

No. 687,104.

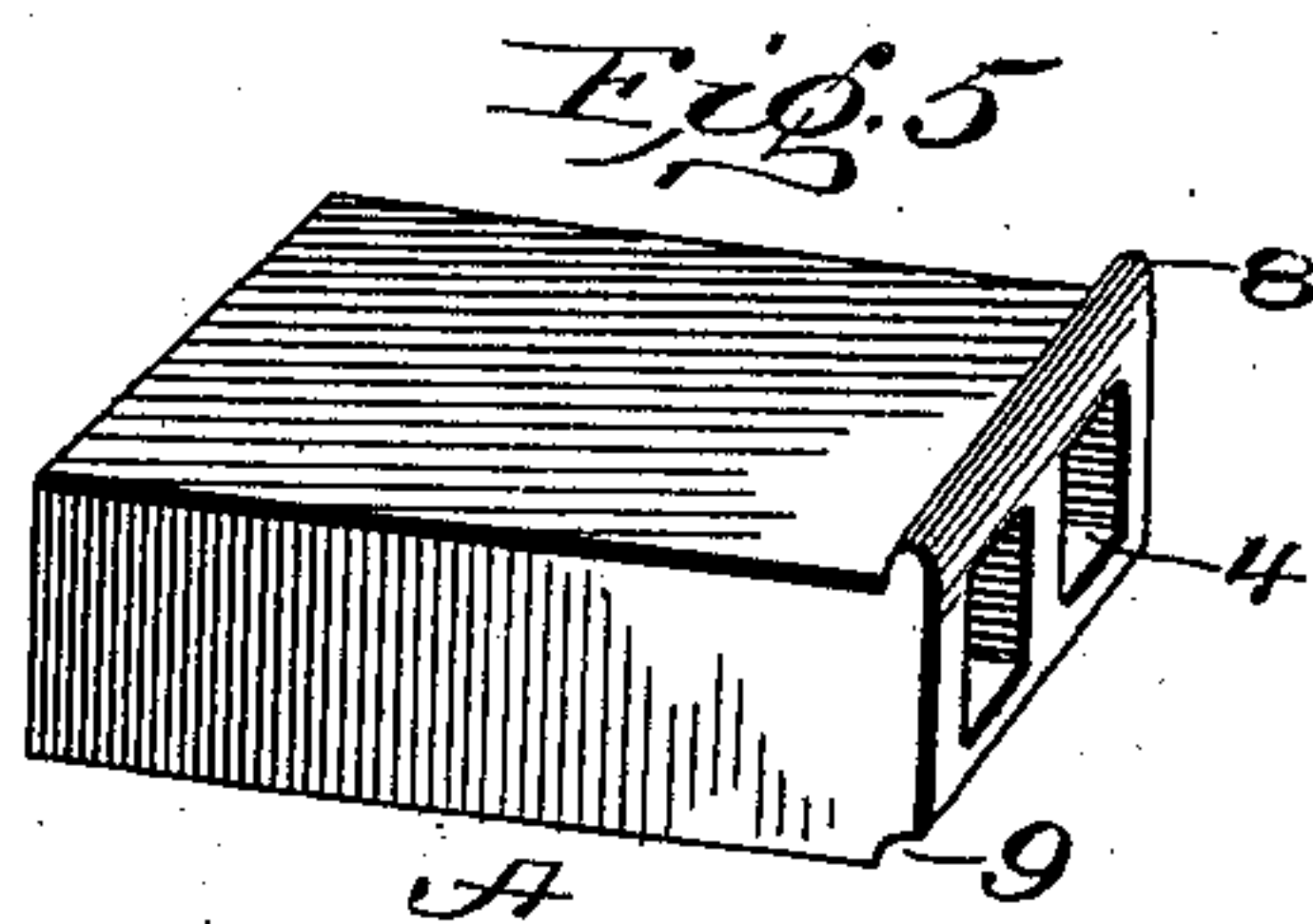
