

No. 750,790.

PATENTED FEB. 2, 1904.

D. W. ANDERSON.  
COMBINED BRICK AND TILE.

NO MODEL.

APPLICATION FILED FEB. 6, 1903.

3 SHEETS—SHEET 1.

Fig. 3.

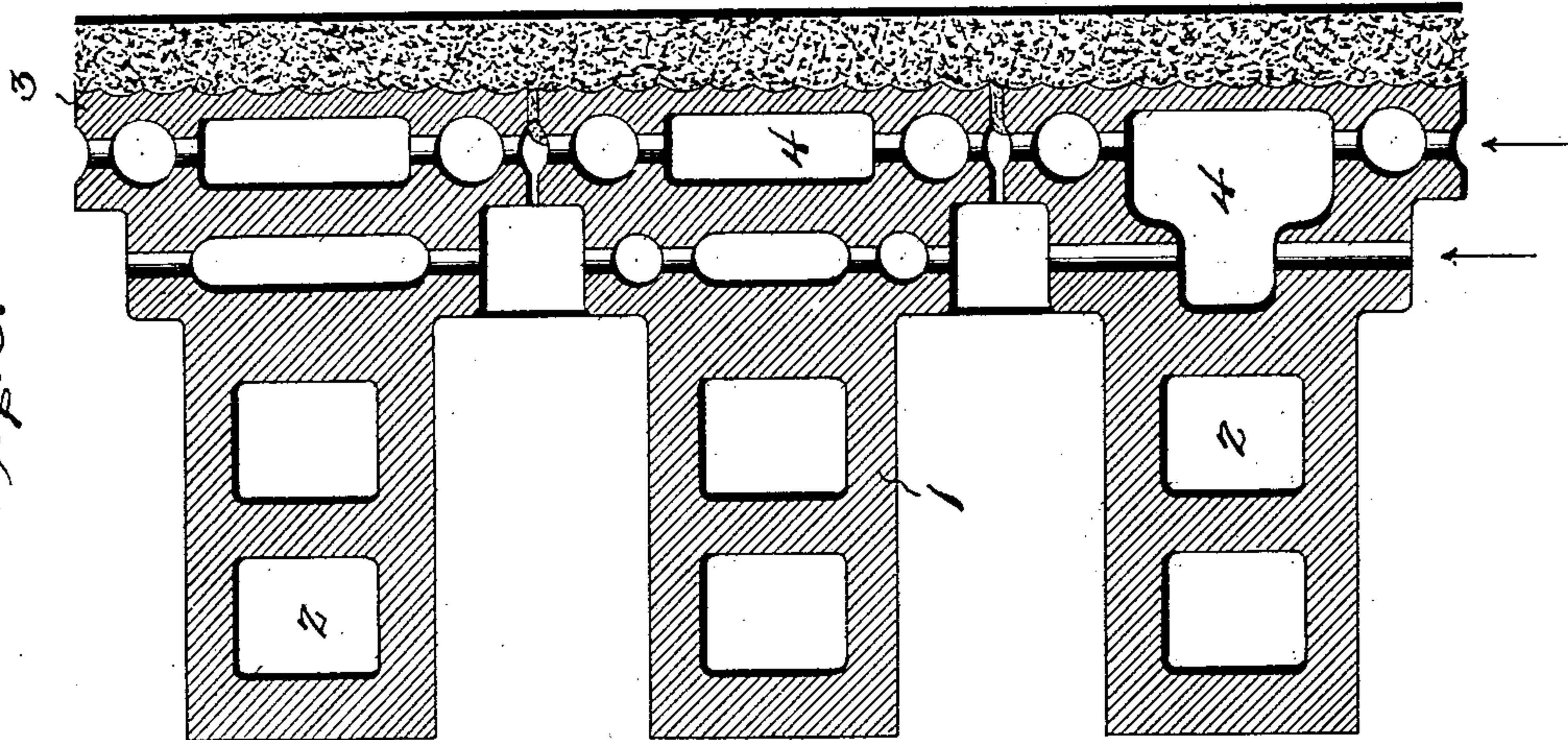


Fig. 2.

