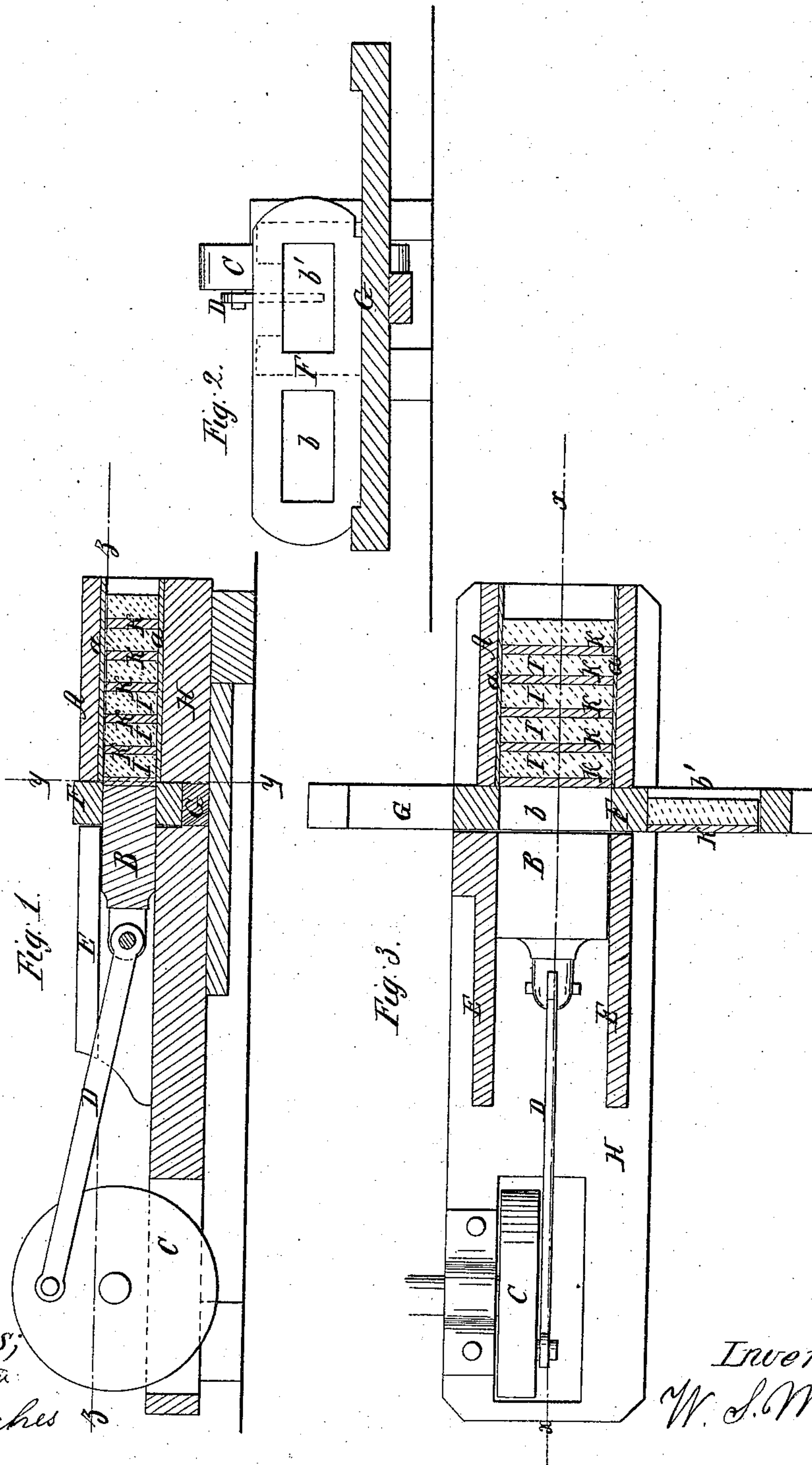


W. S. Mayo,

Brick Machine,

No. 24,320,

Patented June 7, 1859.



Witnesses;
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UNITED STATES PATENT OFFICE.

W. S. MAYO, OF NEW YORK, N. Y.

MACHINE FOR FINISHING BRICKS.

Specification of Letters Patent No. 24,320, dated June 7, 1859.

