# J. A. Hamer,

## Brick Mold,

No. 24,972, Patented Aug. 2, 1859.

Fig: 5.

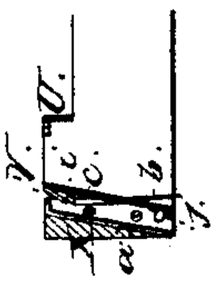



Fig: 1.

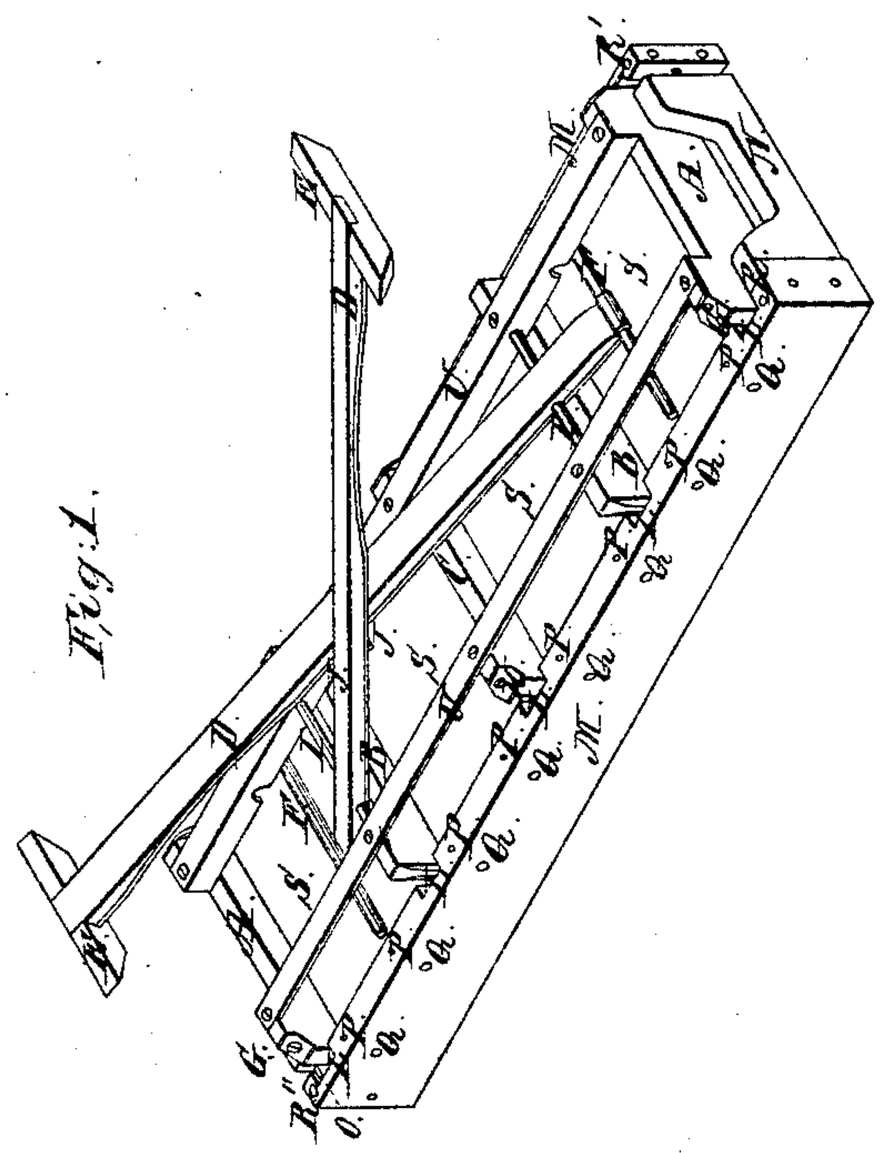



Fig: 3.

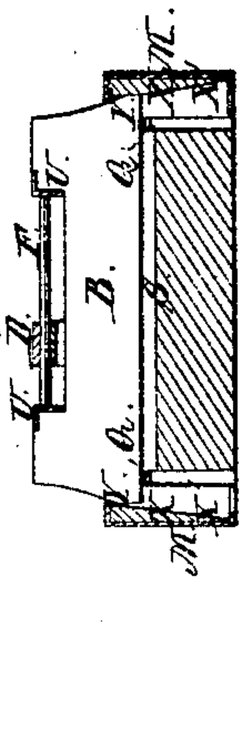
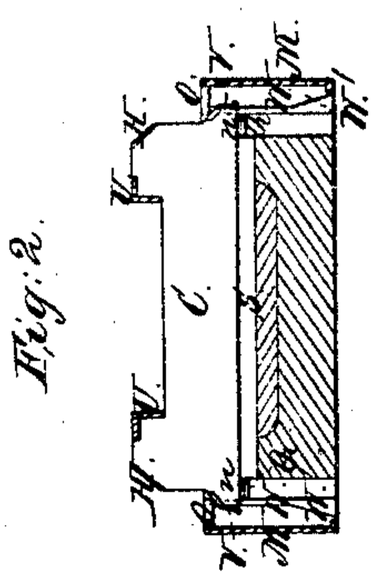



Fig: 2.




Witnesses:

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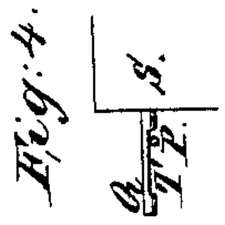
Fig: 4.




Inventor:

James A. Hamer

# UNITED STATES PATENT OFFICE.

JAMES A. HAMER, OF READING, PENNSYLVANIA, ASSIGNOR TO HIMSELF, AND NORRIS MARIS, OF KIMBERTON, PENNSYLVANIA.

