

(No Model.)

C. M. STEELE.
BRICK DIE.

No. 586,461.

Patented July 13, 1897.

Fig. 1.

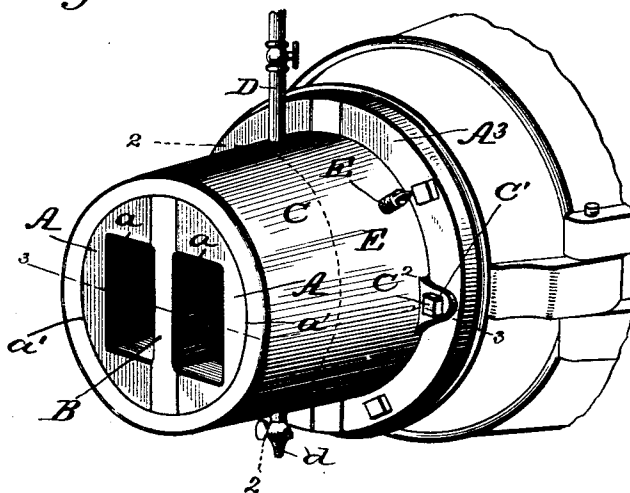


Fig. 2.

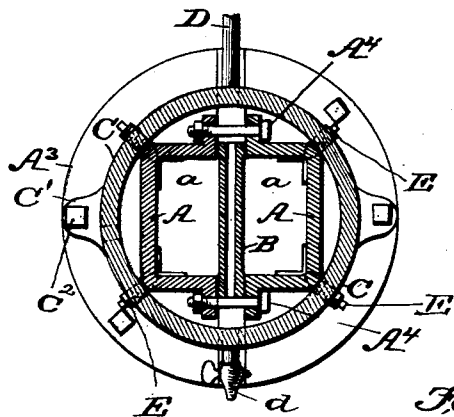


Fig. 3.

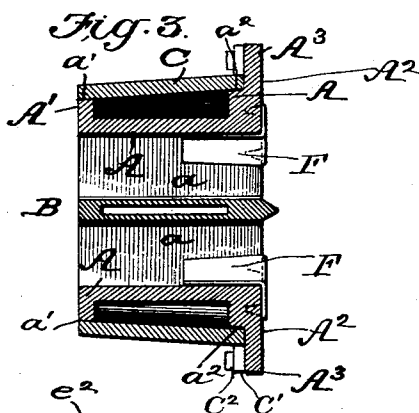


Fig. 5.

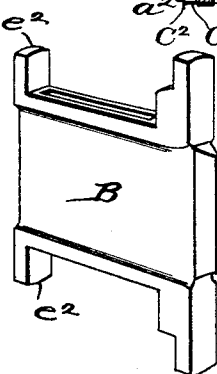
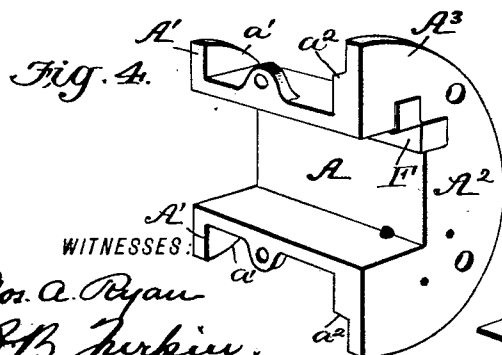


Fig. 4.



WITNESSES:

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BRICK-DIE.

SPECIFICATION forming part of Letters Patent No. 586,461, dated July 13, 1897.

Application filed October 1, 1896. Serial No. 607,570. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE M. STEELE, of Statesville, in the county of Iredell and State of North Carolina, have invented a new and useful Improvement in Brick-Dies, of which the following is a specification.