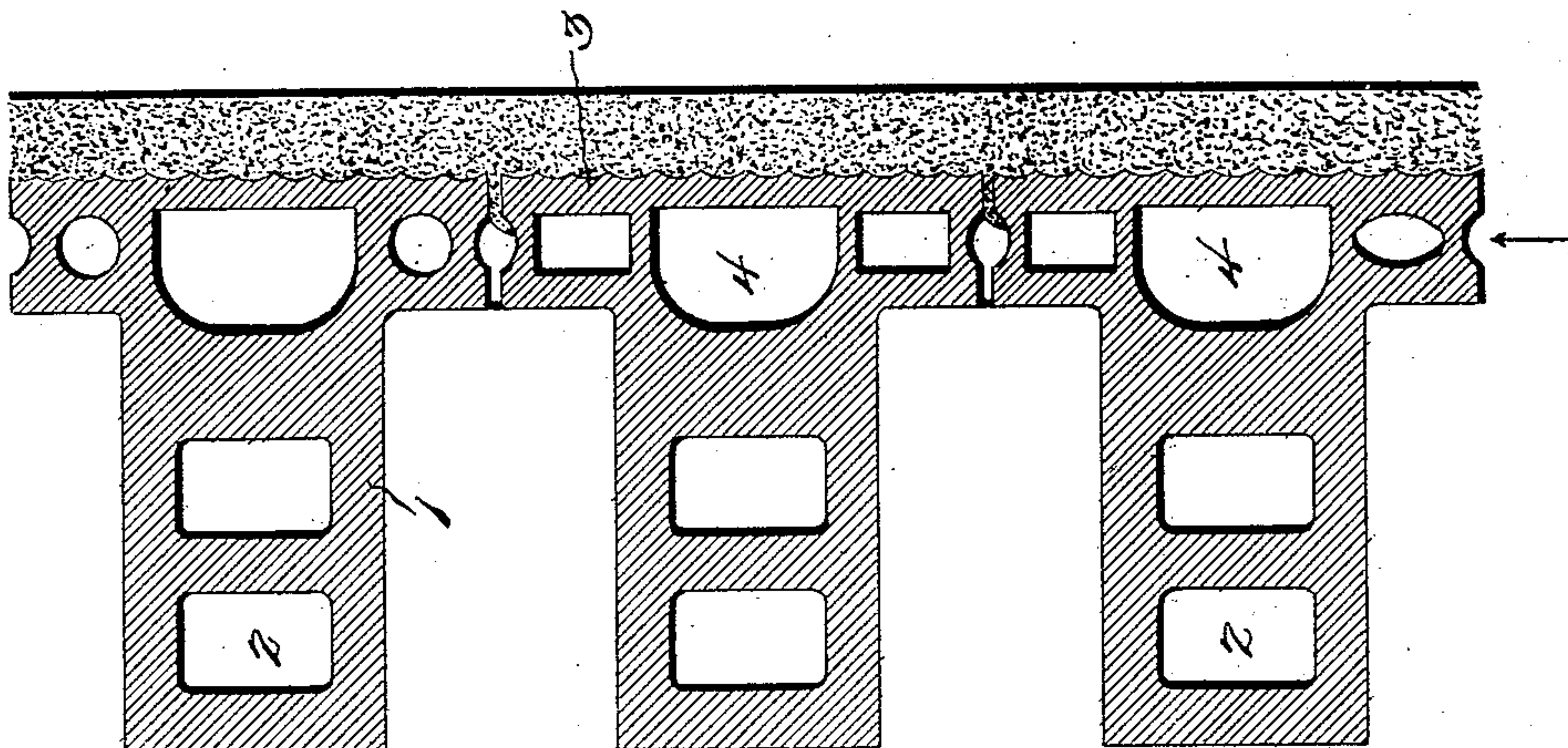
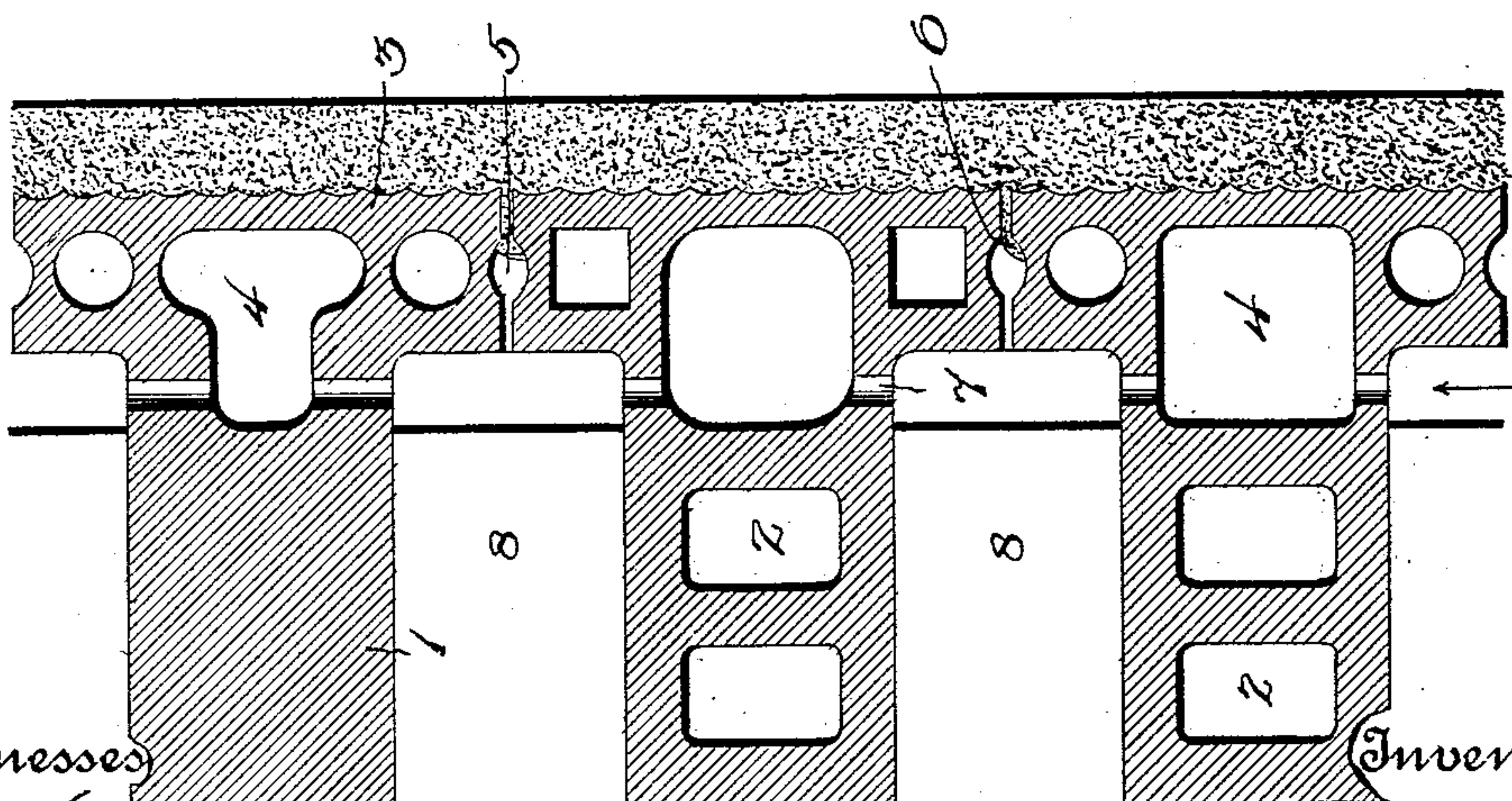


Fig. 1.



