(No Model.) 2 Sheets—Sheet 1.

L. KAHN & H. V. MOORE.

MOLD FOR STOVE ASH PITS.

No. 526,904. Patented Oct. 2, 1894.

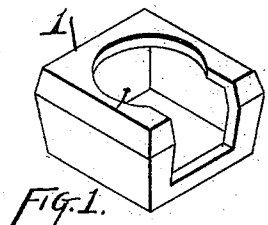

Fig. 1.

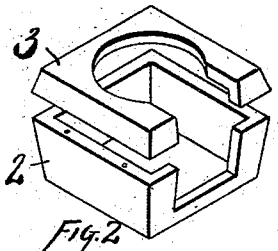

Fig. 2.

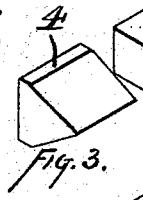

Fig. 3.

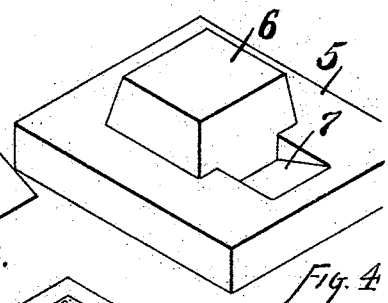

Fig. 4.

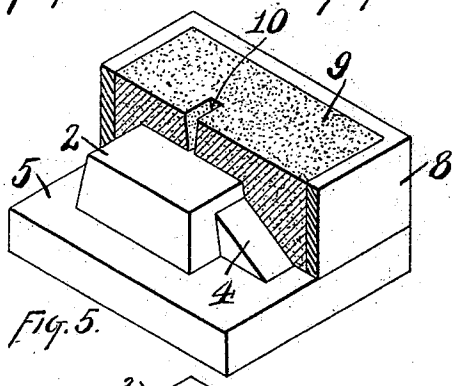

Fig. 5.

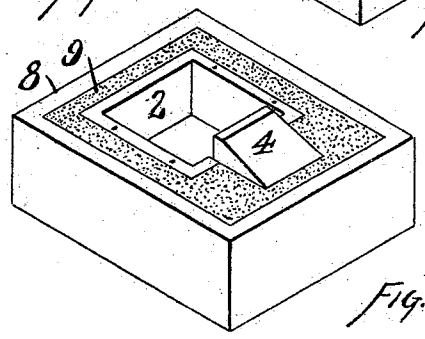

Fig. 6.

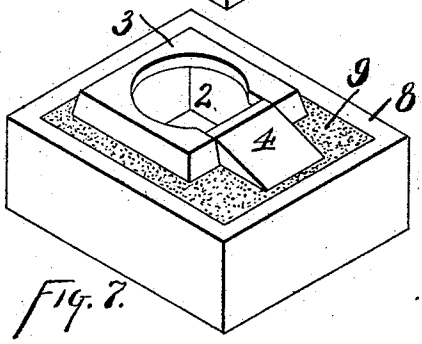

Fig. 7.

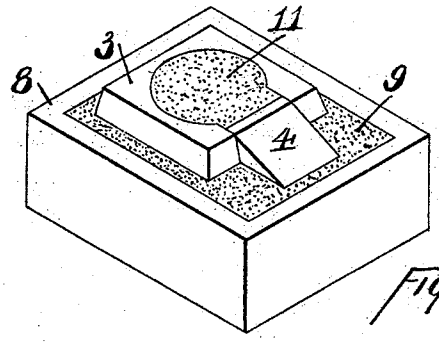

Fig. 8.

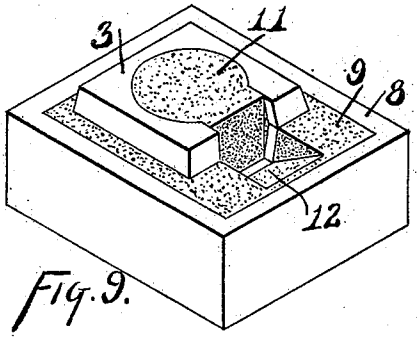

Fig. 9.

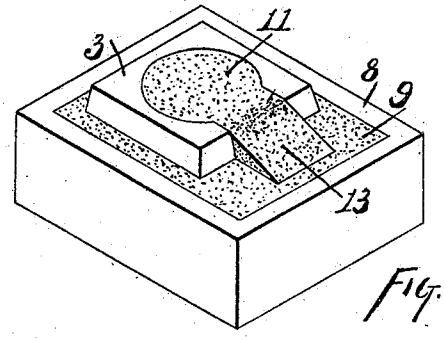

Fig. 10.

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(No Model.) 2 Sheets—Sheet 2.