My invention is an improved brick-die having polished metal surfaces through which the clay is forced, forming it into bars for the purpose of making brick; and the invention consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my brick-die. Fig. 2 is a transverse section on about line 2 2, Fig. 1. Fig. 3 is a horizontal section on about line 3 3, Fig. 1; and Figs. 4 and 5 are detail views.

The means for supplying the clay to the die and for receiving the bars discharged therefrom may be of any desired construction.

The die is composed of the die-sections A A, the partition B, and the shell or casing C. The shell C is cylindrical and is provided at its end with lugs C', perforated for the bolts C², which secure the shell to the heads of the die-sections A. This shell has a steam-inlet D and an outlet d and is provided with the threaded openings for the stems of the valves E, which valves are adapted to be turned by a suitable tool applied to their outer ends, or they may be otherwise suitably turned. The valves operate to control the supply of lubricant to the die-passages, as more fully described hereinafter.

The die-sections A A are formed with the passages a for the clay, such passages having polished surfaces and being open at both ends and at one side, the latter being closed by the partition B, which fits and is held between the die-sections.

At their ends the die-sections are provided with flanges A' and A², made circular at a' and a² to fit the shell C, and the flanges A² being extended at A³, forming heads for connection with the casing of the main portion of the machine.

The die-sections are connected together by the bolts A⁴, which bind them tightly against the partition, which projects at its edges between the edge of the die-sections. This par-

tition is chambered and open at its side edges, communicating with the space between the shell or casing and the die-sections, into which steam is supplied at D, so it will circulate around the die-sections and through the partition. The partition has at one end lugs or flanges, curved at e², to fit in the outer end of the shell and has at its other end lugs or flanges curved to correspond with the flange a² and extension A³.

Inlets for oil or other suitable lubricant are provided at the outer corners of the die-passages at the inner end of the die, such inlets being controlled by the valves E, before described. Within the dies I provide corner-plates F, covering the lubricant-inlets and serving to prevent the clogging of the same, and also to secure a distribution of the oil upon the polished surfaces of the die-passage.

At its inner end the partition B is extended beyond the end of the die-sections and is brought to an edge to divide the clay as it passes to the two passages.

The circular shell is important in that it bears all the outward strain upon the dies.

My die is so constructed that it will form the greatest variety of lays with the least friction, and the several parts may be easily dressed out and polished and can be securely put together with the aid of only two bolts and cap-screws, and the circular case takes all the strain, there being no direct pressure against either bolts or set-screws.

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

1. A brick-die composed of die-sections, a chambered partition located between the sections and forming one of the sides of the die-orifices, and the casing or shell, a steam-chamber surrounding said sections and located between the casing or shell and the sections being provided within the casing or shell and communicating with the chamber in the partition, substantially as shown and described.

2. A brick-die comprising the die proper having a partition chambered to receive steam and the casing surrounding the die proper and forming a steam-space and means for supplying steam to said partition and casing substantially as shown and described.

3. The combination with the die-sections of a shell or casing encircling and holding said sections together and forming a steam-chamber around such sections the said sections forming the inner wall of the steam-chamber substantially as shown and described.

4. A brick-die comprising the die-sections having end flanges, the partition fitted between said sections and having end flanges coinciding with those of the die-sections and the casing inclosing said sections and partitions substantially as shown and described.

5. The combination of the die-sections, the partition clamped between the said sections and the shell or casing fitting around said sections substantially as shown and described.

6. The combination of the die-sections and the intermediate partition provided at their ends with flanges formed to fit the shell or casing and the shell or casing surrounding

such die and partition substantially as shown and described.

7. The combination in a brick-die of the die-sections, the partition fitted at its edges between the said sections and devices connecting said sections and holding them to the partition substantially as shown and described.

8. The combination of the die-sections, the chambered partition open at its edges and fitting at such open edges between the edges of the die-sections, means connecting said sections and the casing encircling the die-sections and partition and forming a chamber in communication with the chamber of the partition substantially as shown and described.

CLARENCE M. STEELE.

Witnesses:

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