Witnessed  
P. L. Mochel  
May M. Pyle.

Inventor.  
David Wiley Anderson  
by Jas. L. Skidmore  
his Attorney.



No. 750,790.

PATENTED FEB. 2, 1904.

D. W. ANDERSON.  
COMBINED BRICK AND TILE.

APPLICATION FILED FEB. 6, 1903.

3 SHEETS—SHEET 2.

NO MODEL.

Fig. 4.

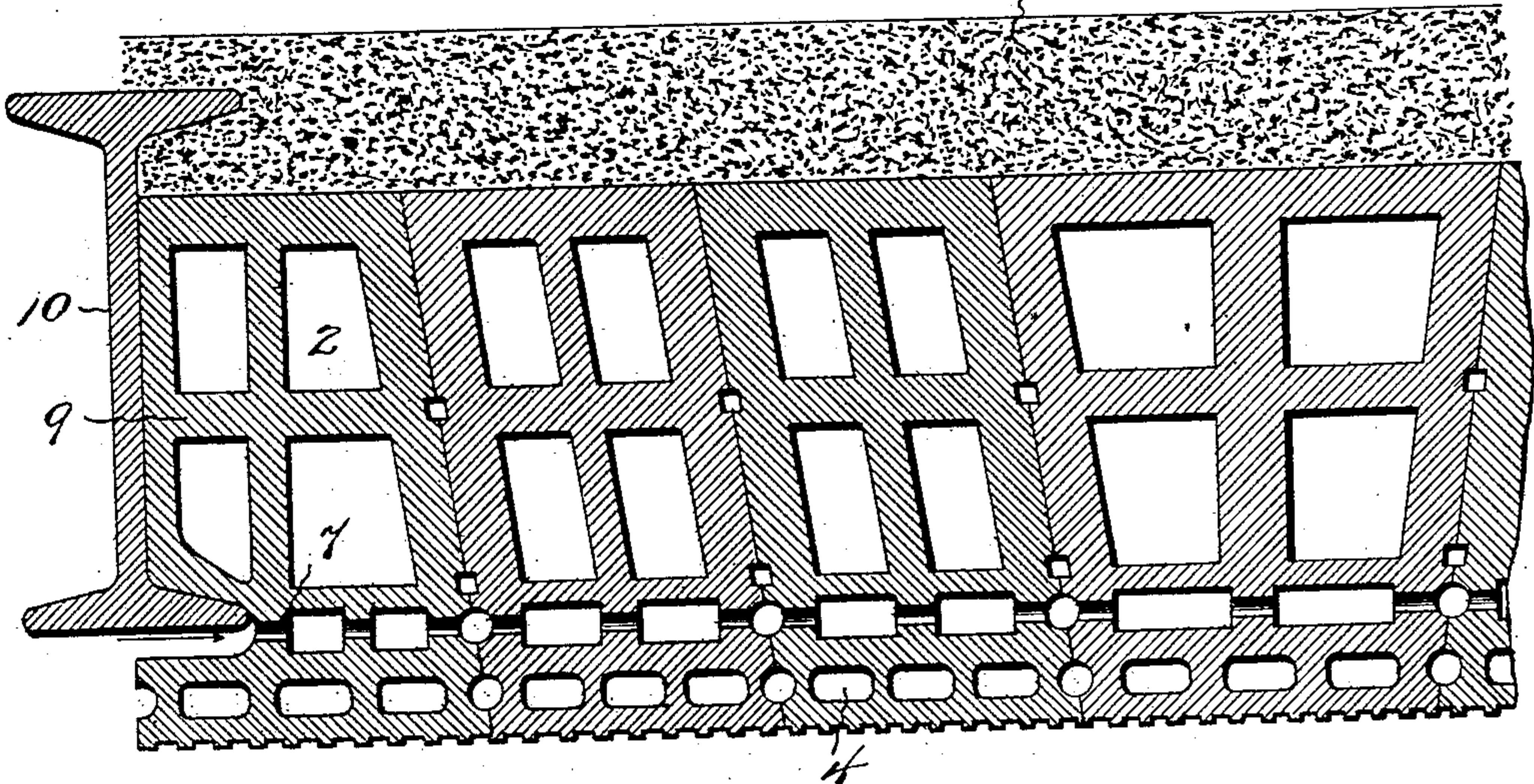


Fig. 5.