## BRICK-MOLD.

Specification of Letters Patent No. 24,972, dated August 2, 1859.

*To all whom it may concern:*

Be it known that I, JAMES A. HAMER, of Reading, Berks county, State of Pennsylvania, have invented an Improvement in Brick-Molds; and I do hereby declare that the following is a full and exact description of its construction and operation, reference being had to the accompanying drawings, and to the letters of reference marked thereon, so as to enable others skilled in the art to make and use my device.

Figure 1, of the drawings represents a perspective view of my improved brick mold; Fig. 2, a vertical section taken immediately in front of the central mold partition C; Fig. 3, a similar section taken in front of one of the partitions B, B; Fig. 4, a detached view of a portion of one of the mold covers S, with one of the support pins Q attached to it; Fig. 5, a modification of certain parts of the brick mold as represented in Fig. 1.

The object of my invention is to construct a brick mold which can be readily disengaged and removed from the bricks after they have been molded, without injuring the corners or any other part of the freshly molded bricks.

The nature of my invention consists in so constructing and arranging in relation to each other, the various component parts of my brick mold that by means of simultaneous action thereof the side boards M, M, may be moved apart and the end boards A, A, and mold partitions B, B, C, be withdrawn so as to disengage all the upright sides of the bricks from contact with the said side and end boards and partitions of the mold, preparatory to removing the latter from the bricks.

The brick mold embodying the principle of my invention and represented in the accompanying drawings is made so as to mold four bricks at a time which number may be varied, however, by constructing this brick mold with a greater or less number of partitions B, B, C. The space between the side boards M, M, and endboards A, A, is covered with boards S, S, S, S, leaving slots between them across the mold and suitable for the insertion of vertical partitions B, B, C, which latter divide the said space into four rectangular receptacles for the material to be molded into bricks. One end of one of the side boards M, is connected by a sliding joint R′, to one end of one of the frames N, N, while one end of the other side board M, is similarly connected to the end of the other frame N, as seen at R″. The sideboards are provided with vertical slots L, peculiarly shaped and hereafter to be described. Each mold cover S, has two horizontal pins Q, projecting from each of its two side edges and all of these pins pass through holes in the side boards M, M, and vertical stop pins P, arranged in the side boards fit into slots T, in the pins Q.

The object of the pins Q, is to support the horizontal mold covers S, without interfering with the lateral motion of the side boards—the movement, however, being limited by the length of the slots T, of the support pins Q, in combination with the stop pins P, all of which will be understood from Figs. 1, and 4.

The endboards A, A, and mold partitions B, B, C, are fastened to and connected together by two rails U, U, so as to form one system. Two rods I, I, are fastened between the rails U, U, and serve as fulcra for the levers D, D, which latter are provided with handles E, E, at their outer ends, and at their inner ends with arms F, F, resting against the upper side of the two outermost mold covers S, S. The two levers (near where they cross each other) are provided with pins J, J, one to each lever and so arranged that the pin J, of each lever reaches underneath the other lever. By this means the two levers will always rise together no matter whether you lift both handles or only one, and as the arms F, of the short ends of the levers bear against the surface of the stationary mold covers S, S, the rise of the system of endboards and partitions hung to the levers by means of the fulcrum rods I, I, will be uniform and simultaneous whether you work the levers by both or by either one of the handles E.

The slots in the side boards M, M, which receive the ends of the partitions B, B, are all alike and it will be sufficient to describe the arrangement of only one of them.

The front of the slot as seen at X, Fig. 3, is curved, so that the slot is not so deep at the top as at the bottom. The object of this is to cause the projecting ends Y, Y, of the partitions B, to gradually push the side boards M, M, apart as they (said ends Y, Y,) slide up along the curved fronts X,

of the slots. The lower end, however, of the curve is straight or nearly so in order that the partitions may be allowed to start before the side boards begin to move apart.

The slots in the side boards M, M, which receive the ends of the partition C, and end boards A, A, are of a different construction compared with those above described, and their object is to move the sideboards back to their original position while the partitions and end boards are made to descend after the brick mold has been removed from the bricks and preparatory to its being again charged with the brick material. These slots are provided with side flanges W, as seen in Fig. 2, beveled on top as seen at *n*, and increasing in thickness toward the bottom as seen at W′.

The little shields V, H, and G, attached to the corners of the partition C, and endboards A, A, overlap one or both sides of said partition and endboards as seen in Fig. 1. The overlapping ends of the shields V, as they come in contact with the incline W′, during the descent of the partitions and endboards, draw the sideboards toward each other. Toward the end of the descent the overlapping portions of the shields H, G, engaged with the beveled tops *n*, of the flanges by which means the sideboards and the system of partitions and endboards will be firmly held together until the system is again lifted up by operating the levers D, D, as above described.

Fig. 5, represents a modification of the slots and shields.

The slot is mounted with a casting *a*, *i*, *j*, the inside flange *a*, being inclined from top to bottom, while the outside flange is straight and only at top and bottom provided with short inclines *i*, *j*.

The end of the partition or endboard is mounted with a shield *c*, which has at its upper end an overlapping wing V, and a projecting knob *b*, at its lower end.

It will be understood that this slot and shield will serve to open and close the sideboards the flange *a*, being an equivalent for the curved front X; the knob *b*, an equivalent for the projecting end Y; and the incline *i*, for the beveled top *n*, in combination with shield V.

The bricks are represented in red in Figs. 2, and 3.

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

1. The construction, combination and arrangement of the operating parts of the brick mold, substantially as set forth for the purpose described.

2. The combination of the sides and partitions of the mold, operating substantially as and for the purpose described.

3. The combination of the levers D, D, with the arms F, F, and pins J, J, for operating the sides and partitions of the mold as and for the purpose set forth.

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Witnesses:

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