

G. Grassle,

Brick Mold.

No. 109,313.

Patented Nov. 15, 1870.

Fig. 1.

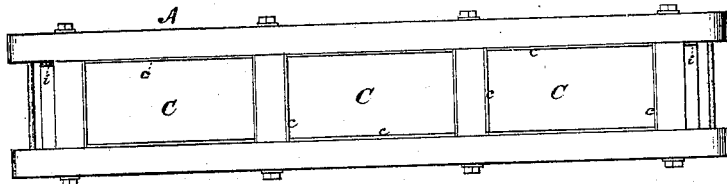


Fig. 2.

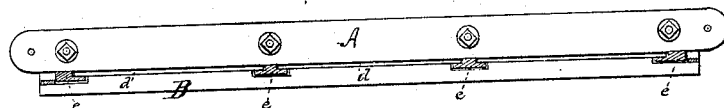


Fig. 3.

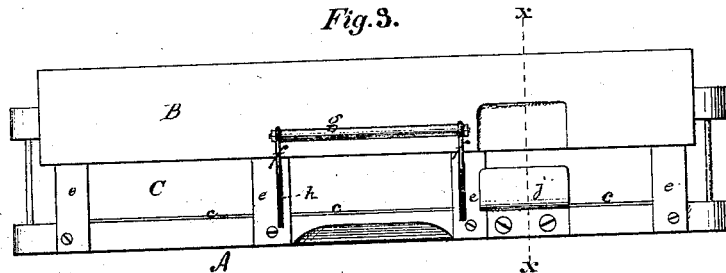


Fig. 4.

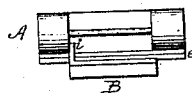


Fig. 7.

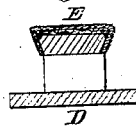


Fig. 5.

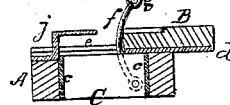
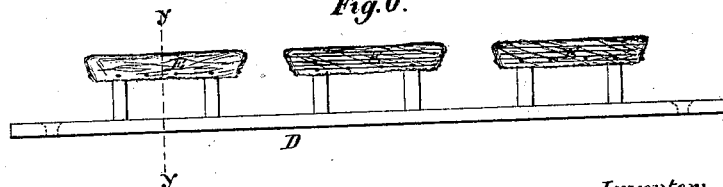


Fig. 6.



Witnesses:

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Letters Patent No. 109,313, dated November 15, 1870.

IMPROVEMENT IN BRICK-MOLDS.

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, GOTTLIEB GRAESSLE, of Hamilton, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Brick-Molds; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention I will proceed to describe it.

My invention consists in a brick-mold, provided with a sliding bottom and a steel lining; and also in a device for oiling or lubricating the interior of the mold, as hereinafter described.

In the drawing—

Figure 1 is a top-plan view of my mold ready for use, the bottom being closed.

Figure 2 is a side elevation of the same.

Figure 3 is a bottom-plan view of the mold, with the bottom partially opened.

Figure 4 is an end view of the mold, with bottom closed.

Figure 5 is a cross-section of the mold, with bottom partially opened.

Figures 6 and 7 are respectively a side elevation and a cross-section of the lubricating device.

In constructing my mold I first provide a strong wooden frame, A, of any desired form, and having any convenient number of cells or openings C, of the form of the required brick.

The inner walls of these cells I line with sheets or plates of steel *c*, by which I obtain sharper corners and edges, and smoother surfaces on the brick, than where wooden surfaces are brought in contact with the clay.

On the under side of the cross-bars of the frame I secure metal bars *e*, of a dovetail or T-form, in cross-section, for the purpose of holding and guiding the sliding bottom.

B represents this bottom, made of a form and size to cover the lower side of the frame, and having steel plates *d* secured to its face, as shown in figs. 2, 4, and 5.

The ends of these steel plates engage under the bars *e*, and thus hold the bottom in position against the frame, but at the same time allow it to be slid sidewise from under the same, as shown in figs. 3 and 5, and thus open the bottom of the cells C.

These steel plates, when the bottom is closed, cover and form the bottom of the cells C.

To prevent the bottom from being moved so far as to become detached I secure to each of its ends a stud or stop, *i*, which, striking against the projecting ends of the frame, limit the movement of the bottom.

In the back side of the two middle cross-bars of the frame I make grooves *h*, and in these grooves I pivot arms *f*, and connect the outer ends of these arms by a handle, *g*, as shown in figs. 3 and 4.

When these arms are turned down into the slots the bottom may be slid back so as to close the mold, but upon pulling up the handle *g* the arms will slide back the bottom and open the lower side of cells C, as shown in figs. 3 and 5.

To the back side of the frame A, I secure a plate or shield, *j*, which is bent outward so as to let the edge of the bottom pass under it, as shown in fig. 5. The purpose of this shield is to form a convenient hold for the operator, and to prevent his fingers from getting into the cells, and thus be bruised or injured, when the bottom is closed.

In using my mold the bottom is closed and the cells filled with clay in the usual manner. The mold is then turned bottom side up on a flat surface, and the handle raised so as to slide back the bottom, when the mold, upon being raised, will part readily from the brick.

In brick-molds of all kinds it is necessary, before the brick can be turned out, that air shall be admitted into the cells behind them. In molds of the ordinary construction having stationary bottoms it is usual to leave a slit or opening along in the lower edges of the cells for this purpose, and when the clay is pressed into the cells a thin film of clay is worked out into these slits, this film being broken off when the bricks are turned out, and thus the bricks left with rough, irregular edges. But in a mold of my construction it is tightly closed while the clay is being molded, and consequently produces bricks having square sharp edges and corners.

For the purpose of oiling or lubricating the interior surfaces of the mold I provide a bar, D, having pads or heads E mounted on it, these pads being equal in number to the cells in the mold, and of the same form and size, and in the same relative positions as the said cells.

The bar D I secure in a convenient position with the pads uppermost, and thoroughly saturate the latter with any suitable substance, preferably coal-oil, and after each using of the mold shove it down over the pads, which thoroughly lubricates the cells, it being understood that the bottom is closed during the operation.

In this manner I produce a simple and efficient device by which the mold can be quickly and thoroughly lubricated.

It is obvious that, if desired, eyes may be secured to the back edge of the sliding bottom, through which the arms *f* shall play, and thus allow of the bottom being closed by opening the handle *g*.

Having thus described my invention,
What I claim is—

1. A portable brick-mold, having its bottom B arranged to slide laterally, substantially as described.

2. In combination with the molds or compartments C, having the steel plate *c* secured to their sides and ends, the sliding bottom B, having the steel plates *d* attached thereto and engaging over the cross-bars *e*, all constructed and arranged to operate substantially as described.

3. The combination of the mold or frame A, slid-

ing bottom B, and levers *f*, constructed and arranged to operate as set forth.

4. In combination with a portable brick-mold, the pads E, mounted on supports D, and having a lubricating-surface on their bottom and sides for lubricating the interior of the molds, as set forth.

GOTTLIEB GRAESSLE.

Witnesses:

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