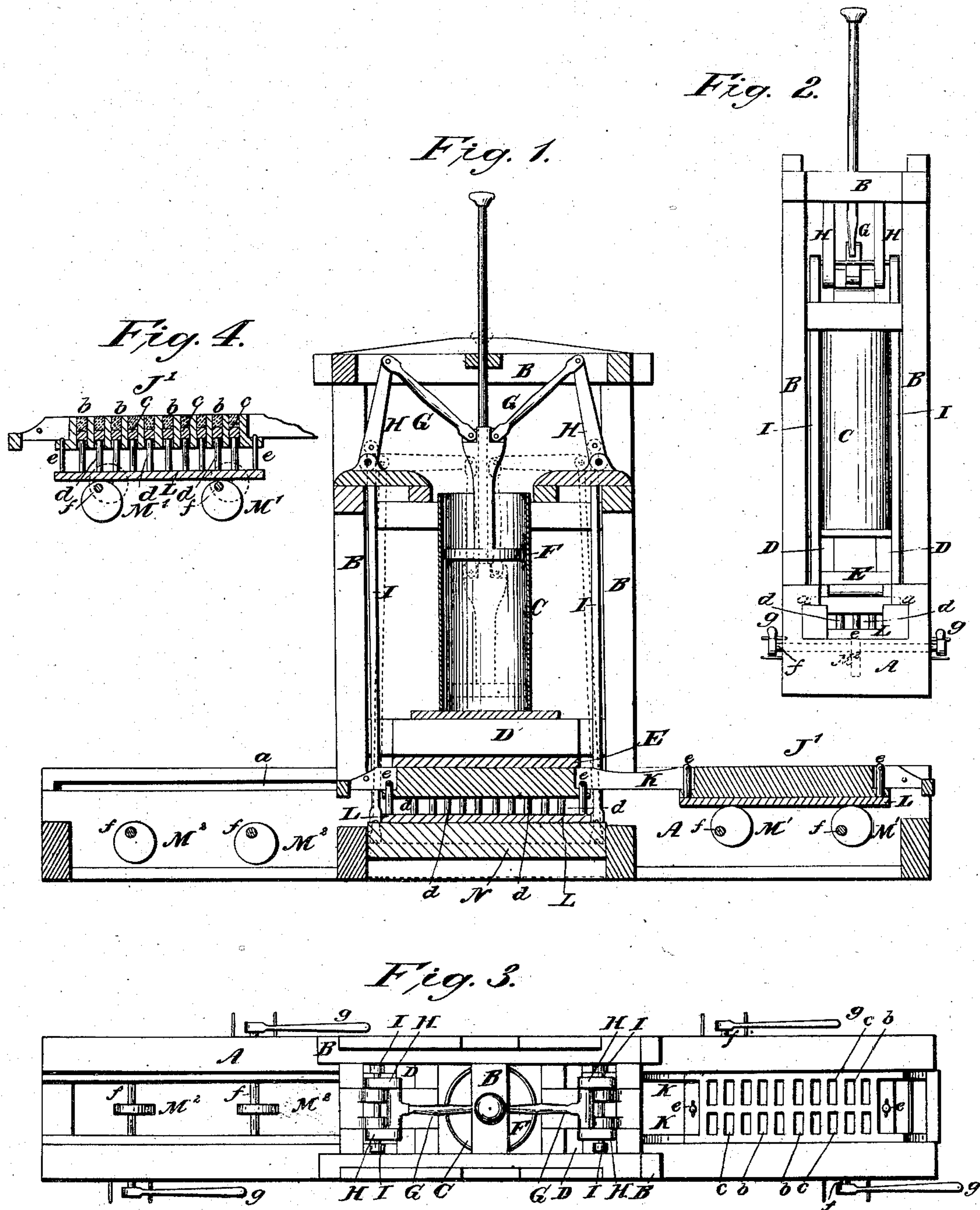


S. L. SPEISSEGER.

Brick Press.

No. 8,780.

Patented March 2, 1852.



UNITED STATES PATENT OFFICE.

S. L. SPEISSEGGER, OF SAVANNAH, GEORGIA.

BRICK-MACHINE.

Specification of Letters Patent No. 8,780, dated March 2, 1852.

To all whom it may concern:

Be it known that I, S. L. SPEISSEGGER, of Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Presses for Making Bricks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a longitudinal section. Fig. 2, is an end elevation. Fig. 3, is a plan. Fig. 4, is a detached sectional view of the mold table, followers and lifting cams.

