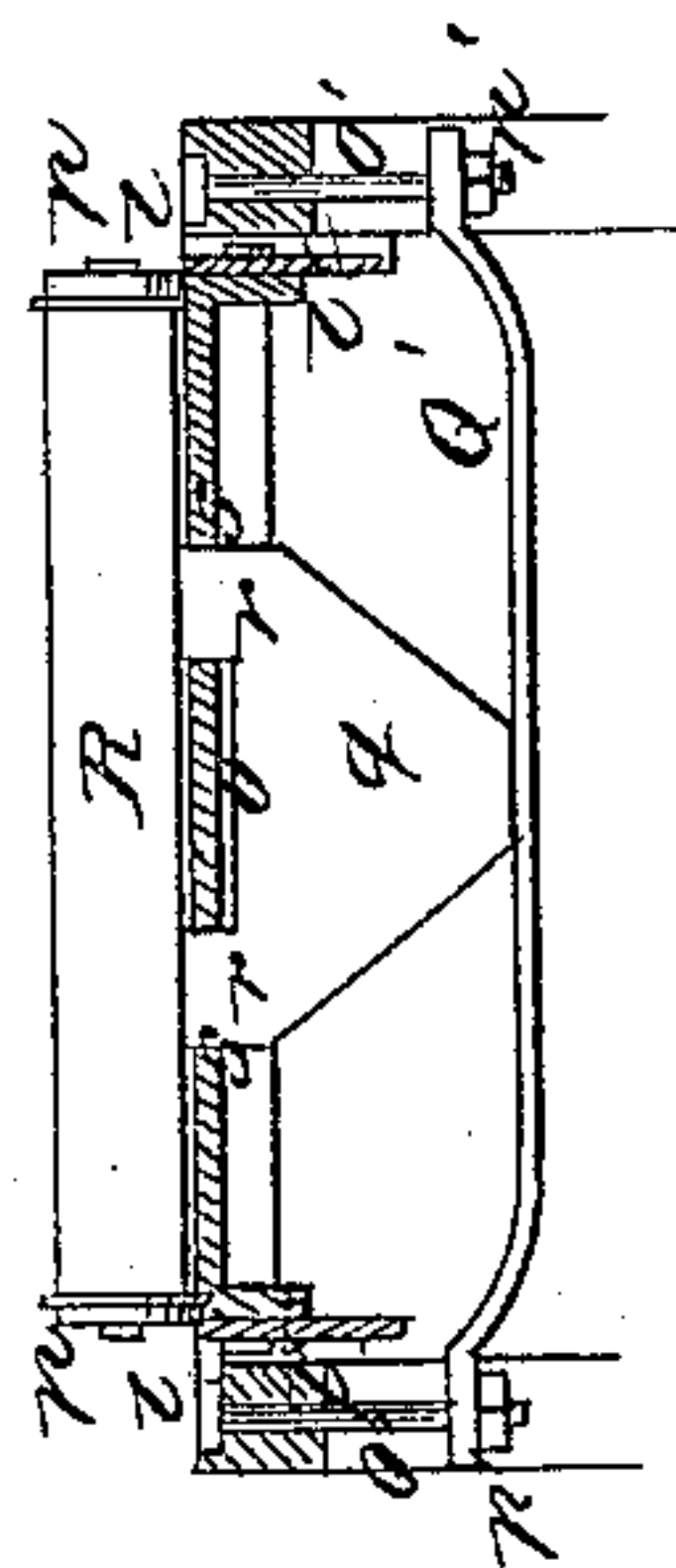
*No 21,876.*

*Patented Oct. 26, 1858.*

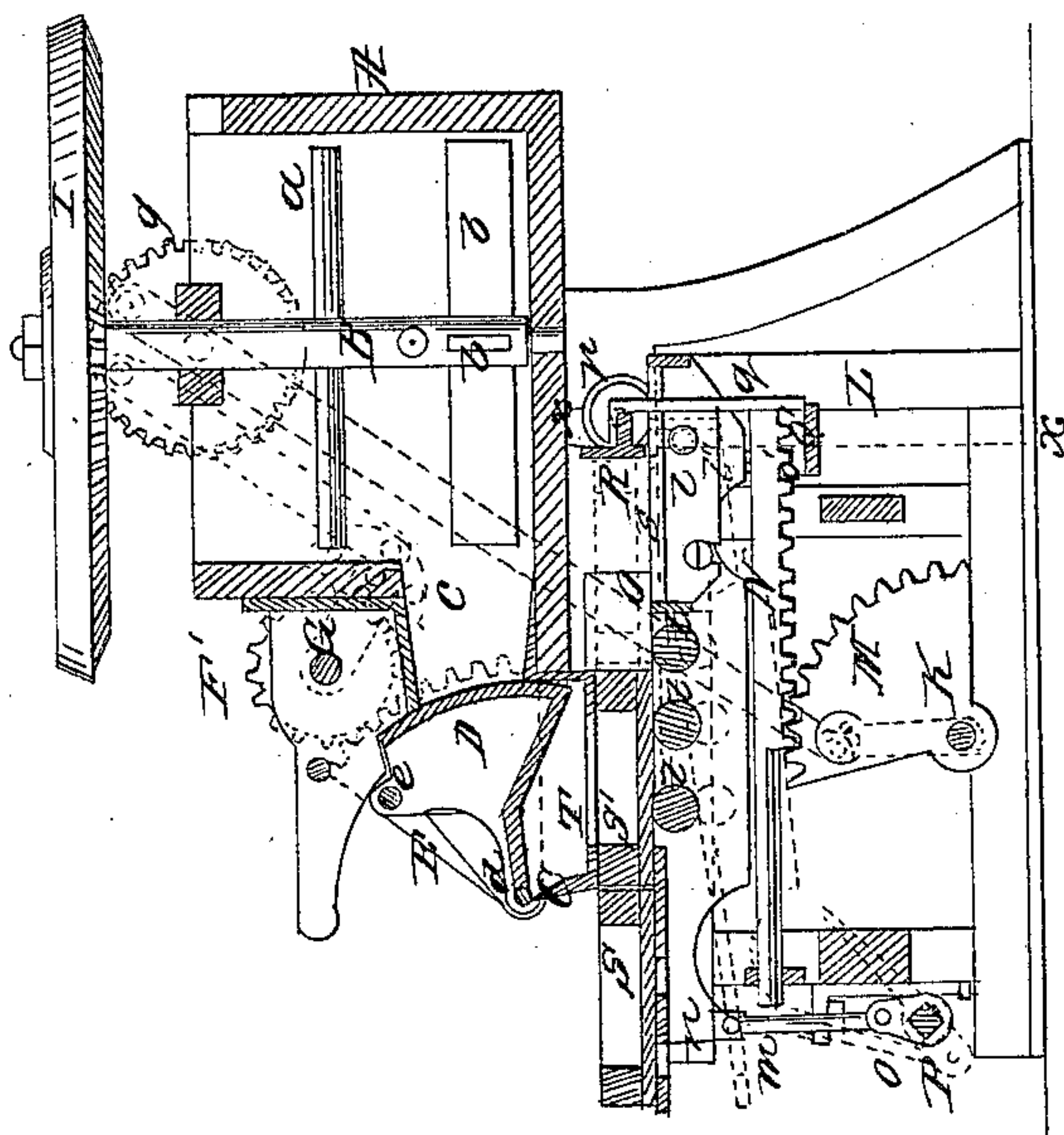
*Fig. 2.*



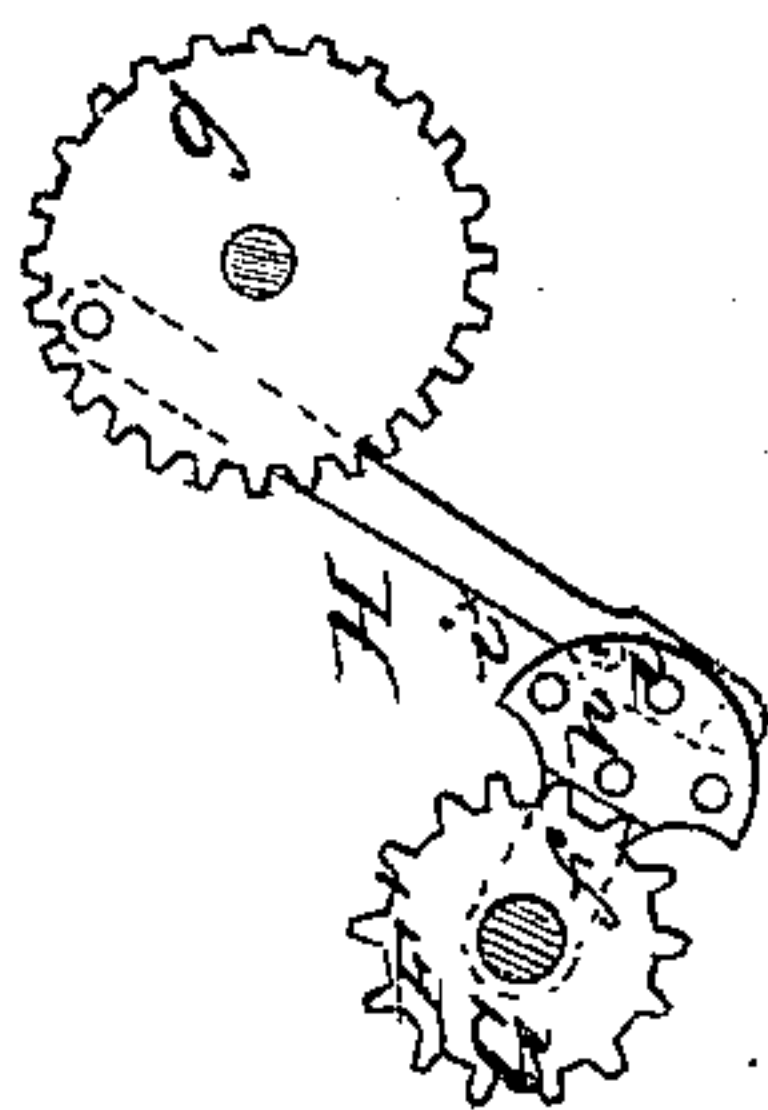
*Fig. 4.*



*Fig. 1.*



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

THOMAS FORBES, OF KANSAS CITY, MISSOURI.

## BRICK-MACHINE.

Specification of Letters Patent No. 21,876, dated October 26, 1858.

*To all whom it may concern:*

Be it known that I, THOMAS FORBES, of Kansas City, in the county of Jackson and State of Missouri, have invented a new and Improved Machine for Molding and Pressing Bricks; 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 vertical central section of a machine constructed according to my invention. Fig. 2, is a front view of ditto. Fig. 3, is a detached view of the mechanism by which the follower is operated. Fig. 4, is a transverse section of the back part of the bed piece and frame as indicated by *x, x*, Fig. 1.

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

The machine is more especially designed for the graduating of the pressure to which the clay is subjected, as circumstances may require.

