A. A. PAULY.

TILE MAKING MACHINE.

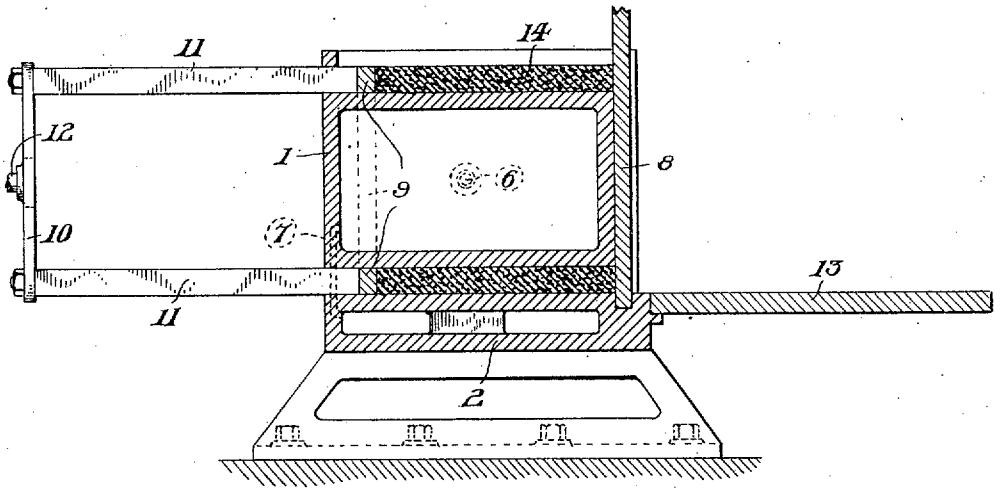
APPLICATION FILED JAN. 25, 1909.

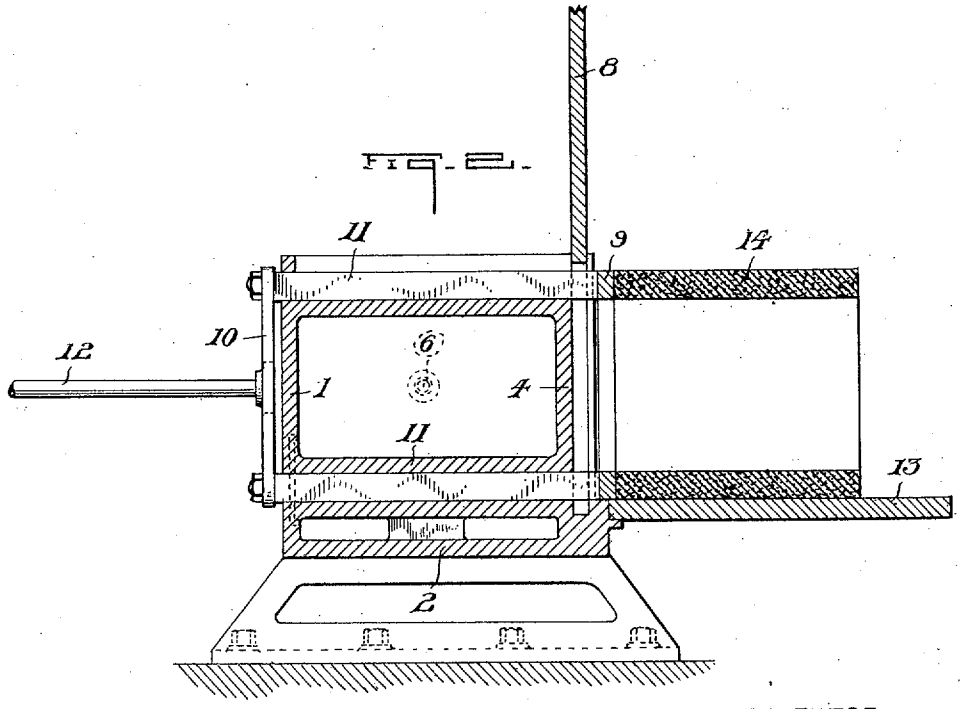
965,004.

Patented July 19, 1910.

2 SHEETS—SHEET 1.

Fig. 1.