The nature of my invention consists in the employment of a cylinder provided with a piston which is operated on by steam, or other propelling force, and the power from which is communicated by cranks and rods to a platen or pressing plate that is brought to bear alternately upon the followers of two mold boxes situated some distance apart but which are connected so as to form one traveling table having a reciprocating motion, and so operated that while the bricks are being formed in one box or set of molds, lifting cams are made to relieve the pressed bricks from the other set and time allowed to remove the bricks also to refill the several molds.

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

A, is the bed of the press and B, B, B, a vertical frame attached to it.

C, is a cylinder, to the lower end of which steam may be admitted, and which is seated on cross ties D, D, that have a fixed top pressing plate E, secured to them.

F, is a piston working in the cylinder C, on the vertical arm or rod of which are connecting rods G, G, for operating cranks or levers H, H, H, H, having their fulcrums or bearings in cross pieces secured to the vertical frame.

I, I, I, I, are connecting rods attached to the cranks H, H, H, H, at points situate a short distance from their fulcrums.

J¹ J², are two mold boxes containing molds b, b, b, b, arranged in any number of rows which boxes are connected by side strips K, K, so as to form one traveling table that receives an occasional reciprocating motion along the bed A, sliding in grooves a, a, along its side. In the molds b, b, b, b, are followers or pistons e, e, e, e, working ver-

tically within them and connected by rods d, d, d, d, to lifting plates or platforms L, L, having guides e, e, e, e, working through flanges on the mold boxes to steady their motion.

M¹ M¹ and M² M², are cams or eccentrics secured to shafts f, f, f, f, working, through the bed, by levers, g, g, g, g, to lift the plates L, L, each one alternately as it, with its mold box, arrives over them.

N, is a platen or pressing plate operated by the rods I, I, I, I, to which it is attached and which by its upward motion lifts the plates L, L, as they (each alternately) are brought over it.

The operation in further description, is as follows. The clay being well pulverized is fed by hopper or otherwise into the molds b, b, b, b, of either box J¹, J², as it arrives at the end of the bed the cams or eccentrics M¹ M¹, or M², M², being then so positioned as to admit of the plates L, L, (either one) being down and the pistons or followers at the bottom of the molds, when a striker may be used for leveling or clearing off the surplus clay from the top of the molds. The table is then made to move and the box of molds thus filled brought under the top fixed pressing plate E, when steam is admitted under the piston F, positioned at the extremity of its bottom stroke which in rising works upward the rods I, I, I, I, and with them the platen N, pressing up the plates L, L, (either one alternately) and the followers or pistons which will squeeze or press the clay in the molds against the lower surface of the plate E. The pressure it will be seen by the motion of the cranks H, H, H, H, is less and the movement of the followers quicker at its commencement than at the close when the motion of the followers is slower in proportion to the travel of the steam piston and hence the pressure greatest at the finishing point when required. During this formation of brick in one box of molds, the molds of the other box have been filled with pulverized clay as described, and the table is then made to travel so that the molds containing the loose clay will be brought under the top pressing plate and the box with molds containing the formed bricks brought over its respective cams M¹, M¹, or M², M², which being slightly turned by means of the handles secured to their shafts will work up the plates L, L, (either one) and plungers attached, caus-

ing the bricks to be thrown out from the molds for clearing off, when by reversing the motion of the cams, the plungers and plate to which they are connected will drop
5 and leave the molds ready for refilling. The same operation alternately taking place with either box of molds and the steam piston F, falling by its own weight or otherwise for a fresh action during the travel of the table
10 or mold boxes J¹, J². The pressure given to the bricks may be varied by increasing or diminishing the pressure of steam used and the thickness of the bricks altered by changing the length of the followers or the
15 rods connecting them to the plates L, L. The table formed by the union of the two mold boxes J¹, J², may be worked backward and forward through rack and pinion worked by the motion of the steam piston as
20 usual to planing machine tables, or in any

other suitable way, and it should travel on friction rollers, also the cams or eccentrics M¹ M¹ M², M², may be similarly operated through toothed quadrant or any other ordinary mechanical contrivance worked by the
25 action of the steam piston.

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

The employment of the plate L; of the traveling mold table, operating simultane- 30 ously on the rods *d*, *d*, and pistons *c*, *c*, in the molds *b*, *b*, in combination with the pressing plate N, of a steam or other press, for the formation and delivery of brick, as substantially set forth.

SAML. L. SPEISSEGER.

Witnesses:

HENRY WILLIAMS,
GEO. B. MITCHELL.