(No Model.)

A. REEVE.

Manufacture of Perforated Blocks of Terra Cotta, &c.

No. 241,068. Patented May 3, 1881.

Fig. 1.

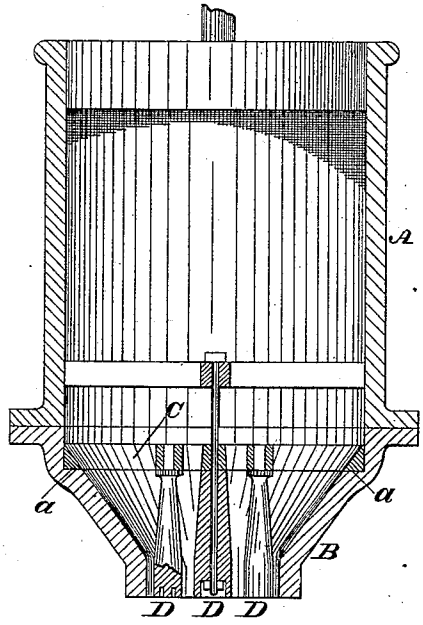


Fig. 2.

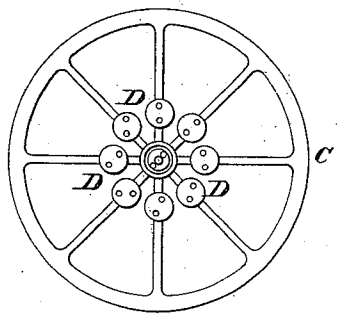
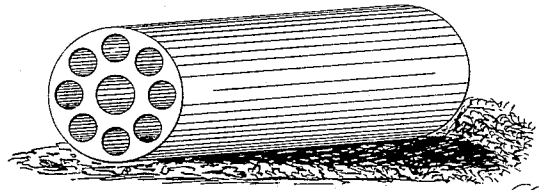


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

AUGUSTUS REEVE, OF CAMDEN, NEW JERSEY, ASSIGNOR, BY MESNE ASSIGNMENT, TO THE NATIONAL UNDERGROUND ELECTRIC COMPANY, OF NEW JERSEY.

MANUFACTURE OF PERFORATED BLOCKS OF TERRA-COTTA, &c.

SPECIFICATION forming part of Letters Patent No. 241,068, dated May 3, 1881.

Application filed October 23, 1880. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTUS REEVE, a citizen of the United States, residing in the city and county of Camden, and State of New Jersey, have invented a new and useful Improvement in Manufacturing Perforated Blocks of Terra-Cotta, &c., which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a vertical section of the machine embodying my invention. Fig. 2 is a bottom view of a portion thereof. Fig. 3 is a perspective view of one of the blocks.

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

This invention relates to mechanism for forming, at one operation, blocks of terra-cotta having longitudinal perforations; and it consists in the construction and combination of devices hereinafter set forth and claimed.

Referring to the drawings, A represents a hopper, and B the die-chamber below the same.

At the base of the hopper or top of the chamber B is suspended a spider or open frame, C, from the under side of the arms of which depend a number of dies, D D, which are tapering at their upper portions and cylindrical at their lower portions. The dies are grouped, arranged, or disposed relatively to the number and location of the perforations or bores required in the block, and all located within the chamber B.

The clay or earth is placed in the hopper A and forced into the chamber B by the action of the plunger, head, or follower of the hopper, so as to fill said chamber and form or close around the dies D. As the pressure is continued on the mass in the hopper the portion in the chamber B is forced out at the bottom thereof and assumes the form of said bottom, the perforations or bores produced by the dies being preserved. When the proper length of the molded block has emerged it is cut off, dried, and burned, or otherwise treated, as occasion requires.

It will be seen that I form blocks each of which has numerous openings or bores extending longitudinally entirely through the same, the molding of the block and formation of said numerous openings or bores being accomplished at one time or operation, and the blocks as completed are uniform, the openings or bores being coincident with each other. Furthermore, when the clay or earth enters into the chamber B it flows or closes around the dies, which, reducing the space through which the clay or earth is forced, compresses the mass during the molding operation, so that the blocks are made compact, and their durability is increased.

In order to suspend the spider C from the chamber B, I form, directly on the inner face of the latter, near the top thereof, a shoulder or right-angular recess, *a*, into which the circumferential ring of the spider is fitted, the base of said shoulder sustaining the ring, the inner circumference of the latter being beveled to accord or form a flush joint with the inclined side of the chamber, whereby no obstruction is presented to the descent of the clay or earth by said ring. The exterior surface of the chamber around the shoulder may be swelled for strengthening purposes. Furthermore, the dies are sustained by rods which extend from the spokes of the spider and are attached to the dies, said rods being connected to a support within the hopper; but ordinarily a single rod at the center is sufficient.

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

1. The cylinder or hopper A and tapering die-chamber B, having a recess, *a*, on its inner face, in combination with the spider C, provided with depending dies D D, and having the inner face of its circumferential rim beveled to accord with the inclined side of the die-chamber, substantially as and for the purpose set forth.

2. In combination with cylinder A and tapering die-chamber B, having shoulder *a* on its inner face, the spider C, consisting of a ring or rim adapted to rest on said shoulder, spokes within the same, and rods extending down from said spokes for the support of the dies D, substantially as set forth.

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Witnesses:

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