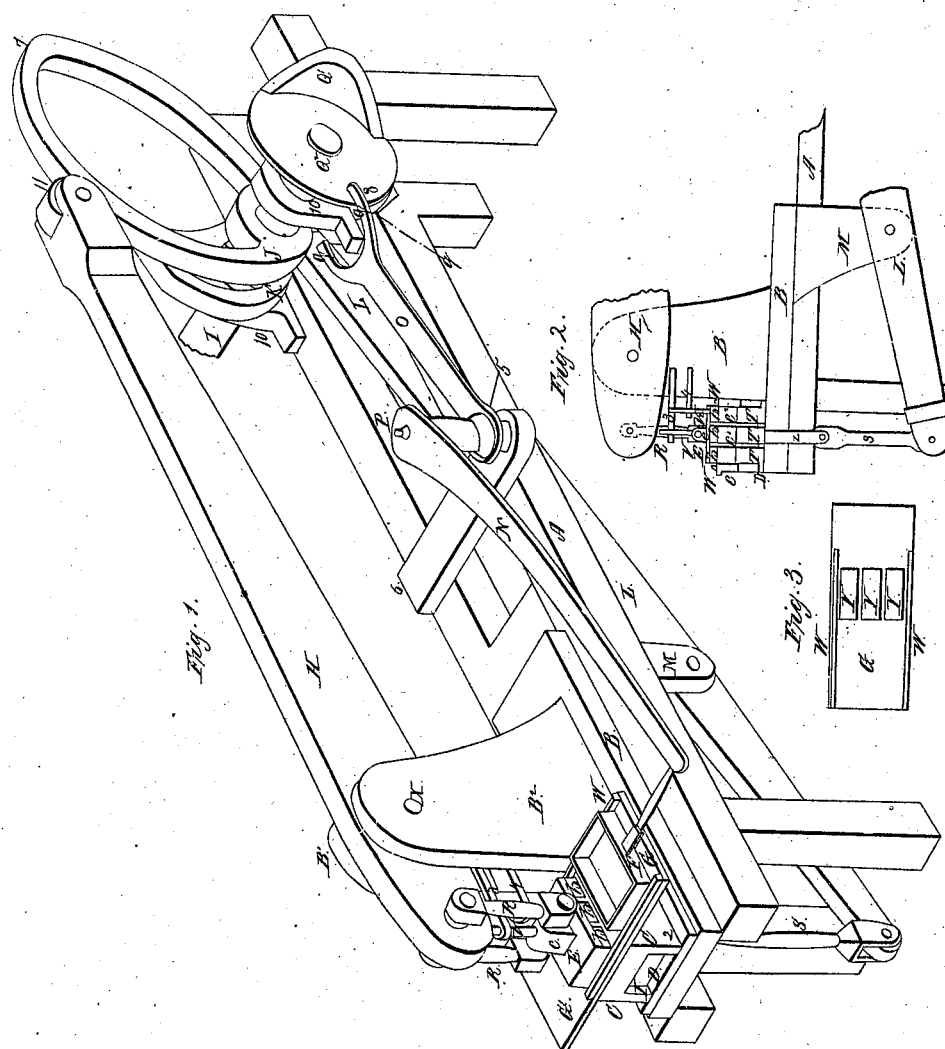


These specifications are hereby  
certified to be correct.

*S. Talbut,*  
*Brick Machine,*  
*No. 1,539,* *Patented Apr. 8, 1840.*



# UNITED STATES PATENT OFFICE.

SAMUEL TALBOTT, OF RICHMOND, VIRGINIA.

## BRICK-MACHINE.

Specification of Letters Patent No. 1,539, dated April 8, 1840.

*To all whom it may concern:*

Be it known that I, SAMUEL TALBOTT, of Richmond city, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Machines for Making Bricks from Dry Clay, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is an isometrical perspective view of the machine. Fig. 2 is a vertical section through the center of the molding part of the machine showing the molds, the discharger, presser, connecting rods, guides, &c. Fig. 3 is a top view of the table.

Similar letters in the figures refer to similar parts.