L. KAHN & H. V. MOORE.

MOLD FOR STOVE ASH PITS.

No. 526,904. Patented Oct. 2, 1894.

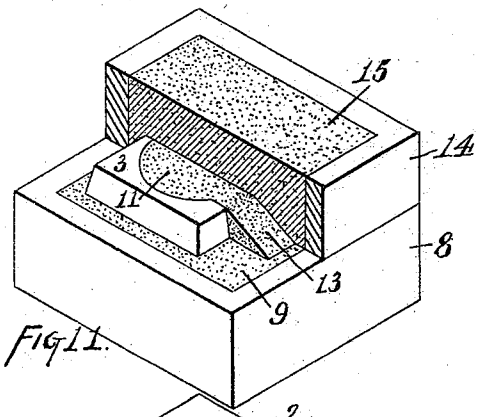

Fig. 11.

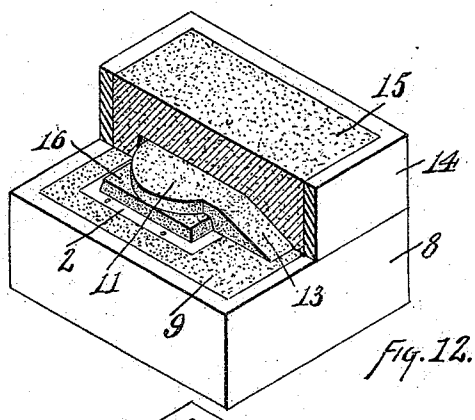

Fig. 12.

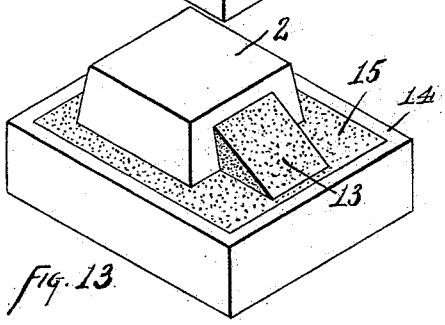

Fig. 13.

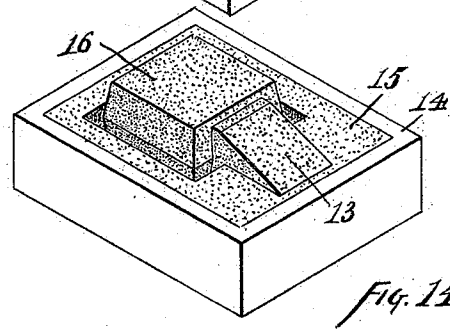

Fig. 14.

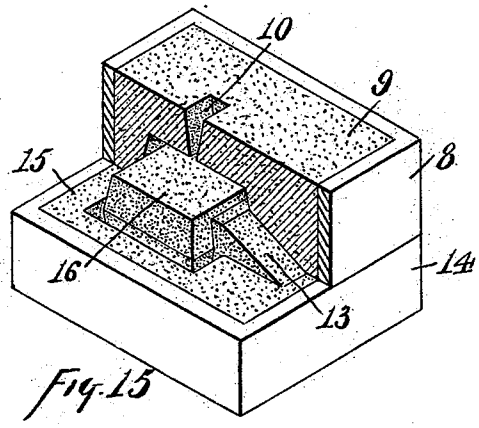

Fig. 15.

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UNITED STATES PATENT OFFICE.

LAZARD KAHN AND HARRY V. MOORE, OF HAMILTON, OHIO, ASSIGNORS TO F. & L. KAHN & BROS., OF SAME PLACE.

MOLD FOR STOVE ASH-PITS.

SPECIFICATION forming part of Letters Patent No. 526,904, dated October 2, 1894.

Application filed January 18, 1894. Serial No. 497,238. (No model.)

To all whom it may concern:

Be it known that we, LAZARD KAHN and HARRY V. MOORE, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Molds for Stove Ash-Pits, of which the following is a specification.

This invention pertains to improvements in molds for casting integrally that class of stove ash-pits formed of a box with an opening in its upper wall for the stove grate and with an opening in its front wall for the ash door.

Our improvements will be readily understood from the following description taken in connection with the accompanying drawings, in which—

Figure 1, is a perspective view of an exemplifying ash-pit of the class referred to; Fig. 2, a perspective view of the pattern employed in forming the mold; Fig. 3, a perspective view of a block employed in connection with the pattern in forming the mold; Fig. 4, a perspective view of the follow-board; and Figs. 5 to 15, inclusive, perspective views of the mold in progressive steps of construction, a portion of the mold appearing in some of the figures in vertical longitudinal section.