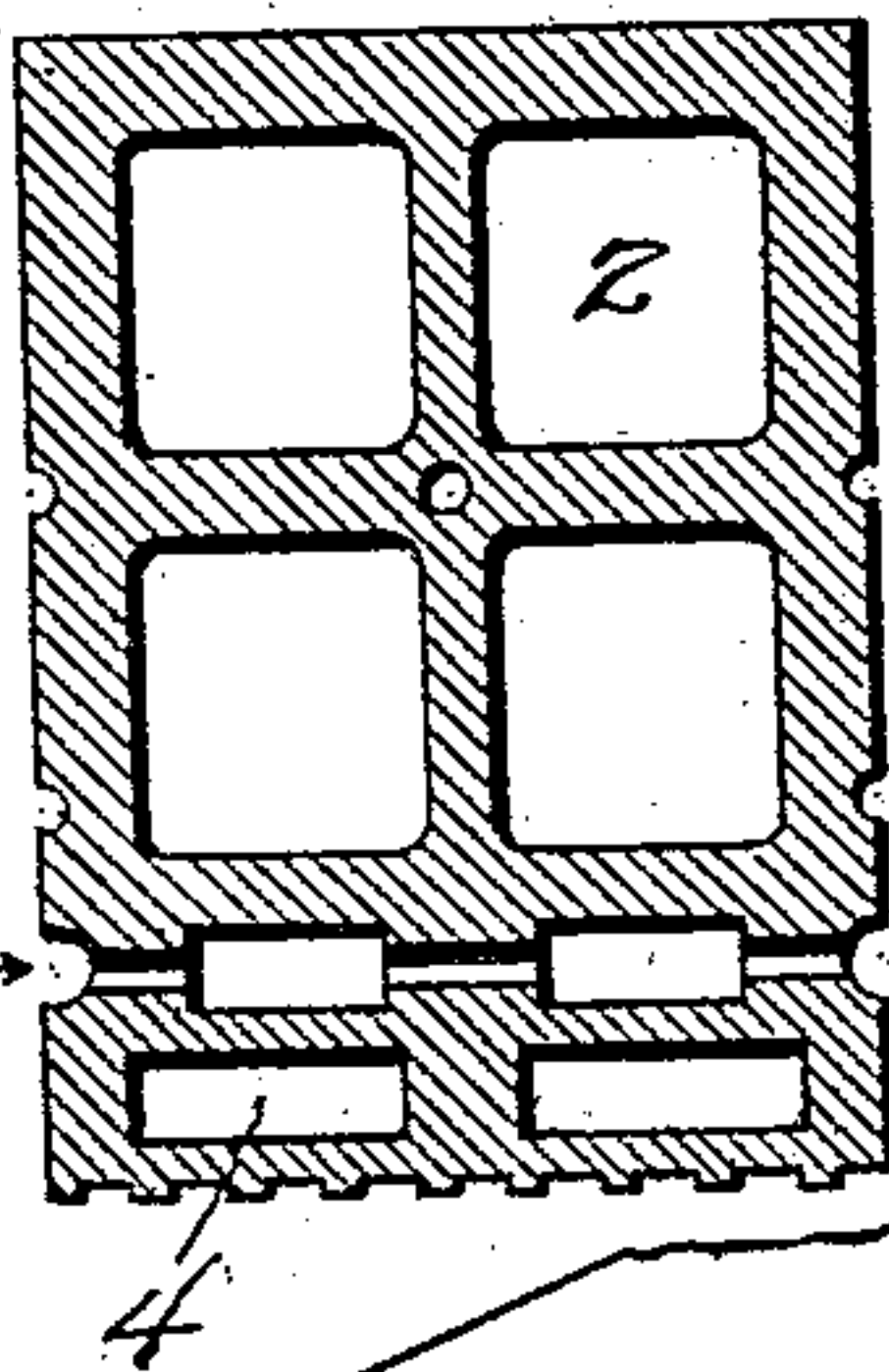


Fig. 6.

