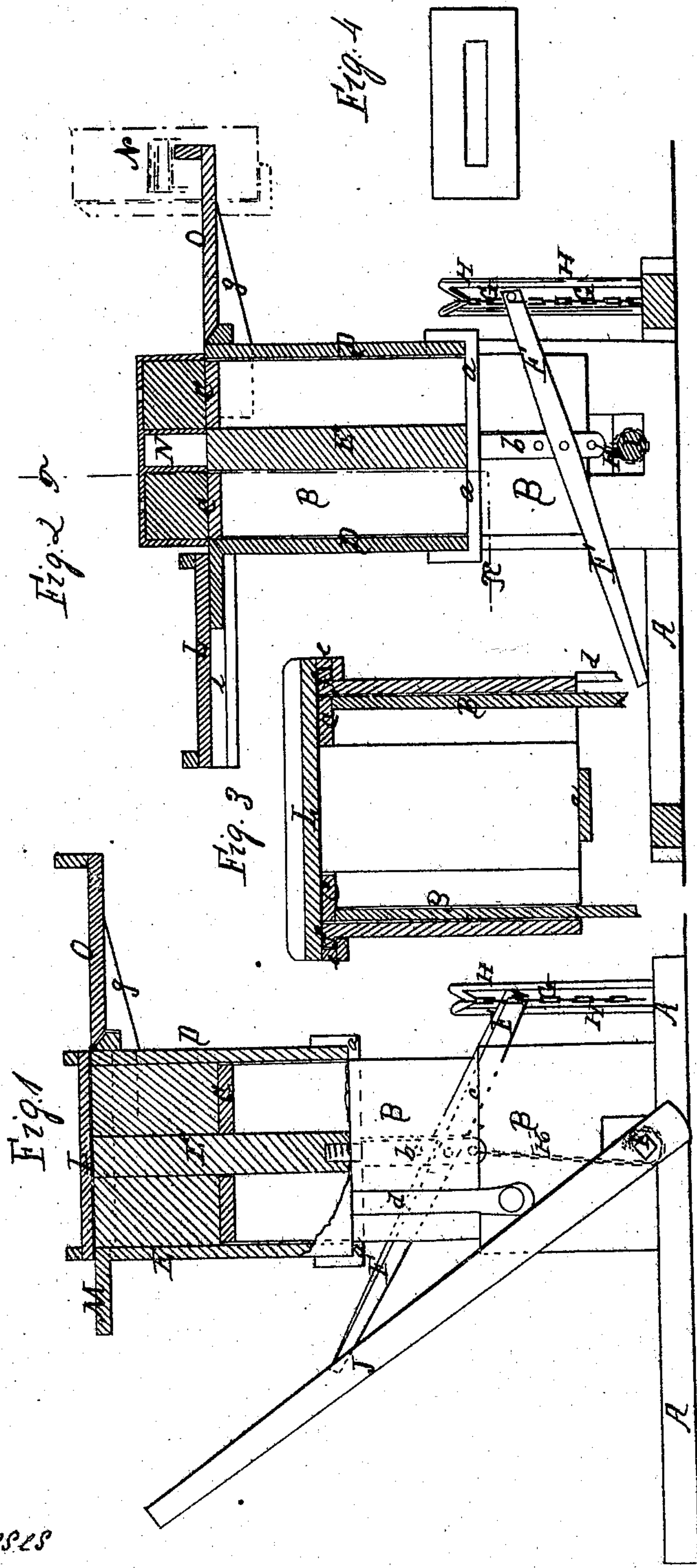


# I. Pardee Brick Machine

No. 74769

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Witnesses

Alex T. Roberts  
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# United States Patent Office

ISAAC PARDEE, OF VINELAND, NEW JERSEY.

Letters Patent No. 74,769, dated February 25, 1868; antedated February 10, 1868.

## IMPROVED CONCRETE-BRICK MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISAAC PARDEE, of Vineland, in the county of Cumberland, and State of New Jersey, have invented a new and improved Concrete-Brick Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation, partly in section, of my improved brick-machine.

Figure 2 is a vertical longitudinal section of the same.

Figure 3 is a detail transverse section of the same, the plane of section being indicated by the line *x x*, fig. 2.

Similar letters of reference indicate like parts.