In the drawings, 1, indicates an exemplifying ash-pit consisting of an integral casting having an opening in its upper wall for the grate of the stove and having an opening in its front wall for the door of the ash-pit; 2, the base portion of the pattern; 3, the top portion of the pattern, the pattern differing from the casting to be produced only in being formed in two pieces, the parting of the pattern being in a horizontal plane at any selected point in the height of the ash-pit but preferably as high up as the top of the door of the ash-pit is to come, such location of the parting of the pattern permitting the entire seating surface of the door-jamb to be cast in a true plane or, in other words, with its draft all one way; 4, a block having one end of a form to fit the door opening in the pattern; the balance of the block having very strong drafts; 5, the follow-board adapted to receive the base pattern 2 in inverted position; 6, a boss projecting up from the follow-board to fit the interior of the base pattern 2, this boss being needed on the follow-board only in case the base pattern 2 is too light to withstand the proper ramming of the mold in the absence of the pattern being properly backed up interiorly by the follow-board, and 7, a recess in the follow-board to properly receive the block 4 when the block is inserted in the front opening of the base pattern and the base pattern is placed on the follow-board.

The process of forming the mold will be best explained by following the steps progressively in connection with Figs. 5 to 15 inclusive. Pattern base 2 and the block 4 are put upon the follow-board as seen in Fig. 5 after which the cope 8 is set and its sand 9 rammed and gated at 10. This completes the cope, as in Fig. 5. The cope is then turned over and the follow-board removed leaving the cope with the base pattern 2 and the block 4 in the sand as seen in Fig. 6. The pattern top 3 is then put in place over the pattern base 2 in the mold, as seen in Fig. 7. The inside of the pattern is then filled and rammed flush with the top of the pattern top, as seen at 11 in Fig. 8, the block 4 confining the sand to the interior of the pattern while being rammed. The block 4 is then withdrawn leaving a pit 12 in the cope as seen in Fig. 9. The pit is then dusted with parting sand, but the parting sand is not applied to the vertical wall which was formed by the sand 11 against the rear face of the block. The pit 12 is then filled with sand and rammed and built up to the form which the block had when in the mold, as seen in Fig. 10. This building up of the sand 13 to take the place of the block need not follow closely the form of the block it being only necessary that it be made with free drafts and that its sides be carried up in neat conformity to the side margins of the front opening in the pattern. The sand 13 with which the block is thus replaced becomes conglomerated with the vertical face of the sand 11 within the pattern whereby sand 11 and 13 go to form an integral core. This leaves the mold as seen in Fig. 10 and all the exposed sand surfaces are to be dusted with parting sand. The drag 14 is then applied to the cope and its sand 15 rammed in, completing the drag, as seen in Fig. 11. The drag is then lifted and the pattern-top 3 drawn and the drag replaced leaving the mold as

seen in Fig. 12, the pattern base 2 remaining in place and supporting the core 16 formed within the pattern, the sand 15 of the drag making solid contact with the sand 11 and 13 of the core. The flask is then turned over and the cope 8 lifted, leaving the drag as seen in Fig. 13 with the base pattern 2 upon the core which is supported by the sand parts 11 and 13 (see Fig. 12) resting solidly on the sand 15 in the drag. The pattern base 2 is then drawn leaving the mold as seen in Fig. 14. The mold is then closed by replacing cope 8, leaving the mold as seen in Fig. 15 and ready for the pouring.

All anchors are avoided and extremely thin castings may be produced with a superior degree of certainty. For the sake of simplicity in description, we have illustrated in Fig. 1 an ash-pit of merely exemplifying form and free from projecting hinge lugs or grate supports or projecting flanges or skirtings or leg duffs. Should any of these additions be desired it is merely a question of forming the pattern accordingly with the additions and treating them in the usual way. By referring to United States Patents No. 472,577, of April 12, 1892, and No. 478,334, of July 5, 1892, there will be seen ash-pits of the class herein referred to but provided with additional features of the kind above mentioned. Such ash-boxes may be made with certainty and economy in our improved molds.

We claim as our invention—

The improved mold for stove ash-pits, such mold consisting of a cope and drag in contact and forming a cavity the shape of the exterior of the ash-pit and forming in addition a pit extending outwardly from the front wall portion of such cavity into the joint between the cope and drag, and a core, the shape of the interior of the ash-pit, disposed within such cavity and having a frontal projection fitting said frontal pit, said core being supported by molded contact of said projection in said frontal pit and by its base making molded contact on the floor of said cavity in a plane parallel with the joint between the cope and drag, a parting being formed between said cope and drag and between said core and the cope and drag, substantially as and for the purpose set forth.

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HARRY V. MOORE.

Witnesses:
SAM D. FITTON, Jr.,
JAMES W. SEE.