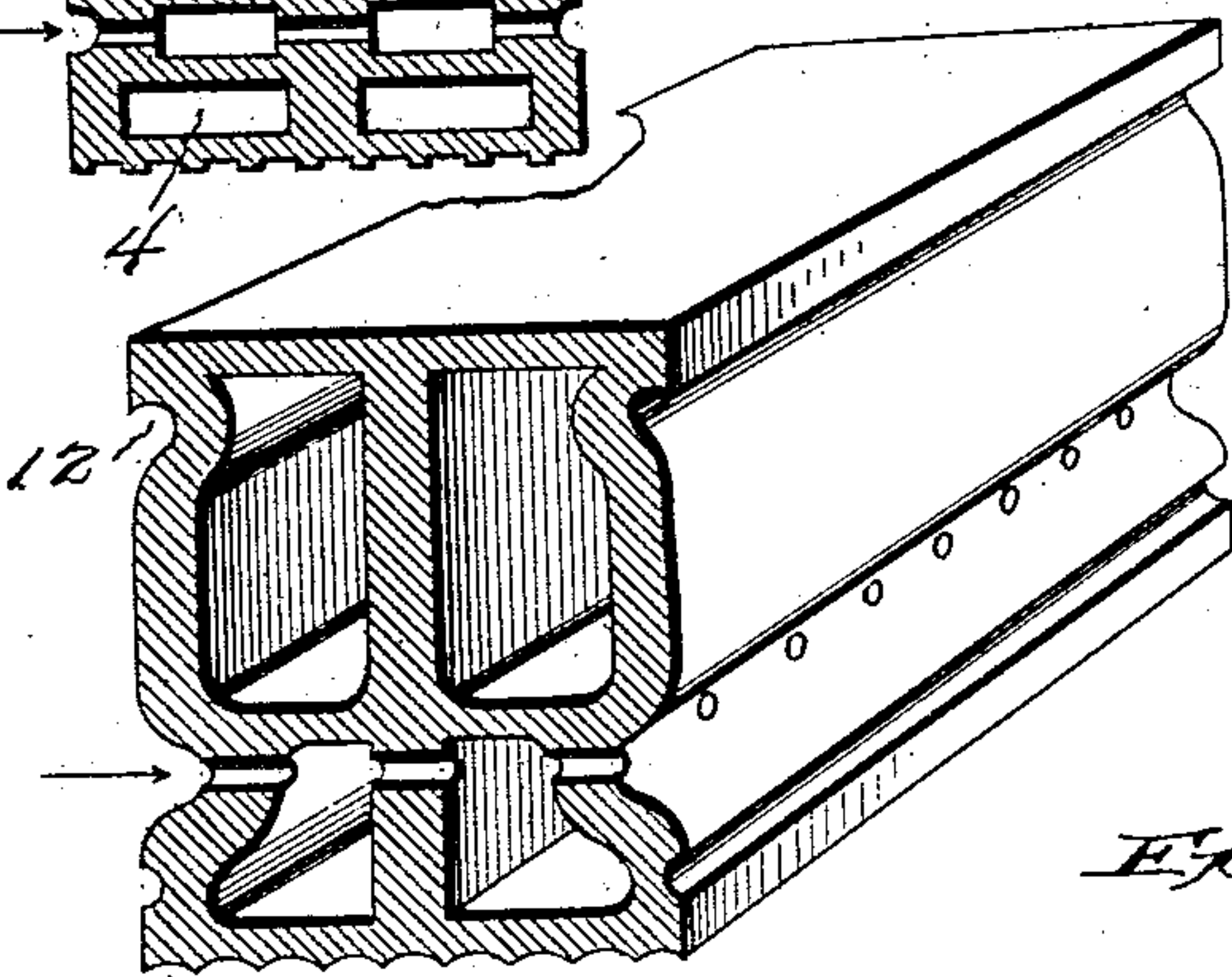


Fig. 11.

