

No. 692,006.

Patented Jan. 28, 1902.

J. CREAGER.
BRICK MOLD.

(Application filed July 18, 1901.)

(No Model.)

Fig. 1

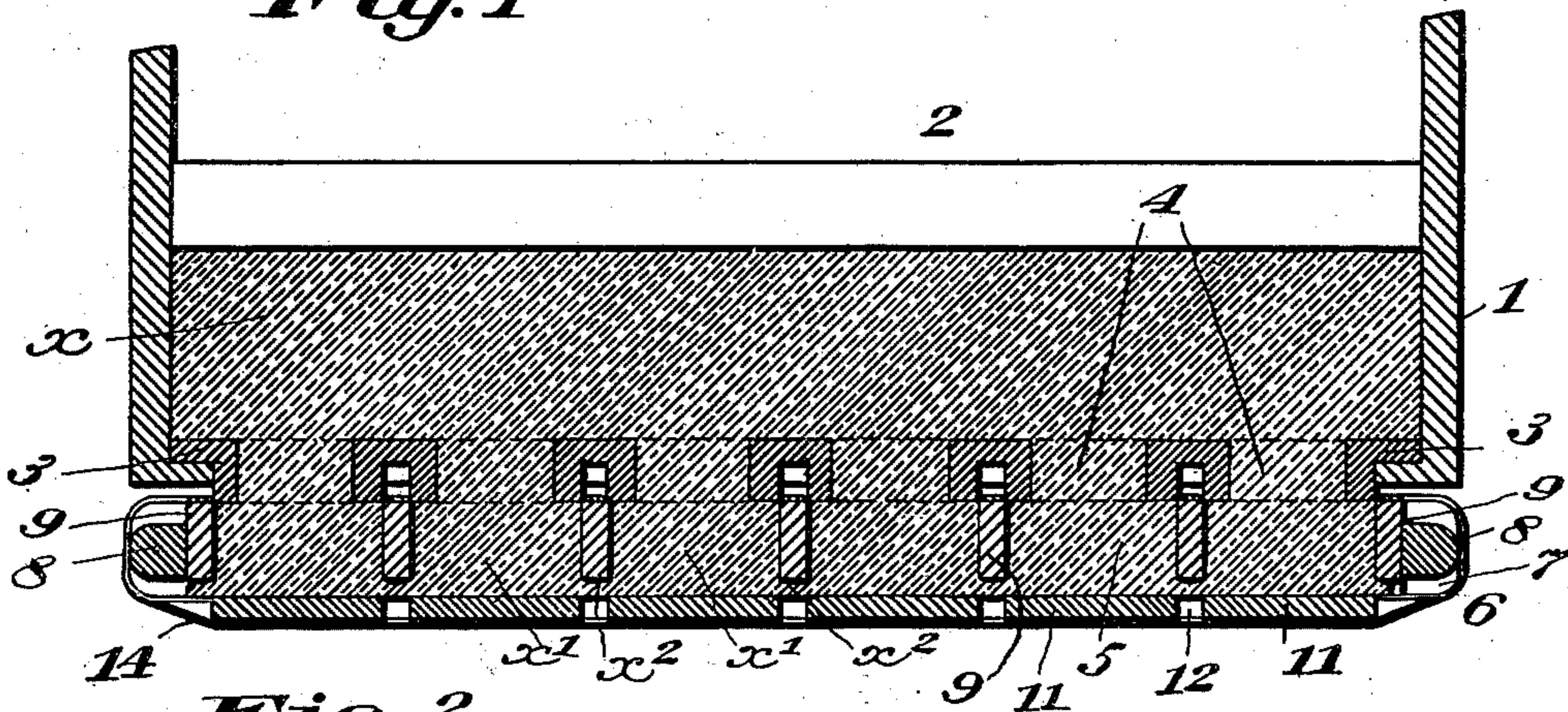


Fig. 2

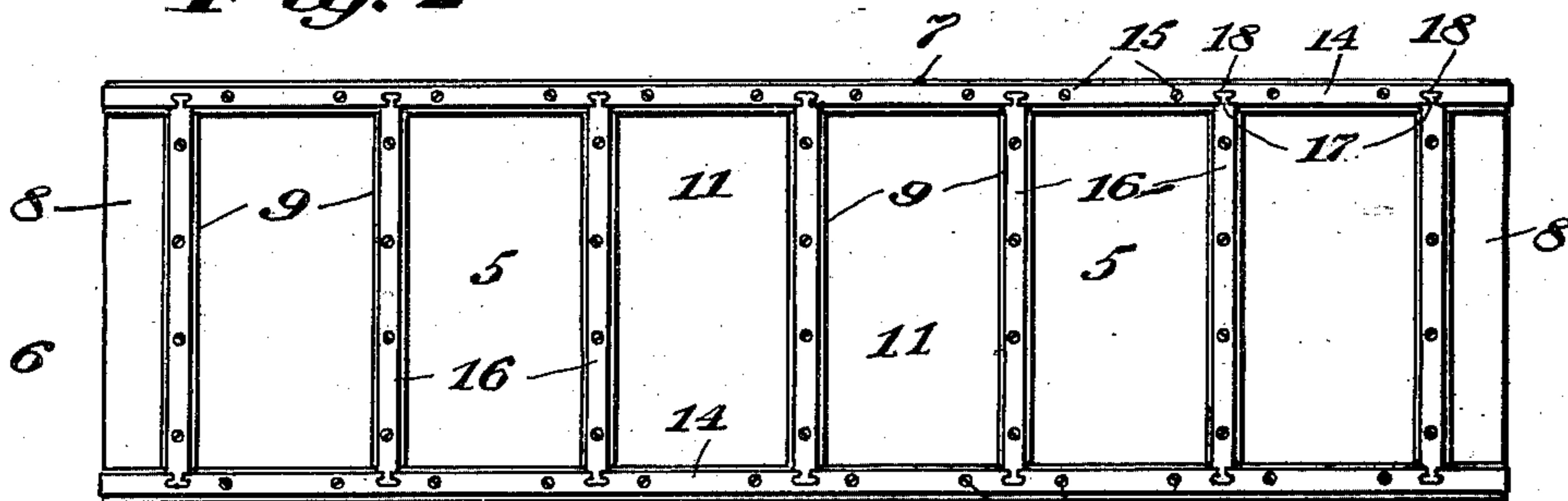


Fig. 3

