

No. 630,114.

O. H. ROOT & G. E. LUCE.
BRICK MOLD.

Patented Aug. 1, 1899.

(Application filed Jan. 16, 1899.)

(No Model.)

Fig. 1.

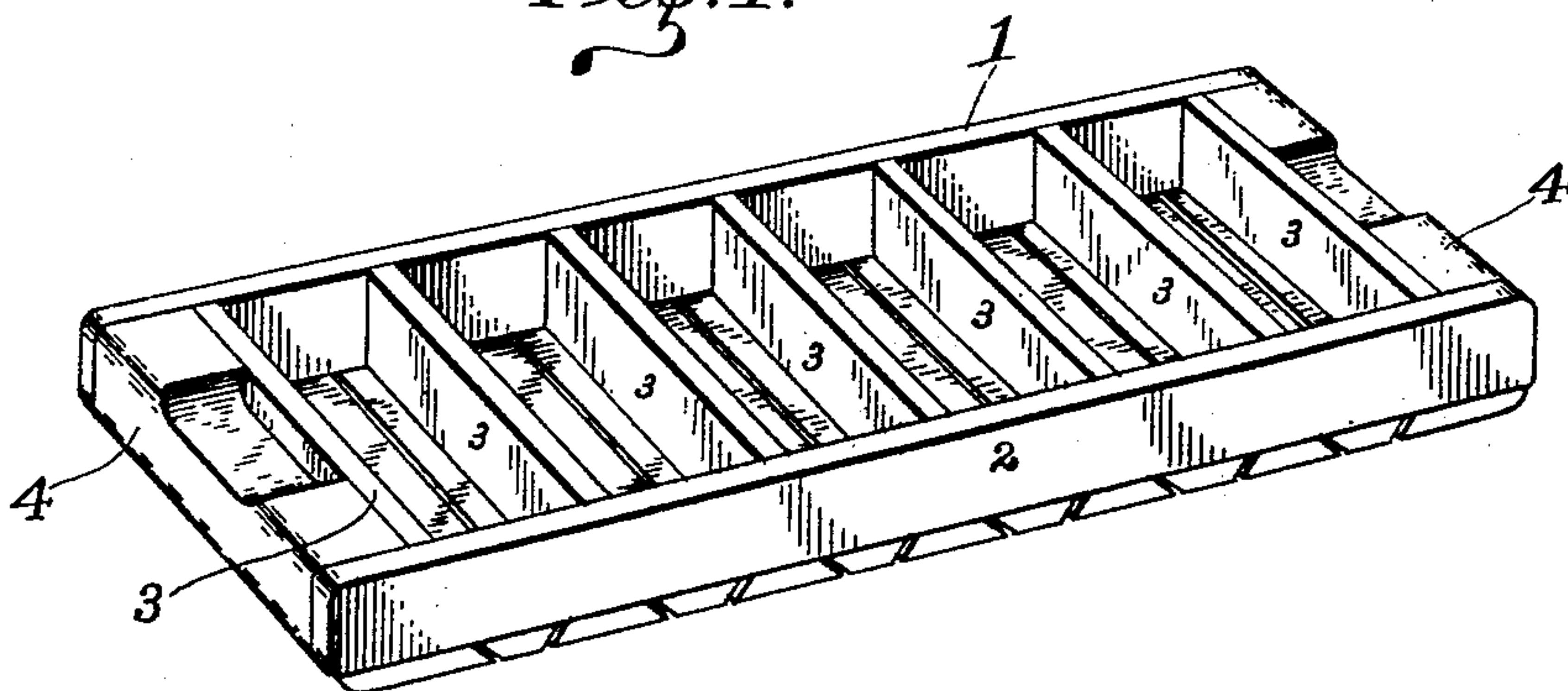
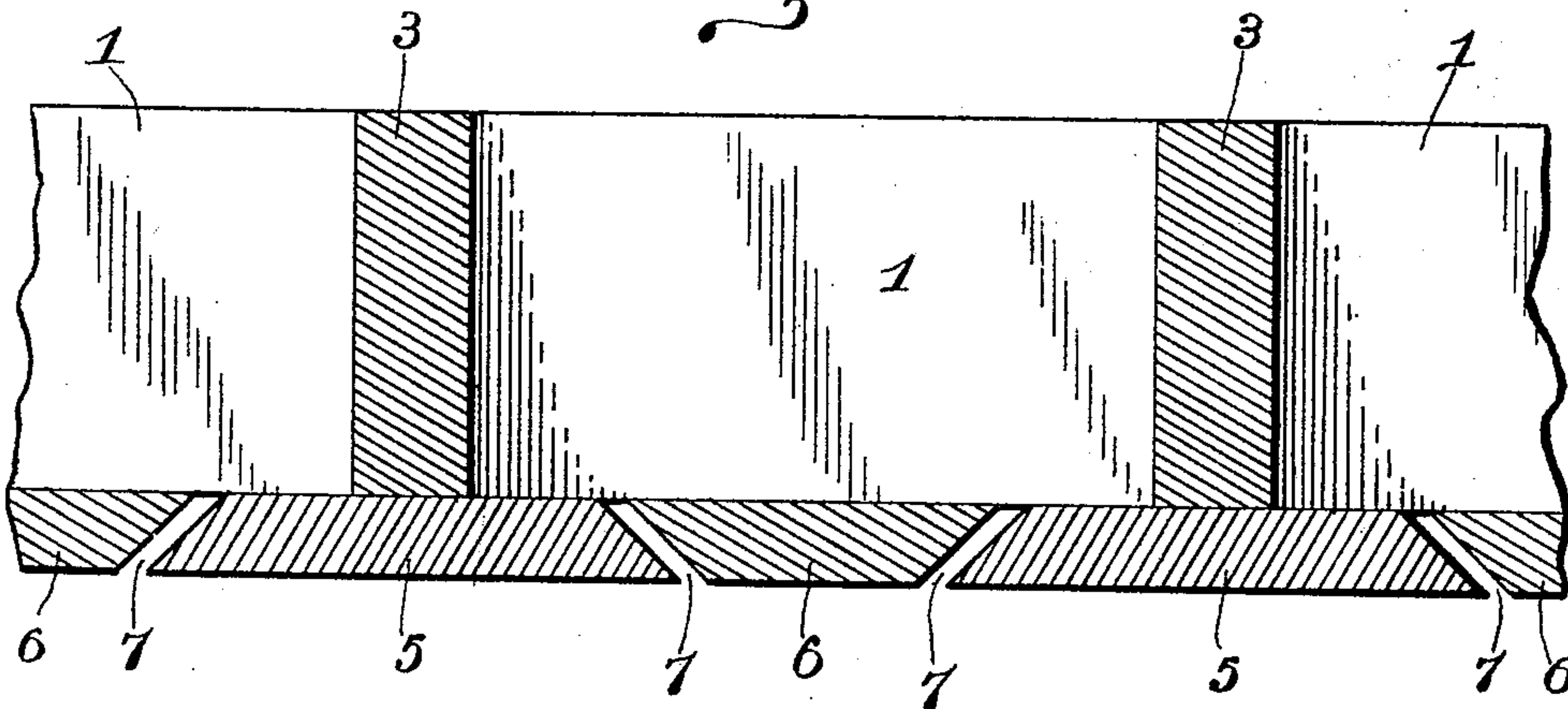


