

*H. Brad,*

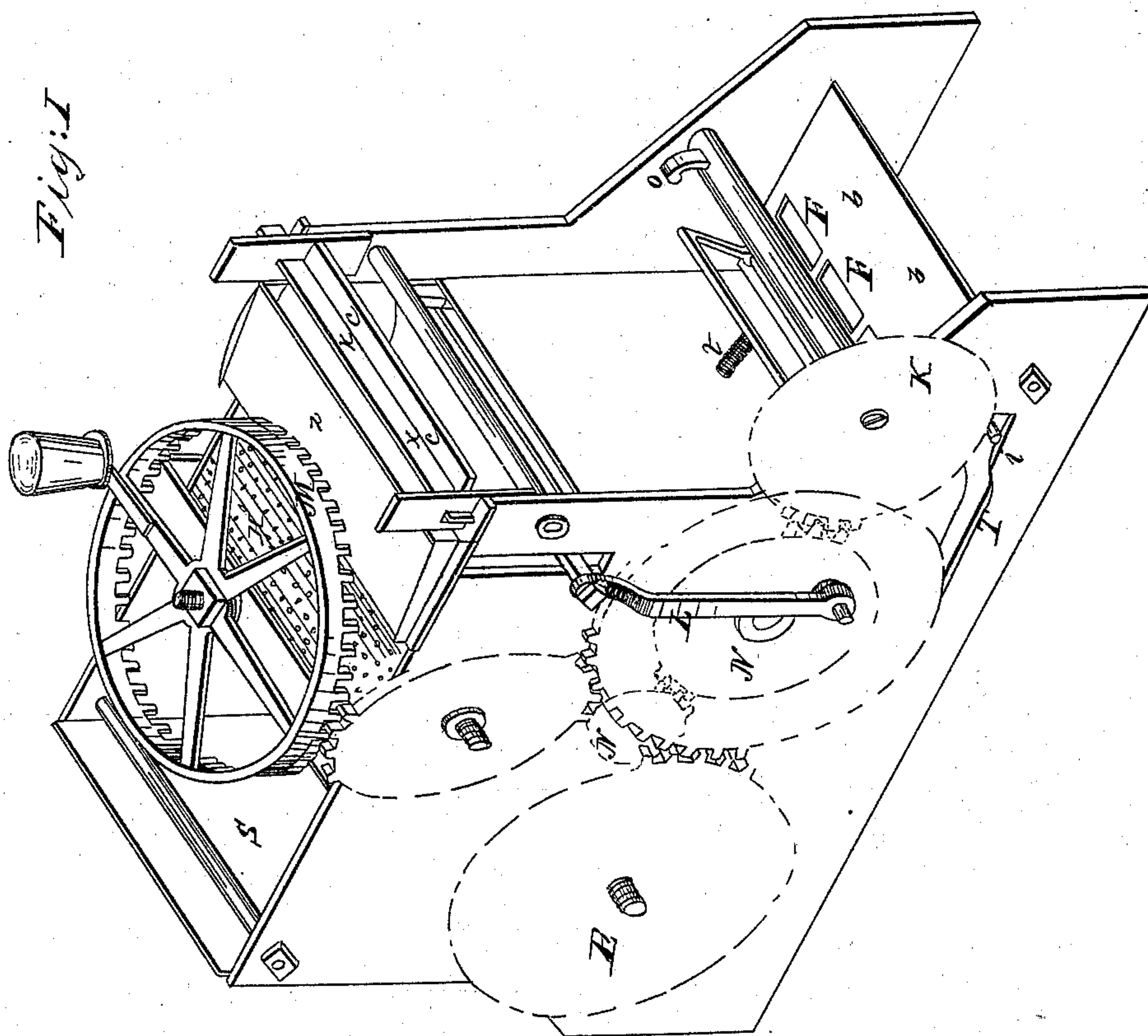
*2 sheets. Sheet 1.*

*Brick Machine.*

*N<sup>o</sup> 15,798.*

*Patented Sep. 30, 1856.*

*Fig. 1*







# UNITED STATES PATENT OFFICE.

HENRY BRAD, OF GREENCASTLE, INDIANA.