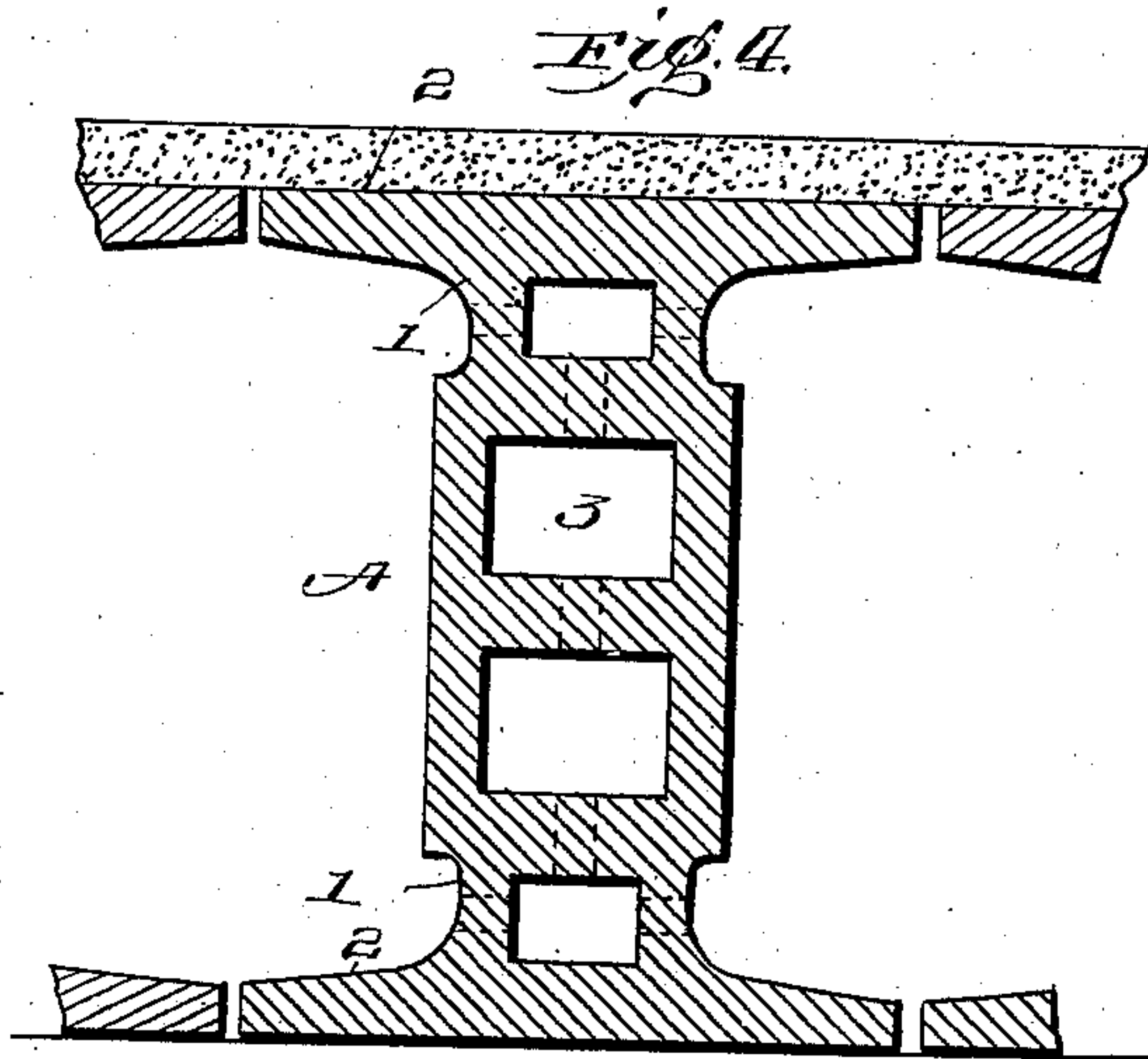
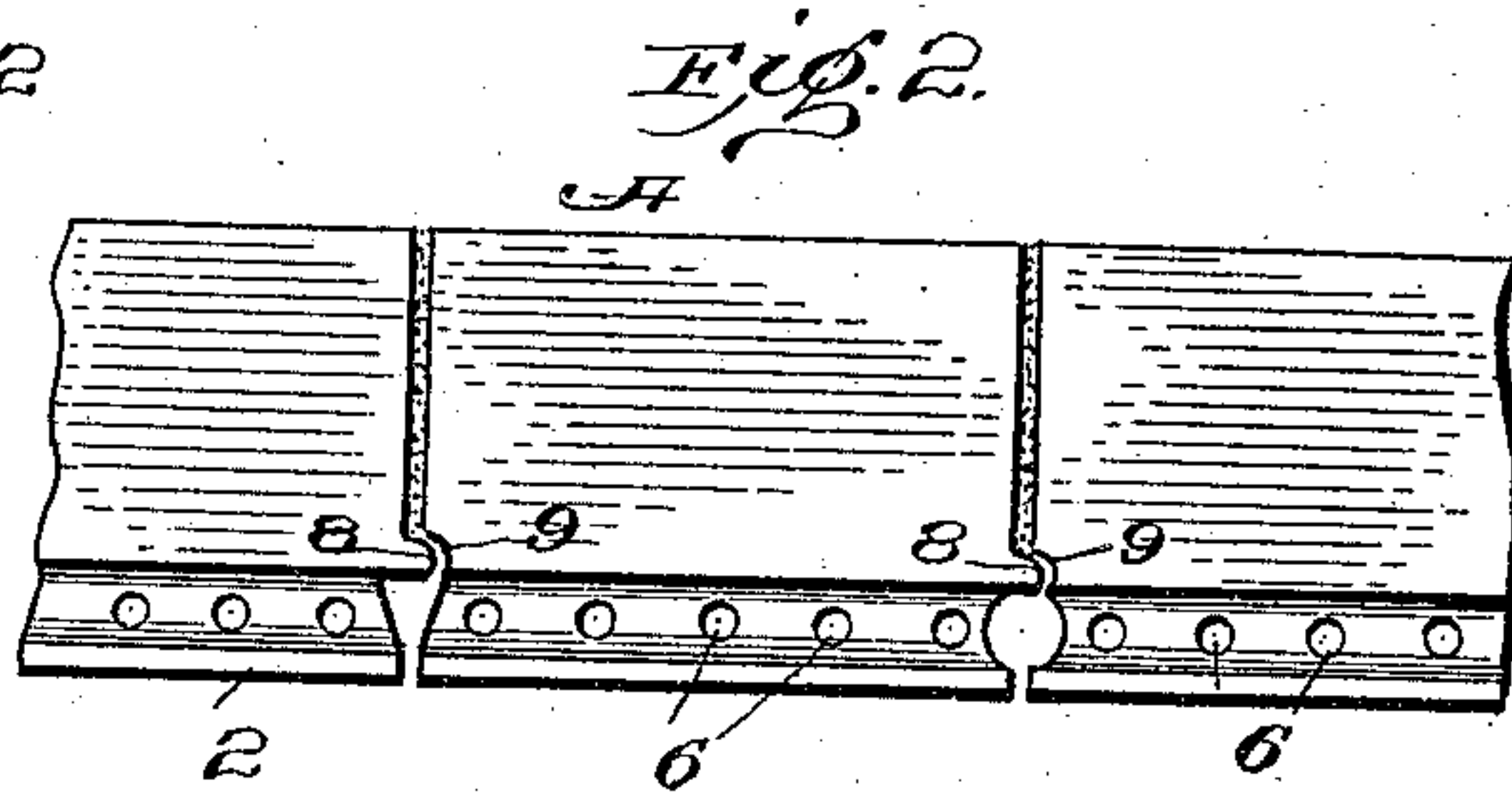