To all whom it may concern:

Be it known that I, W. S. MAYO, of the city, county, and State of New York, have invented a new and Improved Machine for
5 Finishing 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—

10 Figure 1, is a longitudinal vertical section of my invention, taken in the line x, x , Fig. 3. Fig. 2, is a transverse section of ditto, taken in the line y, y , Fig. 1. Fig. 3, is a horizontal section of ditto, taken in the
15 line z, z , Fig. 1.

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

This invention relates to a new and improved machine for giving a smooth even
20 surface to bricks previous to the burning of the same and after they have been properly dried. These unburnt bricks, technically termed "clots" by being subjected to a requisite pressure within metal molds have
25 their sides smoothed and present when burnt a finished appearance, having a smooth, compact and even surface with angular corners. Bricks of this character, which are generally known as "Philadelphia bricks"
30 are used for "facing" houses of a superior class, and are considerably more expensive on account of the labor hitherto required in their manufacture, a great portion of the labor being due to the inefficiency of the machines used for finishing or smoothing the
35 "clots."

The object of the within described invention is to expedite and perfect the finishing or smoothing of the "clots," the machine being
40 so constructed that steam may be used as a motor and provision made for subjecting each individual "clot" to the same pressure however much they may vary in thickness.

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

A represents a rectangular box, which may be constructed of metal or of wood. If
50 constructed of wood as shown in the drawings, the box should be lined with metal plates a , polished at their inner or exposed sides. The interior of the box A, transversely should be of equal dimensions to the "clots" to be operated on, and the box
55 may be of a greater or less length as desired, but I prefer having it sufficiently long

to contain about twenty "clots" with their plates which will be presently referred to.

B is a plunger which works within the box A, and is driven by a crank wheel C, 60 and connecting rod D, between guides E, E. Between the inner end of box A, and the guides E, E, a feed block F, is placed and allowed to slide back and forth transversely a requisite distance on a bed or bar G, which 65 is attached transversely to the bed H, of the machine. The feed block F, is provided with two rectangular openings b, b' , the dimensions of which are equal to the
70 "clots."

The operation of the machine is as follows:—The crank pulley C, is rotated by steam, at least it is designed such a motor be used. The "clots" designated by I, are placed alternately and edgewise in the open- 75 ings b, b' , in the feed block F, by boys or attendants, one being at each side of the machine and the block F, moved so as to bring the openings b, b' , with their "clot" alternately in line with the box A, and plunger 80 B,—the latter at each forward movement forcing a "clot" into the box A. With each clot I, there is placed in the openings b, b' , of the feed block a metal or wooden plate K. These plates correspond in size superficially 85 with the clots I, and are placed at one side of them so that the "clots" in the box A, are not in contact, the plates K, being interposed between them. The working of the plunger B, in the box A, forces the "clots" 90 through the box and the friction of the "clots" is the only resistance offered to the action of the plunger. The box A, therefore must be sufficiently long to contain a sufficient number of "clots" necessary to pro- 95 duce the requisite friction to allow the "clots" to be subjected to a necessary pressure. The edges of the "clots" are smoothed by being forced through the box, the plates a , imparting the smoothness to 100 the edges and the plates K, keeping the "clots" intact so that they cannot be incorporated together or united under the pressure.

From the above description it will be seen 105 that there is no arbitrary or positive resistance given the "clots" I, and each clot will be subjected to an equal pressure and all perfectly smoothed or finished. In all ordinary machines for the purpose that 110 have passed under my observation the "clots" have been placed in separate molds,

compressed therein and thence forced out, and as the "clots" will vary somewhat in size, those that are small will be imperfectly faced or finished, while those that are large will be subjected to an unnecessary pressure. This result is due to the pressing of the "clots" between the plunger and the bottom of the mold, the "clots" being thereby subjected to an arbitrary pressure. The ordinary machines therefore cannot be rapidly driven, nor can the work be expeditiously performed.

I would remark that although the box A, is represented and described as being in a horizontal position, still it may be placed in a vertical or inclined position. The posi-

tion of the parts is not arbitrary, but perhaps a horizontal position would be preferable. The feed block F, may be operated automatically or by hand.

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

The combination of the box A, plunger B, and plates K, with or without the feed block F, substantially as and for the purpose set forth.

W. S. MAYO.

Witnesses:

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