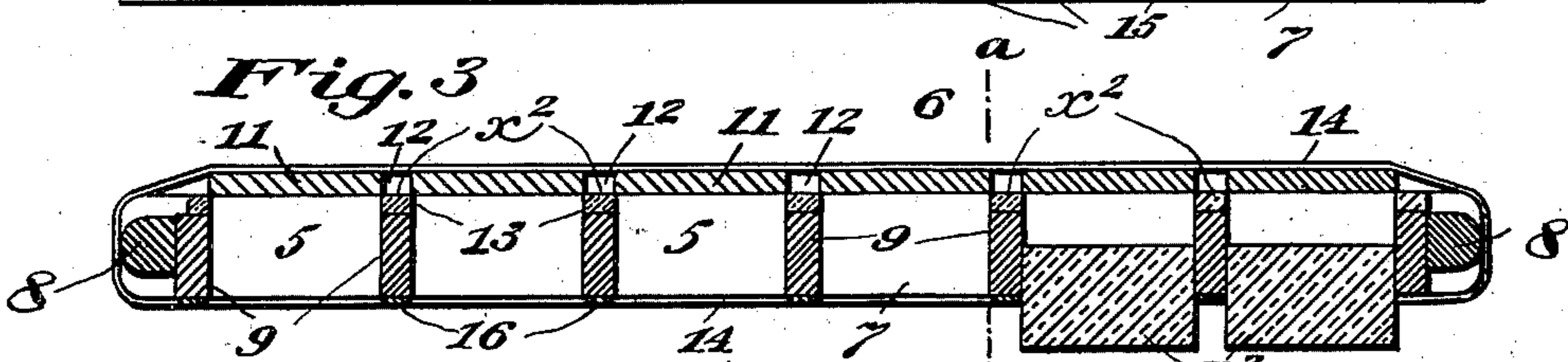


Fig. 4

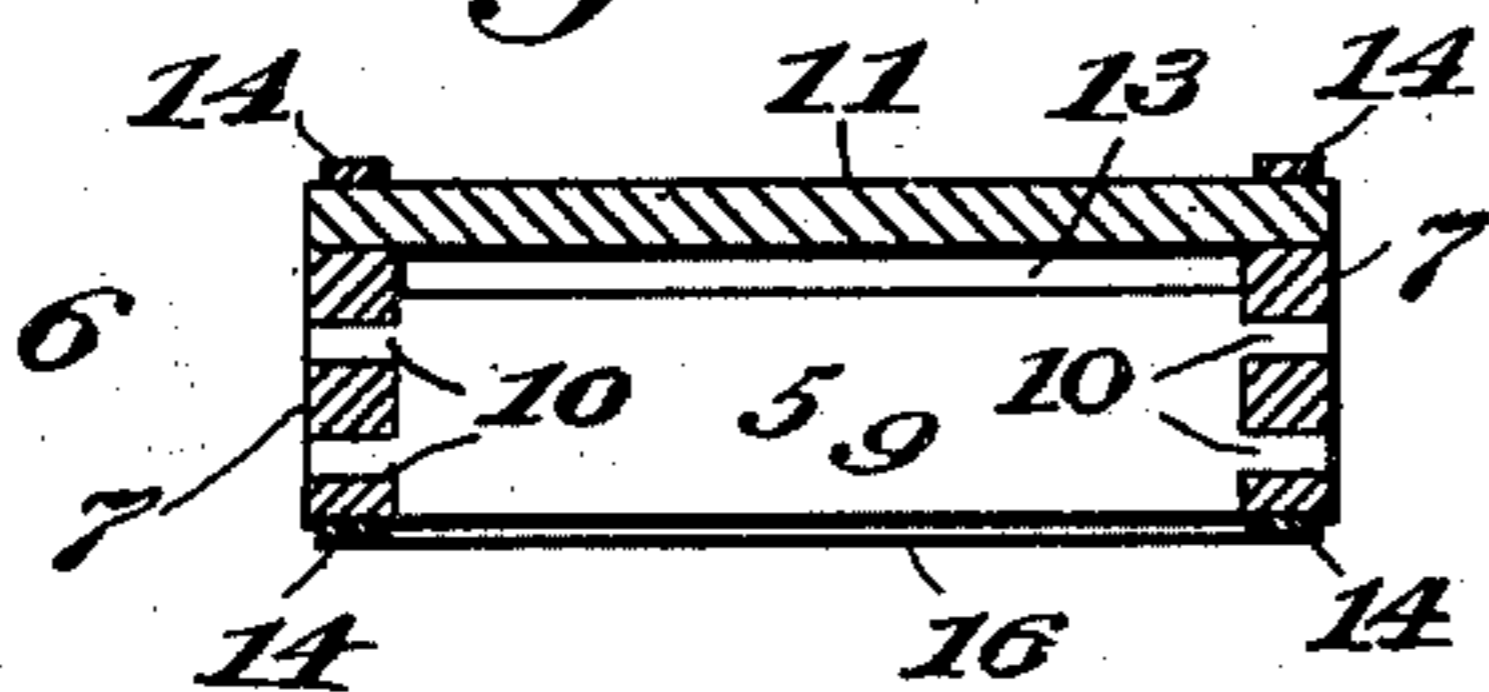
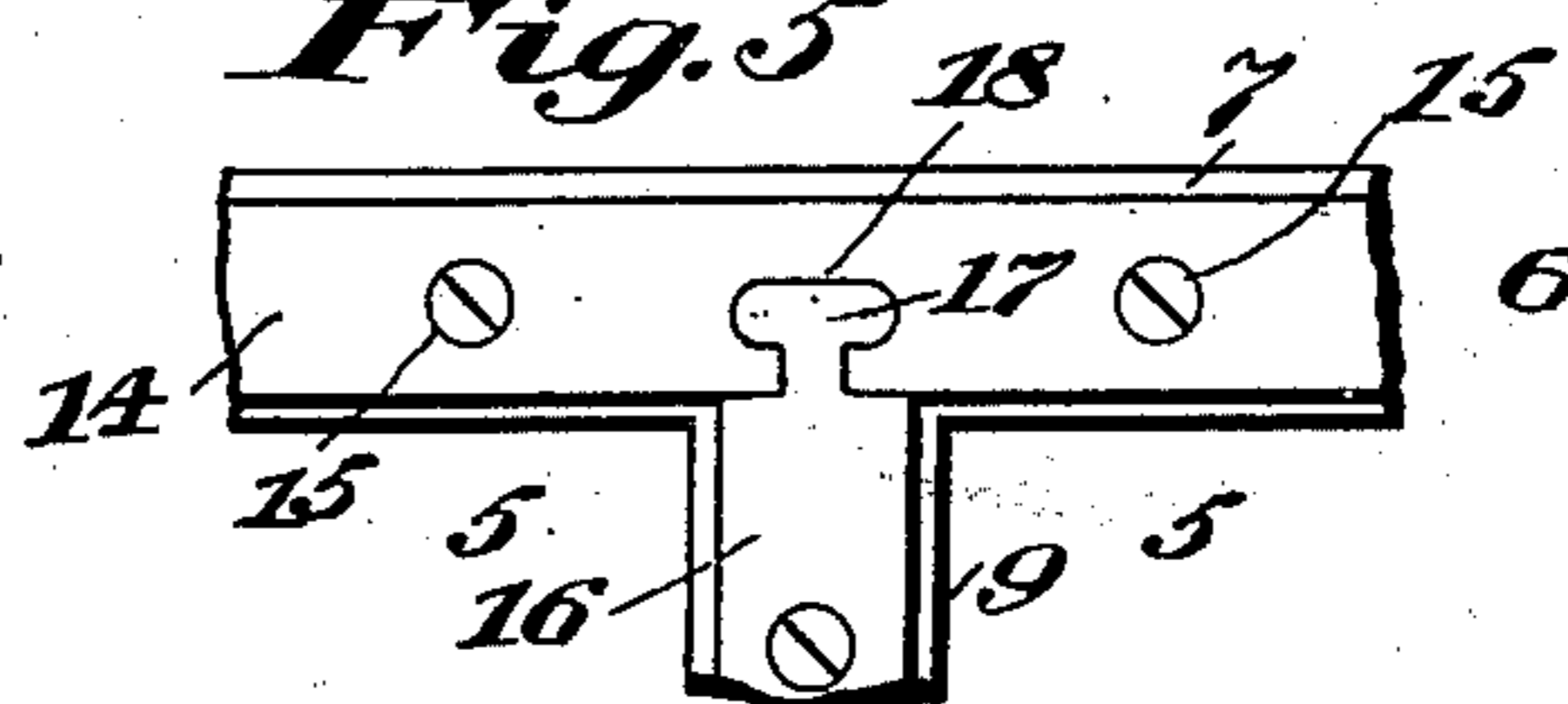