A frame or bench A is made of suitable size and strength to contain and support the parts hereafter described. Upon this frame at one end is secured a large cast iron plate B let into the frame from which rise two standards B<sup>1</sup> B<sup>2</sup> between which the main or pressing lever H is placed, the fulcrum being at *a*. This plate may for the sake of distinction be called the stand. The molds are secured on this stand. They are formed by two vertical parallel side plates 1, 2 flanged at their lower edges and perforated for bolts which secure them to the stand B, between which side plates are division plates C<sup>1</sup> C<sup>2</sup> which form the molds. A table G is formed on a level with the top of the molds having rectangular openings Y therein the size of the molds and two ribs W at the sides of the table which serve as guides for the sliding feeding box. A piston for pressing the clay into the molds is attached by connecting rods to the short end of the main lever H. This piston consists of a plate E having fixed to its under side as many rectangular blocks *b* as there are molds made the same size as the molds into which they are intended to enter, during the operation of pressing the clay. An ear *e* projects from the upper side of the plate E through which passes a horizontal pin which also passes through the lower ends of two parallel connecting rods R connected to the short end of the main lever by a similar pin passing horizontally through the same. A vertical rod V<sup>1</sup> rises from the top of the ear in the center of the plate E and passes through an aperture in a horizontal guide 3 fastened to one of the standards B<sup>2</sup>. A similar rod V<sup>2</sup> rises from the plate E passing through a short

horizontal guide 4; these rods and guides are for causing the piston to move vertically in the molds.

The discharger for throwing up the bricks from the molds is attached to the short end of the lever L by a connecting rod S. This discharger consists of a horizontal plate D upon whose upper side are placed as many rectangular blocks T as there are molds into which they enter being the same size and while the pressing operation is performing these form the bottom of said molds the plate resting firmly upon the stand and when the bricks are to be discharged these blocks are made to rise in the molds and lift the bricks to the level of the table. From the under side of said plate D there projects downward a vertical stem Z the round part of which passing accurately through a round opening in the stand and serving as a guide to cause the discharger to move correctly in the molds; to this stem the rod S is connected which attaches the discharger to the lever L which moves it—which lever has its fulcrum at M below the top of the frame or bench A, being a round pin passing through two ears fastened to the under side of the stand and extending down through an opening in the bench.

A four sided sliding box E having neither top nor bottom is placed upon the table G between the guides W W into which the clay is put for making the bricks, which box performs the double operation of conveying the clay to the molds and at the same time pushing the bricks from them to the end of the table. This box is attached to a lever N, O, made in the following manner: It consists of two arms or branches N, O, radiating from the periphery of a barrel 5 to which they are permanently fixed, which barrel turns on a permanent stud P rising vertically from a casting 6 fastened to the top of the frame near the center thereof. The branch O of the lever acted on by the cams Q *q* is made forked so that the prongs shall be acted on alternately by the cams on either side of the wheel Q<sup>2</sup> as it revolves for moving the box F in and out from under the piston. The cams for moving all the levers are fixed on the main shaft I which turn in standards 10 fastened on top of the frame which shaft is turned by any suitable power the cam marked J moves the main lever H for pressing the bricks—the cam marked K moves the lever L for discharg-

ing them—and the cams marked Q q move the forked lever N, O, for supplying the clay and removing the bricks from the molds.

5 Operation: The power being applied to the main shaft I and the moving parts of the machine in operation the attendant puts the dry clay into the sliding box F which  
10 of the way the piston E descends and presses it into the molds and thus forms the bricks—the piston and discharger then rise simultaneously the latter pushing the bricks out of the molds from which they are removed  
15 by the sliding box in bringing a fresh supply of clay to the molds. When the cam J is in the position represented in the drawing the pressing has commenced and when the greatest extremity of it marked 7 reaches  
20 the anti friction roller in the end of the main lever H then will take place the maximum of pressure—this part of the cam having left the roller the long end of the lever will begin to descend and simultaneously  
25 with this movement the cam K will commence to depress the long end of the lever L and raise the short end with the dischargers and also at the same time the cam Q' will begin to act on the prong 8 of the  
30 lever O causing the box F to move toward

the molds—with a fresh supply of clay which it deposits in the molds and the cam Q' having left the prong 8 the other cam q on the opposite side of the wheel Q<sup>2</sup> strikes the prong 9 and reverses the movement of the lever bringing back the box F  
35 empty—the cam J then acts on the main lever as before and presses the bricks and so on. The bricks are borne off by boys or in any convenient manner. 40

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

1. The mode of producing the pressure on the piston E by means of the lever H operated by the cam J in combination with  
45 the mode of operating the bed D of the press for throwing up the bricks when pressed by means of the lever L operated by the cam K—the whole being constructed, arranged and operating as herein set forth. 50

2. I also claim in combination with the foregoing the mode of operating the box F and removing the bricks by the same, the box being operated by the forked lever O moved by the cams q Q' all as herein set  
55 forth.

SAMUEL TALBOTT.

Witnesses:

WM. LINTON,  
WM. G. WEBBER.