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2 SHEETS—SHEET 2.

FIG. 3.

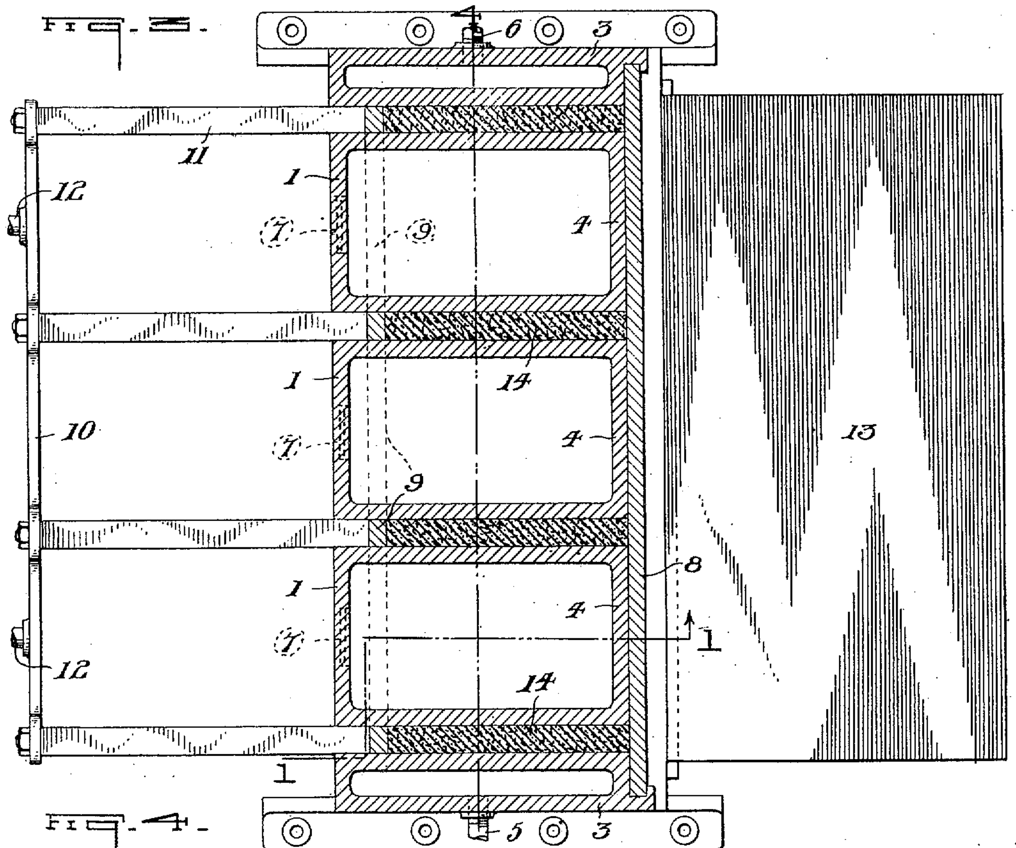
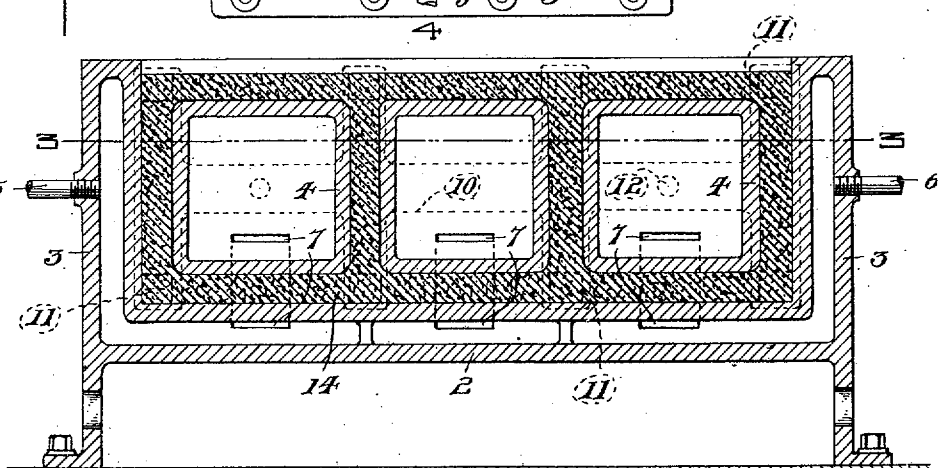


FIG. 4.