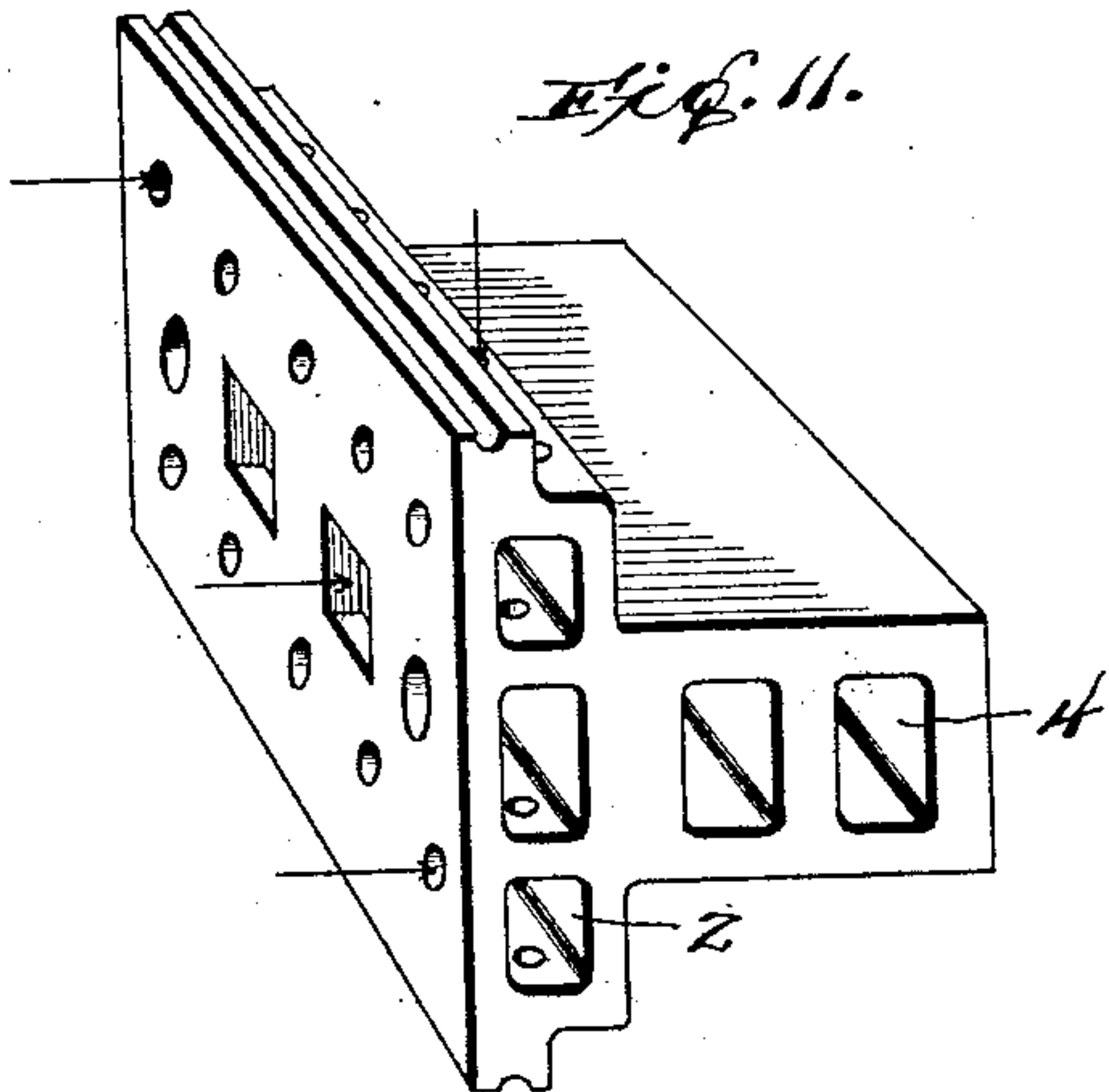
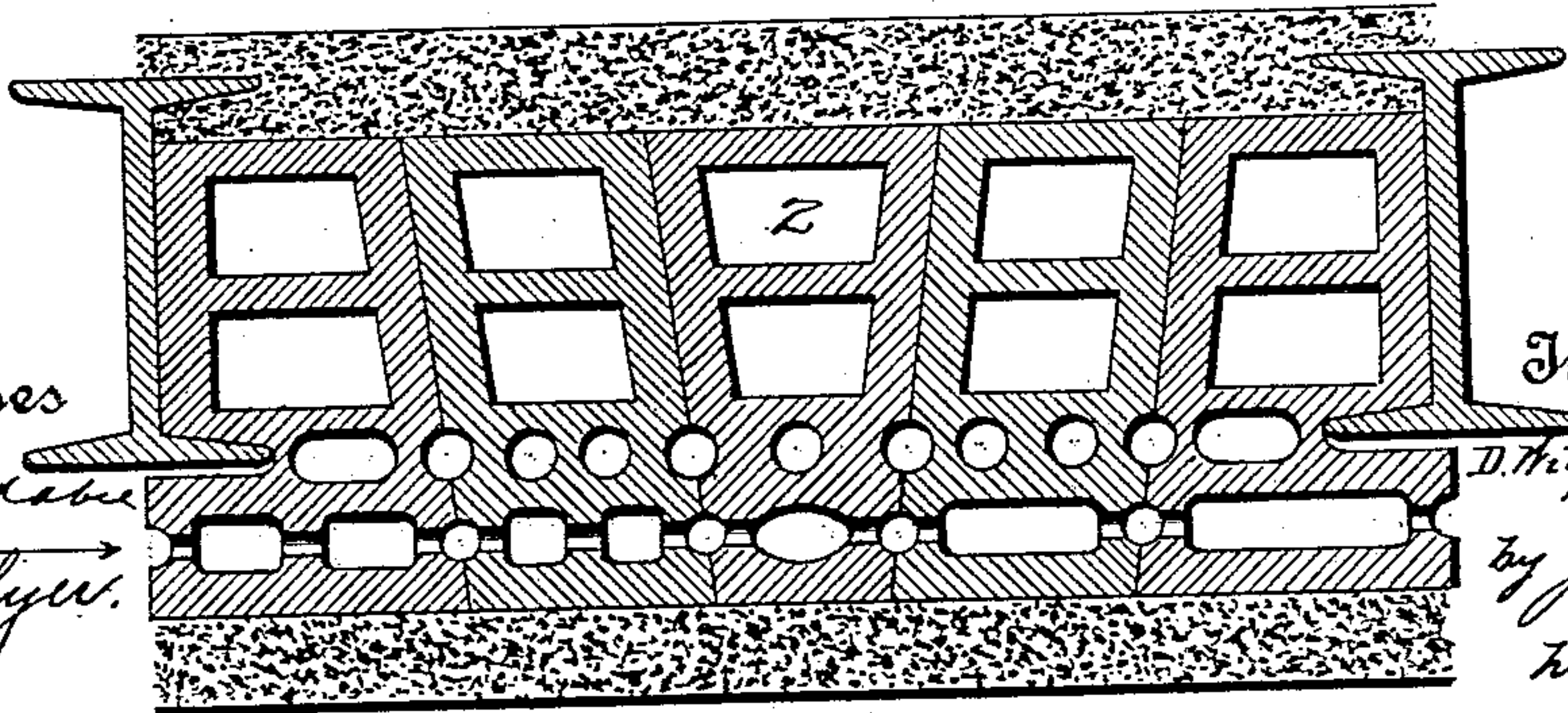


Fig. 7.



Witnesses  
G. L. Knoch  
May M. Plyer

Inventor  
D. W. Anderson  
by Jas. L. Michener  
his Attorney.



No. 750,790.