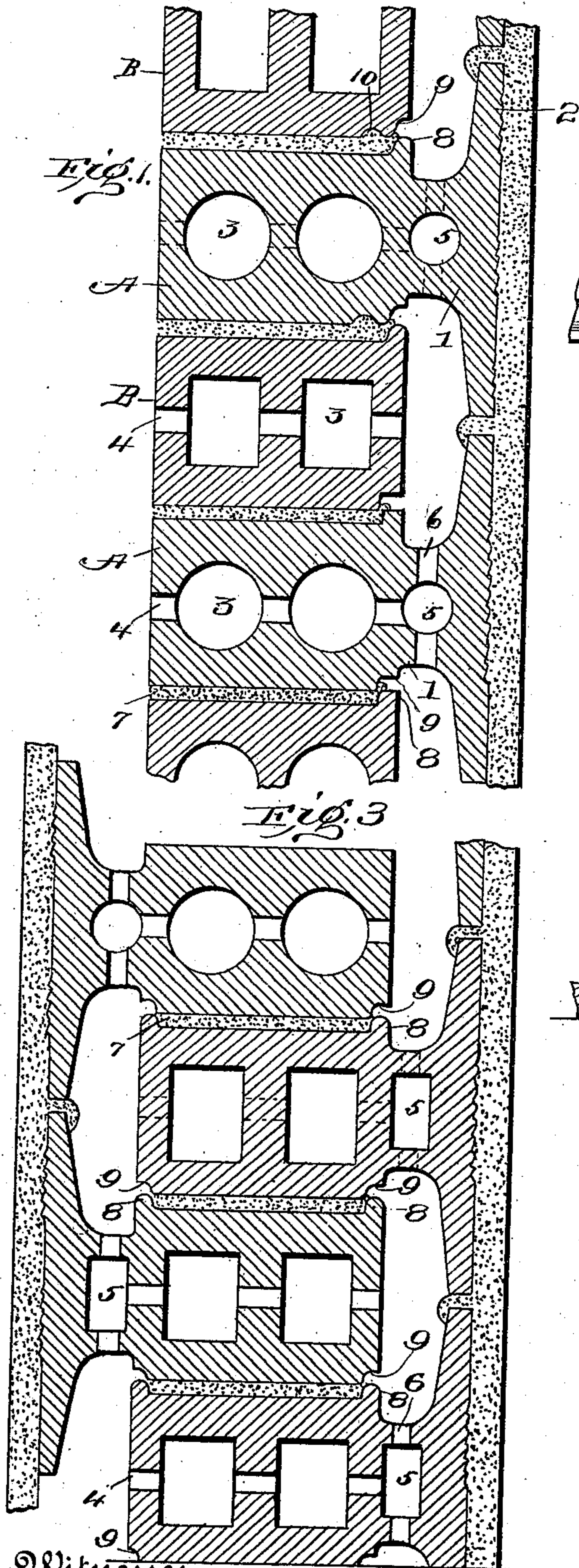
Patented Nov. 19, 1901.