## BRICK-MACHINE.

Specification of Letters Patent No. 15,798, dated September 30, 1856.

*To all whom it may concern:*

Be it known that I, HENRY BRAD, of Greencastle, county of Putnam, and in the State of Indiana, have invented a new and  
5 Improved Mode of Making Brick; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings,  
10 made a part of this specification, in which—

Figure 1, is a perspective view. Fig. 2, a longitudinal elevation.

The nature of my invention consists in providing the front part of the machine,  
15 with a frame and roller in combination with a revolving journal for the purpose of removing the brick from the molds upon the apron.

To enable others to make and use my invention and machine as invented, I disclose  
20 its construction and operation.

The parts of the machine are made in any of the known forms, and are combined and operate as follows, reference being had to  
25 said drawings 1, and 2.

M in Fig. 1, represents the power wheel, or wheel by which the machine is propelled.

H, represents a drum, or roller, which is made with cogs, or teeth on the surface for  
30 the purpose of grinding the clay thoroughly, separating and removing any hard or foreign substance, such as stone, wood, grass, or any other thing calculated to obstruct, or impede the machinery.

35 *c, c*, is a sliding plate which is made concave, to fit, and slide up to the front part of the roller H and has teeth attached like the roller.

40 *x, x*, is a key or wedge, by which to fasten the sliding plate *c, c*, and by moving said plate *c, c*, backward and forward, you open and close the mill so as to grind the clay as fine, or coarse, as desired.

S, represents a cistern to hold water.

45 *z*, in Fig. 1, is the hopper which carries the clay into the mill.

L, is the pitman which is attached to the press by means of a nut screwed on the end of the wrist.

50 In Fig. 2, *a* is a frame to which a roller is attached for the purpose of removing the brick from the molds F, F, upon the apron *b, b*. K, is a revolving journal which operates the frame and roller *a*. F, F, are the  
55 molds into which the bricks are pressed; and *b, b*, is the apron which receives the

brick as they are removed from the molds by the operation of the roller upon them. The operation of the projections *o, o*, on the revolving journal K, forces back the self ad- 60 justing frame *a*, so as to bring the roller in contact with the brick to remove them from the apron *b, b*. The self adjusting frame *a*, is adjusted by means of the spring *t*, said projections having the same motion 65 of the molds F, F, so as to remove the bricks after they are pressed and pass from under the machine. The sliding wrist marked I, which traverses the inclined plane T, is made fast to the bottom of the molds F, F, 70 so as to open them when they enter in, or under the machine, and as they return out, the inclined plane T, operates on the wrist, so as to bring the bricks level with the top, or surface of the apron *b*, so that when the 75 roller comes in contact with the brick in removing them they will not be broken or injured on the edge or otherwise. D, D, in Fig. 2, represents a gate by which the water passing through the sprinkler on the clay, 80 may be regulated at pleasure. N, is a pug-mill or temperer which by its quick motion thereby mixes the mortar. N', by its slow motion works in unison with the same motion of the molds, so that when the molds 85 go under the machine to receive the mortar, the half wing on the journal N', throws the mortar unto the molds, then the press *g*, comes down upon the mortar, and presses the bricks as hard as desired. D', is the 90 gate or slide which regulates the feed of the press, which may be raised or depressed, as the feed may be desired on the machine, and by the closing may be stopped entirely, for the purpose of grinding and tempering the 95 clay or mortar. P, is a pitman which runs the molds, backward and forward under the machine. E, is the journal which operates the pitman P.

What I claim as my invention and desire 100 to secure by Letters Patent is:

The self adjusting frame *a*, for the purpose of removing the brick from the molds onto the apron *b, b*, after they are pressed, operated by means of spring *t*, and projec- 105 tions *o, o*, on the revolving journal K, when the above parts are constructed, arranged and operated as set forth.

HENRY BRAD.

Attest:

A. S. LAKIN,  
HIRAM MARSHALL.