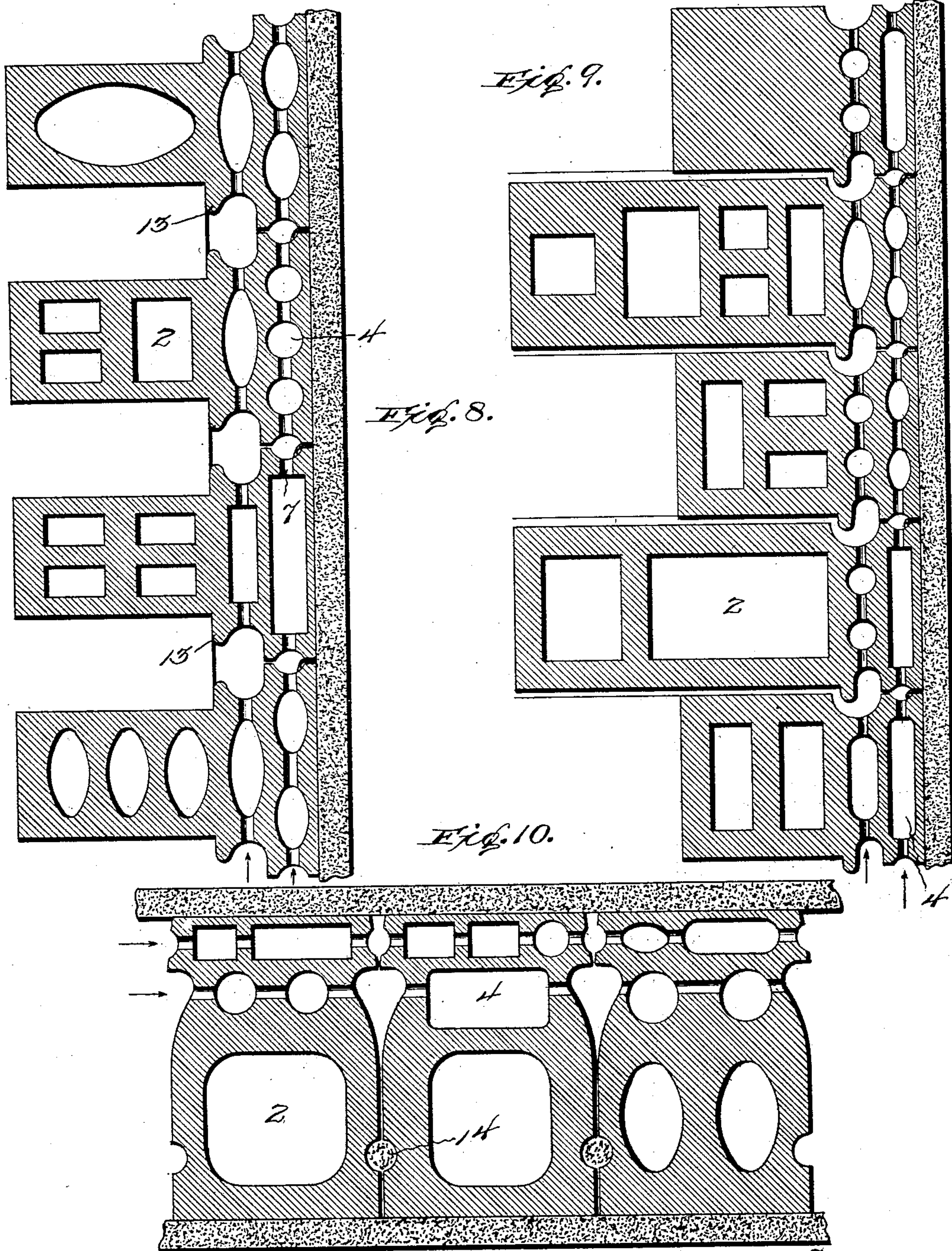
PATENTED FEB. 2, 1904.

D. W. ANDERSON.  
COMBINED BRICK AND TILE.

APPLICATION FILED FEB. 6, 1903.

NO MODEL.

3 SHEETS—SHEET 3.



Witnesses  
J. L. Kocman  
May M. Plyer.

Inventor  
David Wiley Anderson  
by Jas. L. Skidmore  
Attorney.



# UNITED STATES PATENT OFFICE.

DAVID WILEY ANDERSON, OF RICHMOND, VIRGINIA.

## COMBINED BRICK AND TILE.

SPECIFICATION forming part of Letters Patent No. 750,790, dated February 2, 1904.

Application filed February 6, 1903. Serial No. 142,178. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID WILEY ANDERSON, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in a Combined Brick and Tile; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined brick and tile; and the objects of the same are to provide a combined brick and tile which shall be comparatively light in weight, which shall be provided with openings or hollows in the tile portion for rendering the structure light in weight and for ventilation, for more thoroughly fireproofing steel beams and analogous structures, and to provide a combined brick and tile having openings in both the brick and tile portions and air-passages in the intermediate integral portion between the brick and tile.

Another object is to provide a combined brick and tile having openings or hollows in the tile portion and air-passages intersecting said openings or hollows, while the brick portion and the intermediate integral portion between the brick and tile may be either solid or hollow to suit different conditions and for different classes of work.

A combined brick and tile made in accordance with my present invention embodies strength, lightness in weight, and provision for ventilation, and the openings and hollows are of the required area to insure uniformity in strength in order that liability of breakage in handling and laying may be reduced to a minimum.

The objects and advantages referred to are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view of a portion of a wall made up of combined brick and tile made in accordance with one form of my invention. Fig. 2 is a like view showing a section of a wall made up of combined brick and

tile having an extended tile portion provided with openings or hollows. Fig. 3 is a similar view showing the brick and tile having an extended or enlarged portion intermediate the brick and tile and said intermediate portion provided with perforations or air-passages. Fig. 4 is a sectional view of a floor construction, showing brick and tile of the required contour for structures of this character. Fig. 5 is a cross-section through a substantially rectangular combined brick and tile designed to be used in structures similar to that shown in Fig. 4. Fig. 6 is a perspective view of a brick-tile-floor lintel-block having a hollow tile portion, a hollow brick portion, and a perforated intermediate brick portion. Fig. 7 is a sectional view of an arch-floor, illustrating the form of combined brick and tile which may be used for structures of this character. Fig. 8 is a sectional view of a wall made up of brick-tile building-blocks having hollow tile portions, hollow brick portions, and perforated intermediate connections. Fig. 9 is a sectional view illustrating a modified form of terra-cotta brick-tile building-block of the hollow and perforated type. Fig. 10 is a sectional view illustrating a construction of brick-tile paving-blocks for use in paving sidewalks and for vaults. Fig. 11 is a view in perspective, showing a modified form of brick tile provided with ventilating-openings through the tile facing.