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

A, represents a mud or pug mill which is formed of a quadrilateral box having a vertical shaft B, placed centrally within it and provided with horizontal arms or beaters *a*, and sweeps *b*, the sweeps *b*, being at the lower end of the shaft and formed of flat blades of a suitable width attached edge-wise to the shaft.

At one end of the mill A, a cast iron box C, is attached. This box extends the whole width of the mill and communicates with the interior of the mill by an opening or passage *c*, as shown clearly in Fig. 1. Within the box C, a cast iron follower D, is fitted or placed, said follower being transversely of section or V-form and working on a rod *d*, which is secured in the outer

part of the box C. On each end of the rod *d*, a toothed sector F, is fitted or placed and these sectors are connected with the follower D, by a rod *e*. In each sector F, a pinion gears. These pinions designated by F, F', are attached to shaft G, and to the pinion F', a bent bar *f*, is attached, said bar being connected to a crank pinion *g*, by a connecting rod H. The rod H, is attached to the bar *f*, by having it fitted in a socket *h*, a pin *i*, passing through the socket and rod, see Figs. 2 and 3.

On the upper end of the shaft B, a spur wheel I, is placed. This wheel gears into the crank pinion *g*. A similar pinion *g'*, is placed at the opposite side of the mud mill and the wheel I, also gears into said pinion. To the pinion *g'*, a rod J, is attached and the lower end of this rod is attached by a pin or bolt *j*, to an arm *k*, attached to one end of a shaft K, in the lower part of a framing L, see Fig. 2, and red lines in Fig. 1. The framing L, supports the mud mill and all the working parts of the machine.

The pressure of the follower D, may be varied at any time as occasion may require by adjusting the pin *i*, of the rod H, in either of a series of holes *i'*, in the socket *h*, by which the stroke of the follower D, may be varied to produce the result.

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

The arrangement and combination of the variable rods H, with the sockets (*h*) bars (*f*) pinions (*g g'*) and spur wheel I as and for the purposes herein shown and described.

THOMAS FORBES.

Witnesses:

M. D. TREFREN,

WM. S. T. PATTON.