D. W. ANDERSON.
BRICK OR COMBINED BRICK AND TILE.

(Application filed Feb. 6, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
J. M. Fowler Jr.
Albert Popkins

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

No. 687,104.

Patented Nov. 19, 1901.

D. W. ANDERSON.
BRICK OR COMBINED BRICK AND TILE.

(Application filed Feb. 6, 1901.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 6

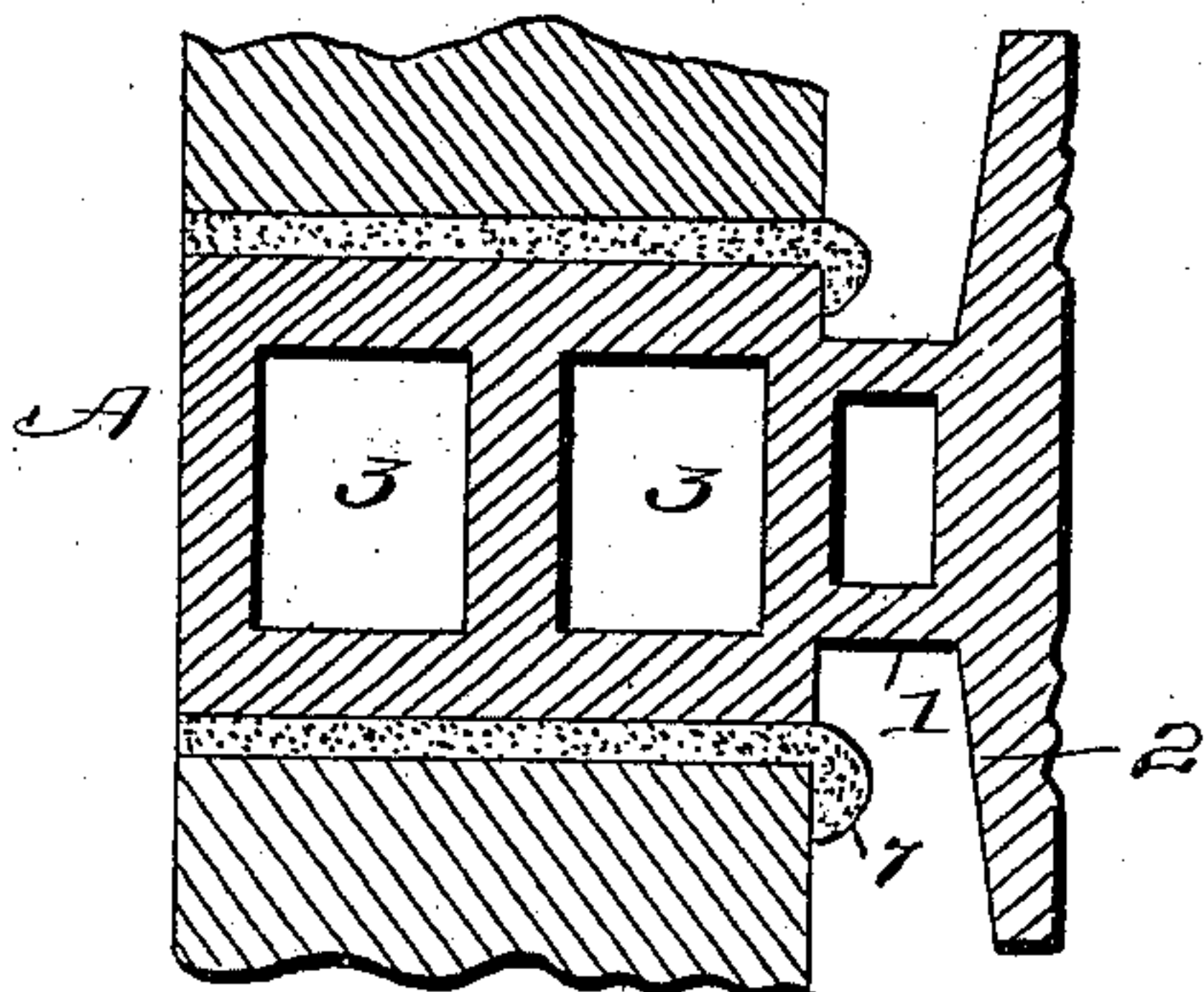


Fig. 7

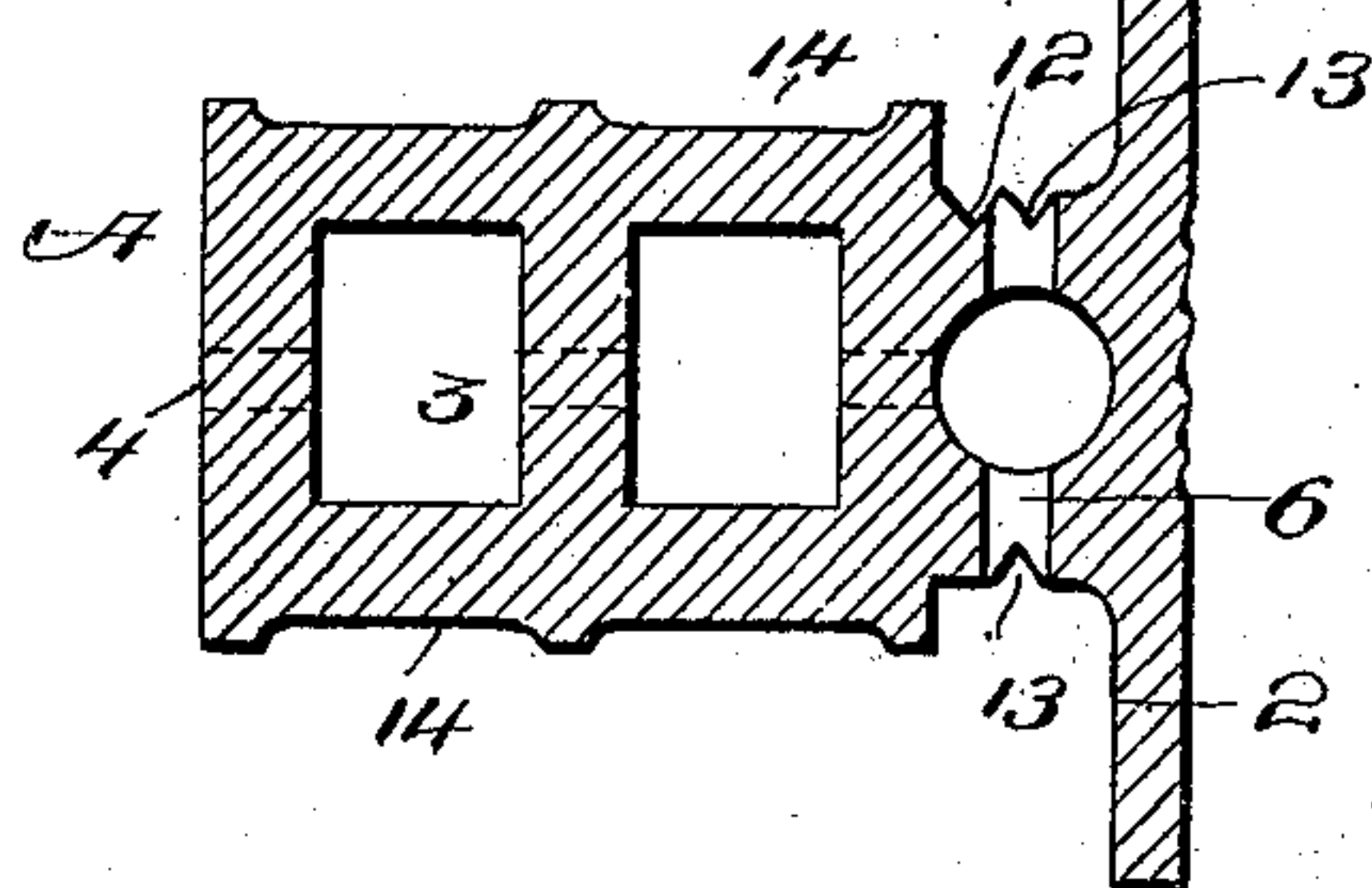
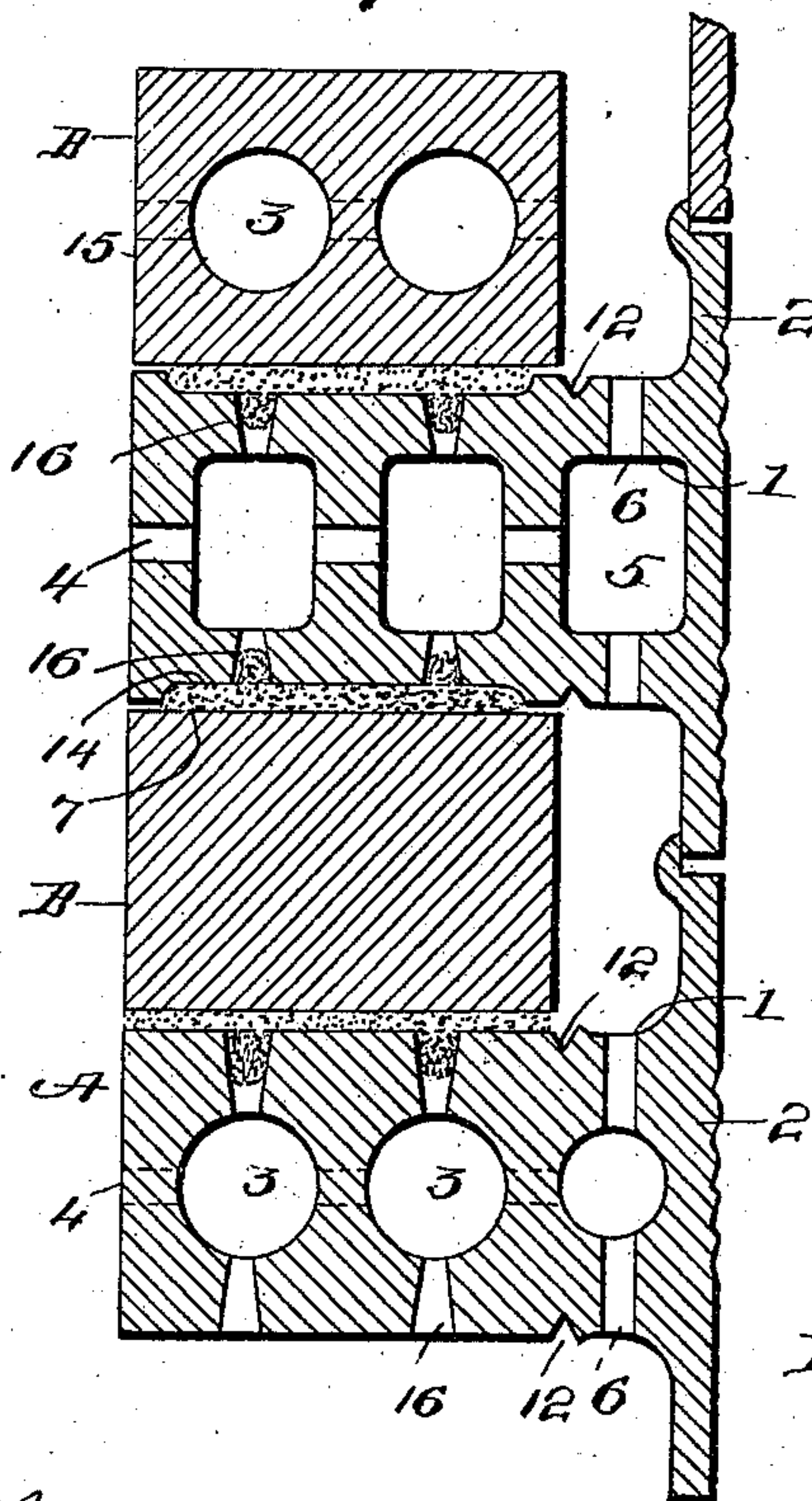


Fig. 8



Witnesses
J. McGowen
Albert Popkins

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

UNITED STATES PATENT OFFICE.

DAVID WILEY ANDERSON, OF RICHMOND, VIRGINIA.

BRICK OR COMBINED BRICK AND TILE.

SPECIFICATION forming part of Letters Patent No. 687,104, dated November 19, 1901.

Application filed February 6, 1901. Serial No. 46,211. (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 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in combined brick and tile-facings for walls and analogous structures, such as ceilings and floors.