This invention relates to a new machine for pressing and forming concrete stones for building purposes, in a separate press, which is so constructed that it can be easily handled, and that the ready-pressed concrete can be easily removed from it.

A represents a horizontal frame, of rectangular or other suitable shape, and made of suitable material. It is the bed or support for the other portions of the machine. B B are two vertical plates, arranged on either side of the frame A, and projecting upward from the same. Their upper ends are connected by a horizontal plate, C, which is as long and wide as the concrete is to be. D is a rectangular box, of such dimensions as to fit close around the plate C; it has neither top nor bottom. In its inside is a core, E, which is a block of the same height as the box D, and which is secured to the same by means of braces, *a a*, at its under side, as shown. The box D having the core E, is fitted around the plate C and plates B, in such a manner that it can easily slide up and down on the same. It is, at its under side, provided with a vertical projecting pin, *b*, the lower end of which is pivoted to a lever, F. The lever F has its fulcrum on a chain, G, that is suspended from a small yoke, H, which is fitted upon the frame A, as shown. By means of this lever F, the box D and core can be raised and lowered at will. When lowered, the edge of the end-pieces of the box will rest upon shoulders, *c*, which are formed on the uprights B. The surface of the plate C will be flush with the upper edges of box and core, as in fig. 2. When the box is raised, as in fig. 1, the plate C will form the bottom of the box, the latter being upheld by springs *d d*, which are formed on the sides of the uprights B, as shown. It must here be remarked that the plate C is slotted, to enable it to fit around the core E. I is a horizontal shaft, having its bearings in the frame A, directly below the pin *b*, and connected at one end with a long crank or lever, J. A chain or rope, K, connects the lower end of the pin *b* with the shaft I, in such a manner that, by means of the lever J, the chain can be wound around the shaft I, and the box D be lowered. A great deal of power is gained by this arrangement. When the box is raised, the cement, &c., for forming the concrete, is put into it. L is a sliding cover, which has grooved sides, *e e*, which fit around strips, *f f*, that are secured to the sides of the box, near its upper edge, as shown. These strips *f*, and grooves *e*, prevent the cover L from being raised from the box. When the cement is in the box, and the cover L drawn over the same, the box is drawn down by means of the lever J, and the cement is compressed between the plates C and L. When sufficiently pressed, the slide L is drawn to one side, when it will rest upon a plate, M, that is provided for the purpose, and a sheet-metal box, N, which is as wide and long as the inside of the box D, and as high as the concrete when pressed, and which has a core, to correspond with the core E, is placed bottom-up upon the box D, and then the latter is lowered, by means of the lever F, until the bottom, C, is flush with the top of the box D, as in fig. 2, when the concrete will have been transferred to the inside of the box N, as is indicated by red lines in fig. 2. O is a table or platform, which is pivoted between braces, *g g*, that project from that side of the box D which is opposite to that on which the plate M is arranged. This platform O is flush with the top of box D, and the box N can be drawn towards and upon it. When the box N stands upon the plate O, the latter can be turned on its pivots, so that the box N may be turned bottom-down. The plate O is acting as a cover for the box N while the same is being turned, thereby preventing the concrete, or parts of it, from falling out. The concrete is then taken, in the box N, to the drying-room, or to any other suitable place. When dried, it can be easily removed from the box N. The core E forms a slot in the centre of the concrete, as shown (in fig. 4, which is a top view of a concrete formed in my machine,) which slot serves to facilitate and hasten the drying of the matter, and which will also serve to form excellent ventilating-flues in buildings.

What I claim as new, and desire to secure by Letters Patent, is—

1. The arrangement of the levers F and J, when the same are connected with the sliding box D, in the manner set forth.
2. The sliding box D, in combination with the uprights B, plate C, pin *b*, lever F, chain K, shaft I, and lever J, all made and operating substantially as and for the purpose herein shown and described.
3. The box D, when provided with a core, E, in combination with the sliding plate L, that has grooves, *e* and fits over strips, *f*, as set forth.
4. The hinged platform O, in combination with the box N and box D, all made and operating substantially as and for the purpose described.
5. The springs *d*, when arranged as set forth, for the purpose of keeping the box D up, as set forth.

ISAAC PARDEE.

Witnesses:

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