Like numerals of reference designate like parts wherever they occur in the different views of the drawings.

As shown in Fig. 1, the numeral 1 designates the brick portion of my combined brick and tile, and 2 designates the openings or hollows in said brick portion. The tile portion 3 is provided with openings 4, which may be of any desired number, contour, and area, and these openings are designed to give free ventilation and to reduce the weight of the brick and tile. Key-grooves 5 are formed in the edges of the brick tiles to form anchor-recesses for the plastering 6. It will be understood, of course, that the face of the tile may be glazed if it is desired to be used as a facing-tile, or the surface may be roughened if it is desired



to use a plaster surface. The integral intermediate portion between the brick and tile is provided with perforations or air-passages 7, which afford thorough ventilation to the wall.

5 Ordinary solid bricks 8 may be used as filling-blocks between the brick tiles.

As shown in Fig. 2, the combined brick and tile are provided with openings 4 in the tile portion and the hollows 2 in the brick portion, the tile portions being extended laterally and there being no intermediate or neck portion provided with perforations or transverse air-passages such as are shown at 7 in Fig. 1. This construction illustrates one of the simplest forms of my present invention and one which may be utilized to advantage in many structures and conditions.

As shown in Fig. 3, the brick and tile has an extended or enlarged portion intermediate the brick and tile, said intermediate portion being provided with perforations or passages.

Referring to Fig. 4, which illustrates a brick and tile floor construction, the numeral 9 designates a skewback-block the brick portion of which is provided with openings or hollows 2 and the tile portion having openings 4. The intermediate integral portion is provided with perforations and air-passages 7. A metal I-beam 10 is fitted at one end into a recess formed in the skewback, and a concrete or brick-tile filling 11 may be applied to the structure, as shown.

In Fig. 5 a brick-tile filling-block is shown in section, said brick tile having the same general structure as those shown in Fig. 4. The brick-tile-floor lintel-block shown in Fig. 6 is provided with a hollow tile portion, a reduced neck portion having transverse air-passages or perforations, and a hollow brick portion provided with longitudinal tie-grooves or mortar-anchoring recesses 12.

In Fig. 7, in which an arch-floor section is illustrated, the combined brick and tile are of the required contour for structures of this character and are provided with the openings in the brick portions and the tile portions and perforations or air-passages in the intermediate reduced neck portions. The surface of the floor may be formed by concrete, tile facing, or wood, and the ceiling may be of plastering, or the face of the brick-tiles may be glazed to form a finish, as will be obvious.

The structure shown in Fig. 8 illustrates a building-block having a hollow tile portion, a hollow brick portion, and a reduced intermediate neck portion provided with openings and perforations. A shoulder 13 is formed at the sides of the brick portion to form abutments for the filling-bricks and also serve as mortar-guides to prevent the mortar from entering the air-conduits.

A terra-cotta brick and tile is illustrated in Fig. 9, the contour of the blocks being similar to those shown in Fig. 8 and provided

with similar openings and perforations. The tile extension shown in Fig. 8, however, is lacking.

In Fig. 10 is illustrated in section a pavement made up of combined brick and tile having hollow tile portions, hollow brick portions, reduced neck portions having perforations, and key-grooves or anchor-recesses 14 for mortar to hold the paving-blocks firmly in position.

The construction of brick-tile illustrated in Fig. 11 provides a plurality of openings in the facing of the tile portion, said openings leading to and communicating with the air-conduits in the body of the tile. This form of brick-tile is especially utilized when it is not desirable to plaster or otherwise coat the exterior facing of the tile and when it is desired to more thoroughly ventilate the rooms or walls of buildings.

From the foregoing it will be obvious that a combined brick and tile made as described will be strong and durable, will insure thorough ventilation of the structure, and will be comparatively light in weight and not liable to breakage in handling and laying.

Having thus fully described my invention, what I desire to secure by Letters Patent and claim is—

1. A combined brick and tile, comprising a brick portion, a tile portion having a number of openings of various shapes, and sizes, and an intermediate portion, connecting the brick, and tile, and integral therewith, as herein set forth.

2. A combined brick, and tile, comprising a brick portion, a tile portion having a number of openings, and air-passages intersecting such openings, and an intermediate portion, connecting the brick, and tile, and integral therewith, as herein set forth.

3. A combined brick, and tile, comprising a hollow brick portion, a tile portion having openings of various shapes, and sizes, and an intermediate portion, connecting the brick, and tile, and integral therewith as herein set forth.

4. A combined brick and tile comprising a hollow tile portion, a brick portion, and an intermediate integral portion having perforations, substantially as described.

5. A combined brick and tile, comprising a brick portion, a tile portion having a number of openings, and an intermediate or neck portion having a number of openings, and air-passages intersecting said openings, said neck being integral with the tile and brick, as herein set forth.

6. A combined brick and tile, comprising a brick portion, a tile portion having a number of openings, and perforations intersecting said openings, and an intermediate or neck portion connecting, and integral with said tile and brick, and having a number of open-

ings, and perforations intersecting said openings, as herein set forth.

5 7. A combined brick and tile having openings in the tile portion, openings or hollows in the brick portion, and an intermediate extended neck portion having perforations, substantially as described.

8. A combined brick and tile having longi-

tudinal grooves to serve as mortar anchors and guides, substantially as described. 10

In testimony whereof I affix my signature in presence of two witnesses.

DAVID WILEY ANDERSON.

Witnesses:

CHAS. G. PETTIT, Jr.,

J. GRACE BURGESS.