Fig. 5



Witnesses
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UNITED STATES PATENT OFFICE.

JONATHAN CREAGER, OF CINCINNATI, OHIO.

BRICK-MOLD.

SPECIFICATION forming part of Letters Patent No. 692,006, dated January 28, 1902.

Application filed July 18, 1901. Serial No. 68,707. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN CREAGER, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Brick-Molds, of which the following is a specification.

This invention relates to certain improvements in molds such as are used in pressing brick and other articles, and has for its object to provide a mold of this character of a simple and inexpensive nature and of a strong and durable construction, having improved and simplified means for facilitating the removal of the molded articles from it.

The invention consists in certain novel features of the construction, combination, and arrangement of the several parts of the improved mold, whereby certain important advantages are attained and the device is made simpler, cheaper, and otherwise better adapted and more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In the accompanying drawings, which serve to illustrate the invention, Figure 1 is a fragmentary sectional view taken through the die of a brick-machine and showing a mold embodying my improvements in position under the same. Fig. 2 is a plan view of the improved mold. Fig. 3 is a longitudinal section taken through the improved mold and showing the same in inverted position for the removal of the brick therefrom. Fig. 4 is a cross-section taken through the mold in the plane indicated by the line *a a* in Fig. 3. Fig. 5 is an enlarged fragmentary view showing details of construction of the reinforcing means for the walls of the improved mold.

In the views, 1 indicates the casing of the brick-machine, and 2 indicates the plunger movable therein.

3 indicates the die through which the clay is pressed upon the downward movement of the plunger into the mold, said die having openings 4, corresponding in position with but of less dimensions than the chambers 5 of the mold, the lower edges of said die overhanging along the sides of each chamber 5, so that as the clay is pressed into the mold it will be caused to completely fill the lower por-

tions of the chambers before it comes into contact with the side walls thereof.

6 indicates, as a whole, the mold arranged beneath the die. The mold 6 comprises side pieces 7 7, extended lengthwise along opposite sides of the mold and tied together at the ends thereof by cross-braces 8 8, which form handles by means of which the mold may be conveniently lifted for its manipulation. The side pieces 7 are also braced and tied together at intervals by cross-pieces or partitions 9 9, each of which has at its ends tenons 10, engaged with sockets in the side pieces of the mold. The partitions 9 divide the interior of the mold transversely into chambers 5, each the size of a single brick. The bottom or floor of each chamber 5 is formed of a plate 11, secured on the under side of the mold with its ends overlapping the side walls 7, and the said bottom plates 11 are spaced apart or separated from each other, as shown at 12, at distances corresponding with the thicknesses of the several partitions 9, their edges being alined with the walls of the spaces 5, as clearly shown in Fig. 3. The partitions 9 do not extend entirely down to the plane of the bottom plates 11, but have their lower edges spaced apart from and above said bottom plates, so that openings 13 are produced beneath said partitions, which openings afford communication between the several spaces 5 5, and also afford communication between said spaces or chambers 5 and the openings 12 between the bottom plates 11 of the several chambers, so that air may enter said chambers when the mold is inverted to facilitate the removal of the molded articles from their chambers.