The present invention is designed especially as improvements intended to complete and perfect my former invention comprising a combined brick and tile facing or furring for walls embraced in my pending application, Serial No. 38,605, filed December 4, 1900; and the objects are, first, to provide a brick or combined brick and facing-tile formed to prevent the strata of mortar or cement from being pressed out at the ends or faces; second, to provide a combined brick and tile-facing for ventilated walls which has air passages or conduits having concave or channeled bottoms to provide escape for condensation of moisture; third, to provide a combined brick and tile-facing for walls provided with grooves or notches constituting guide-marks for readily fixing the position of the brick or body in the wall, and, fourth, to provide a combined brick and tile-facing for walls having all the foregoing-mentioned improvements in features and constructions.

I have fully and clearly illustrated the improvements in the accompanying drawings to be taken as a part hereof, and wherein—

Figure 1 is a view in vertical section of a wall composed of bricks and combined bricks and tile-facings embodying my present improvements. Fig. 2 is a view showing in longitudinal arrangement a series of combined brick and tile-facings constituting in the arrangement a ceiling, the mortar being

prevented from escaping at the ends. Fig. 3 is a view in vertical section of a double-faced wall constructed of reversed combined brick and tile-facings and embodying my improvements. Fig. 4 is a view showing the application of a double-faced and flanged combined brick and tile-facing as a support for a floor. Fig. 5 is a perspective view of a brick suited for intermediate position between two combined brick and tile-facings as shown in Fig. 1. Fig. 6 illustrates the waste of mortar the invention remedies. Figs. 7 and 8 illustrate modified forms of the combined brick and facing-tile.

Referring to the drawings, A designates the body of a combined brick and tile-facing, which may be of standard dimensions or of such dimensions as will best suit it to the uses intended. From the face of the body is formed at one or both ends a neck-piece 1 of such length and height as may be required, and on the end of the neck-piece is formed oppositely-extending vertical tile-facing flanges 2. Through the body are formed longitudinal passages 3, communicating with each other by transversely-arranged passages 4, and also openings into an air-passage 5, extending through the neck-piece 1, vertical passages 6 being formed in the neck-piece and intersecting the lateral passage 5. A combined brick and tile-facing of this general construction and form serves all the purposes of making a wall which may be readily utilized for heating, ventilating, or cooling purposes, as indicated in the drawings; but in making up the wall it has been found that owing to the weight of successive layers the soft mortar is forced from the bed, as indicated in Fig. 1 at 6, the protruding part being likely at once or on disintegration to drop down on the floor of the air-passage and in a measure impede the free passage of the currents of air traversing the passage. To obviate this to the extent of preventing the exudation of the mortar, I form the body of the brick and tile-facing with a flange 8, extending across its edge face, as shown, and at the lower face with a recess or groove 9, so that in laying the wall the recess and flange of contiguous bodies will interengage and form a lock or keeper, preventing the es-

cape of any of the mortar. To insure relief from expansion of the stratum mortar, there may be formed in the face of the body a mortar-relief groove 10, into which the excess of mortar is pressed, as shown in the drawings. It is apparent that in the use of combined brick and tile facings in double-faced walls and partitions the body is formed with flanges and recesses at both ends, as shown in Fig. 3.

In the construction of walls of the character to which these structural pieces are adapted the position of the parts in the wall can be readily and expeditiously ascertained and determined by forming a groove 12 across the face of the body at that point or line which corresponds to the face-line of the main structure, as indicated in the drawings. (See Figs. 7 and 8.) In forming a wall of this character hollow bricks B may be placed between the combined brick and tile, and these bricks may be provided with air-passages similar to those formed in said combined brick and tile. To provide means for the escape of moisture emanating in the air-passages from any source whatever, I make the surfaces of the neck-piece concaved or channeled, as at 13, whereby any moisture precipitated and condensed may readily find its way through the vertical opening intersecting the other conduits through the neck-pieces.

In Figs. 7 and 8 instead of forming the contiguous layers of brick and tiles with the interengaging flanges and recesses the mortar-faces of the combined brick and tile-facings are dished out, as at 14, and the intermediate bricks 15 have plane faces. This construction and arrangement serve to confine the mortar with reasonable certainty. The body portion of the combined brick and tile may also be provided with funnel-shaped openings, such as shown at 16, or formed with recesses in the upper and lower faces thereof, thus permitting some of the mortar to enter such recesses and prevent its being compressed or forced into the air-conduits. It will also be understood that the intermediate bricks may be dished out or recessed to receive the mortar, and thus assist in preventing an overflow of the mortar into the air-conduits.