Fig. 2.



WITNESSES:

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OLIVER H. ROOT, OF INDIANAPOLIS, AND GRAFTON E. LUCE, OF BRAZIL,
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BRICK-MOLD.

SPECIFICATION forming part of Letters Patent No. 630,114, dated August 1, 1899.

Application filed January 16, 1899. Serial No. 702,332. (No model.)

To all whom it may concern:

Be it known that we, OLIVER H. ROOT, residing at Indianapolis, in the county of Marion, and GRAFTON E. LUCE, residing at Brazil, in the county of Clay, State of Indiana, citizens of the United States, have invented certain new and useful Improvements in Brick-Molds, of which the following is a specification.

As is well known, it is necessary to have vent-openings in the bottoms of brick-molds in order that the bricks can be readily removed therefrom. Openings at the corners of such molds as have heretofore been used have a tendency to leave the corners of the bricks somewhat rough and ragged, so that a second operation, known as "pressing," has been necessary where smooth symmetrical sightly work is required. Where the bottoms are severed from the sides and partitions at the corners also, they are apt to spring away, thus producing some variation of the dimensions of the brick and causing inequalities, so far as straightness and evenness are concerned. To construct separate valves is somewhat expensive, besides which said valves frequently become clogged and inoperative. If the openings through the bottom are vertical, then that portion of the bottom between the slits is wholly unsupported and may spring down a greater distance than is permissible with perfect work. However, some springing down of a central portion is not disadvantageous, as slight roughness on the sides of the brick with which the mortar comes in contact, while of not much importance either way, is rather an advantage than a disadvantage.

Our invention consists in forming the bottom in parts divided by slits running lengthwise of the several mold-cavities, said slits being at a point back from the edges or corners of the mold, and also arranged at an angle or diagonally to the mold-opening. With such slits the tendency when the clay is pressed into the molds is to spring the central portion of the bottom downwardly somewhat, causing the slits to partially or wholly close while the pressing operation is going on, while when the pressure is relieved the inherent spring force of these parts tends to return them to position, thus not only pro-

viding the vent-openings necessary to relieve the brick from being held in by suction, but also having a tendency to start the brick out of the molds, and this without causing any roughness at the corners or front edges, but only along the middle portions, where, as above stated, it is not objectionable, but rather advantageous.

In the accompanying drawings, Figure 1 is a perspective view of a brick-mold structure containing molds for six brick, and which is generally of an ordinary and well-known form, but in which the bottoms of the mold structure are formed in accordance with our present invention; and Fig. 2 is a longitudinal sectional view, on an enlarged scale, transversely of one of the molds and including fragments of two adjacent molds, illustrating our said invention more clearly.

These mold structures consist, as usual, of the side members 1 and 2, a suitable number of transverse partitions 3, which form the sides of the individual molds, and pieces 4, which also form the handles to the mold structures, and bottoms composed of parts 5 and 6, the edges of which are beveled, as shown, and between which are the slits 7. The bottom portions 5 are nailed strongly to the sides 1 2 and partitions 3, and thus, as will be readily seen, the corners of the molds at the bottoms of the partitions 3 have no openings or irregularities whatever, while the parts 5, which form a portion of said corners, are strong and rigid and unyielding. The bottom portions 6, however, are secured only at the ends to the side bars 1 and 2, and are thus springy and yielding in the center, as above described. The slits 7 are comparatively narrow, and under the pressure of filling the molds said slits are nearly closed, while when the pressure is relieved they reopen and start the bricks out of the molds. Too great a movement of these parts 6 is prevented by the edges of the parts 5, which extend under them, as clearly shown in Fig. 2, and with which said parts 6 will come in contact after but a comparatively slight movement and be thus supported.

It is of course obvious that where desired the bottom piece 6 may be made in two or more parts with narrow slits between the

several parts, especially where it is desired, as in the cases of extra-large brick or some peculiarly adhesive clays, to supply a greater number of vent-openings. These, however, 5 are mere mechanical details of arrangement and construction and are, of course, comprehended in our invention.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a brick-mold, of the usual sides and ends, bottom pieces 5 rigidly secured thereto and forming the corners to the molds, and other bottom pieces 6 secured 15 by their ends to the side pieces of the mold structure, narrow slits being left between said bottom pieces 6 and said bottom pieces 5, substantially as set forth.

2. The combination, in a brick-mold, of the 20 usual sides and ends, bottom pieces 5 rigidly secured thereto and extending across the par-

titions dividing the several molds and forming square and unyielding corners for said molds and having their edges also extending outwardly, and central bottom pieces 6 secured only by their ends and having their 25 upper edges extending over the outwardly-extending lower edges of the bottom pieces 5, thus leaving diagonal slits between said two bottom pieces, and said bottom pieces 5 30 thus being adapted to support the edges of said bottom pieces 6 when the latter are pressed downwardly, substantially as and for the purposes set forth.

In witness whereof we have hereunto set 35 our hands and seals, at Brazil, Indiana, this 10th day of January, A. D. 1899.

OLIVER H. ROOT. [L. S.]

GRAFTON E. LUCE. [L. S.]

Witnesses:

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D. O. STONE.