Reinforcing-strips 14 of metal are extended along the upper and lower edge portions of the side pieces 7 of the mold to strengthen the same, said reinforcing-strips being extended outside of the bottom plates 11 of chambers 5 and being secured in place by means of screws 15 or the like. Other reinforcing-strips 16 are also extended along the upper edges of the partitions 9 and are similarly secured in place by screws or the like, being formed at their ends with T-shaped members 17, which engage in and interlock with similarly-formed openings 18, produced in the reinforcing-strips 14, as clearly shown in Figs. 2 and 5. These reinforcing-strips securely

bind and hold the several parts of the mold in relation and greatly strengthen the same.

In using the improved mold the clay (indicated at x in Fig. 1) is pressed upon the downward movement of the plunger 2 down through the openings 4 of the die and into the chambers 5 of the mold, where it is permitted to expand laterally, so as to completely fill the chambers of the mold, as indicated at x' . The pressure imparted by the downward movement of the plunger 2 will cause a portion of the clay to enter the spaces 13 beneath the partitions 9, as indicated at x^2 , the clay being pressed laterally into said spaces 13 from the lower portions of the chambers 5. When the mold has been filled and pressed and the removal of the molded brick is desired, the mold is inverted to the position shown in Fig. 3, whereupon the weight of the clay within the chambers 5 of the mold will cause them to fall, as shown at the right in Fig. 3, from said chambers 5, air entering through the spaces or openings 12 and 13 to replace the clay and facilitate the removal thereof. As the molded articles fall from the chambers 5 of the mold 6 it is evident that the projecting flanges or fins x^2 in the openings or spaces 13 will be sheared off from the sides of the brick by the lower edges of the partitions 9, beyond the sides of which said portions x^2 project or overhang, so that the sides of the brick produced by my improved mold are made perfectly true and smooth. The portions so sheared off from the molded articles will fall freely from the openings 12 when the mold is again set upon the bottom plates 11, since the said bottom plates do not project beneath the partitions to permit lodgment of the sheared off fins or flanges above them. In this way the vents formed of the openings 12 and 13 are kept free and do not become clogged up. The bottom plates 11 being made of a width not less than the distance between the partitions 9, it is also evident that the corresponding surfaces of the molded articles will be perfectly true and smooth and will carry no fins or flanges, such as would be produced upon them if said bottom plates were made of less width than the distance between the partitions 9.

From the above description it will be seen that the improved mold constructed in ac-

cordance with my invention is of an extremely simple and inexpensive nature and is especially well adapted for use, since it insures a smooth and perfect surface upon the molded articles and permits of effecting a very material economy in the manufacture of brick. The construction is also extremely simple and inexpensive and is very strong and durable, there being no liability of closing of the air spaces or openings 12 and 13 by the swelling of the material of which the bottom plates and partitions are formed. It will also be obvious from the above description that the improved mold constructed as above described is capable of considerable modification without material departure from the principles and spirit of the invention, and for this reason I do not wish to be understood as limiting myself to the precise form and arrangement of the several parts of the device herein set forth.

Having thus described my invention, I claim—

1. A mold for brick or other articles formed of side pieces extended parallel and spaced apart, transverse parts extended between the side pieces to form a chamber between said transverse parts and side pieces and a bottom plate held in fixed relation with respect to said side pieces and transverse parts and extended entirely across the bottom of said chamber to close the same, one wall of said chamber being alined with the edge of said bottom plate and being formed of a part the lower edge of which is arranged above the plane of said bottom plate to produce beneath said part an opening having communication with said chamber and adapted for the admission of air thereto, substantially as set forth.

2. A mold for brick and other articles having its interior provided with a partition dividing it into two chambers and having a fixed bottom provided with an opening alined with, and of a width equal to the thickness of the partition, substantially as set forth.

Signed at Cincinnati, Ohio, this 15th day of July, 1901.

JONATHAN CREAGER.

Witnesses:

JOHN ELIAS JONES,
J. D. THORNE.