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UNITED STATES PATENT OFFICE.

ALBERT A. PAULY, OF YOUNGSTOWN, OHIO, ASSIGNOR TO THE CONCRETE STONE AND SAND COMPANY, OF YOUNGSTOWN, OHIO, A CORPORATION OF OHIO.

TILE-MAKING MACHINE.

965,004. Specification of Letters Patent. **Patented July 19, 1910.**

Application filed January 25, 1909. Serial No. 473,990.

To all whom it may concern:

Be it known that I, ALBERT A. PAULY, a citizen of the United States of America, residing at Youngstown, in the county of Mahoning and State of Ohio, have invented or discovered new and useful Improvements in Tile-Making Machines, of which the following is a specification.

My invention relates to machines for making hollow tile from concrete and its object is to provide a machine of this character in which the cores and stripping devices are horizontal, the concrete being poured in at the upper side of the mold instead of at one of the ends, as has heretofore been the practice.

Another object is to provide means for heating the mold body and the core in order to cause the cement to set quickly.

Referring to the accompanying drawings, Figure 1 is a vertical section on the line 1—1, Fig. 3, showing the mold filled with concrete; Fig. 2, a similar section, showing the parts at the close of a tile-ejecting operation; Fig. 3, a horizontal section on the line 3—3, Fig. 4; and Fig. 4, a vertical section on the line 4—4, Fig. 3.

On the drawings, 1 represents the vertical back wall of the mold, from which project the bottom 2, the sides 3, and the cores 4. I have shown all these parts integral but they may be formed of assembled pieces. The bottom and sides are made hollow for the reception of steam or other heating fluid, 5 representing the inlet and 6, the outlet for the same. In the back wall 1 are the passages 7 which place the interiors of the cores 4 in communication with the steam in the walls of the mold. Other means may be used to lead the steam to the cores.

The front of the mold is closed by the gate 8 which is held in place by grooves in the sides 3. The gate may be slid up in the grooves in order that the tiles may be ejected beneath it, as shown in Fig. 2. The rear end of the space in which the tiles are molded is closed by the pallet 9, which has an opening to receive each of the cores 4. A reciprocating cross-head 10 at the rear of the mold carries the plungers 11 which engage the rear face of the pallet. 12 represents the bar or piston rod for operating the cross-head.

13 is a platform or shelf forming a forward continuation of the bottom of the mold to receive and support the ejected tile 14.

15 is the base for the mold. It may be integral with the mold or be variously constructed.

The parts being as shown in Figs. 1 and 3, the concrete is poured into the spaces around the cores through the open upper side of the mold. The ends of the tile are shaped by the pallet 9 and the gate 8. The bottom and vertical sides of the tile are formed between the cores and the bottom and sides of the mold, while the upper side of the tile may be smoothed and shaped in various ways. Steam is passed through the hollow spaces in the mold and into the cores. When the tile has become sufficiently set to support itself, the gate 8 is raised and the cross-head 10 is pushed toward the mold to the position shown in Fig. 2, in which the tile 14 is shown ejected and lying upon the shelf 13. The parts are then returned to the position shown in Figs. 1 and 3 ready for the formation of another tile. The said shelf may be a removable one on which the tile may be removed from the molding machine.

I claim—

In a molding apparatus, a mold-body having hollow side and bottom walls, and an open upper side through which the material to be molded may be poured, a hollow horizontal core within the body, a rear wall connecting the core and the body, a removable vertical closure for the space between the front ends of the side walls, said closure being seated against the front end of the core, a pallet through which the core extends, and an ejector projecting through the rear wall and into engagement with the pallet, there being a passage in the rear wall connecting the hollows in the body and the core.

Signed at Youngstown, O., this 19″ day of January, A. D. 1909.

ALBERT A. PAULY.

Witnesses:

THOS. H. JENKINS,

ED. J. HOLWAY.