It is apparent that as circumstances or conditions of the structure may require the brick portions of the tile may be provided with the flanges and recesses arranged opposite at the sides or in other edge relation to suit the mortar connections, as indicated in Fig. 2 of the drawings, or the brick portions may have two flanges and opposite recesses, as shown in Fig. 3 of the drawings. It is also apparent that the flange-and-recess construction may be made applied to the brick, as shown in Fig. 5 of the drawings, which bricks may be utilized in building walls or utilized as intermediate layers in the construction of ventilated walls in connection with combined brick

and facing tiles, as shown in Fig. 1 of the drawings.

In my application for Letters Patent filed December 4, 1900, Serial No. 38,605, I have disclosed a combined brick and tile of an analogous character to the one illustrated in this application; but I do not wish to claim in this application any of the subject-matter covered by the claims in that application.

What I claim is—

1. A combined brick and facing-tile, the brick portion of which is formed with a projection on one edge and a recess on its lower face.

2. A combined brick and facing-tile having an integral neck-piece, the brick portion being formed with an upwardly-extending flange on one edge and a recess in its opposite edge adjacent to the neck-piece.

3. A combined brick and facing-tile having an integral neck-piece, having air-passages therethrough, the brick portion being formed with an upwardly-extending flange on one edge and a recess in its opposite edge, adjacent to the neck-piece, substantially as described.

4. A combined brick and facing-tile and an integral connection between them, said integral connection having perforations therethrough constituting air-passages, and the brick portion being formed with a vertical flange across one edge and a recess across the opposite edge, adjacent to the integral connection, substantially as described.

5. A combined brick and facing-tile connected together by an integral portion, the brick portion being formed with a vertical flange extending across the front upper edge and a recess extending across the lower front edge, and the integral connecting portion provided with vertical air-passages, substantially as described.

6. A combined brick and facing-tile, the tile portion being connected to the brick portion by an integral perforated portion, the said tile having a projected portion arranged at right angles to the brick portion, and the brick portion being formed with a vertical flange across its front upper edge and a recess across its lower front edge, substantially as described.

7. A combined brick and facing-tile with a perforated integral connection between the brick and tile portions, the tile portion being arranged at a suitable distance from the brick portion to form an air-space between the said portions, and the brick portion having a vertical flange across its upper front edge and a recess in its lower front edge, substantially as described.

8. A combined brick and facing-tile with a perforated integral connection between the brick and the tile portions having vertical perforations therethrough and a concave surface across its upper face, and the tile por-

tion being arranged at a suitable distance from the brick portion to form an air-space between the said portions, substantially as described.

5 9. A combined brick and facing-tile having a hollow brick portion formed with a vertical flange across its upper front edge and a recess across its lower front edge, and a tile
10 portion integrally connected to the brick portion by a perforated neck-piece having a concaved upper surface, substantially as described.

10 10. A combined brick and tile, the brick having one or more hollow portions, a vertical
15 flange on one edge and a recess across the edge opposite thereto, one or more necks or webs integrally connecting the brick and tile portions, and said necks or webs having perforations therethrough.

20 11. A combined brick and facing-tile comprising a body having passages therethrough, a vertical flange on one of its front edges and a recess in its edge opposite thereto, a concaved neck portion having communicating
25 air-passages, and a vertically-flanged facing-tile integral with the outer end of the neck portion, substantially as described.

30 12. A combined brick and facing-tile comprising a body portion having a vertical flange and a recess arranged opposite to each other, a neck portion having air-passages and a concaved upper surface, and the neck and
35 body portions having communicating horizontal passages therethrough and the flanged facing-tile integral with the neck arranged vertically.

40 13. A brick and facing-tile combined, comprising a body portion to set with the wall and formed with a flange across one edge and a recess across the edge opposite thereto, a neck portion having a concave upper surface projected laterally from the body portion and terminating in upper and lower vertical
45 flanges, and provided with horizontal and vertical passages intersecting through the neck.

50 14. A combined brick and tile-facing for walls, consisting of a facing-tile, a neck-piece integral therewith and extending therefrom, and formed with intersecting air-passages
55 therethrough, and a body part adapted to set within a wall and formed with a vertical flange across one edge and a recess across the opposite edge, adapted to interengage with coincident recess and flange of companion
pieces, substantially as described.

60 15. A combined brick and tile-facing for walls, consisting of a facing-tile, a neck-piece integral therewith and extending therefrom and formed with intersecting air-passages
65 therethrough, and a concave channel across its face, and a body part adapted to set within a wall and formed with a vertical flange across one edge and a recess across the opposite edge, adapted to interengage with coincident flange and recess of companion pieces, substantially as described.

16. A combined brick and tile-facing for walls, consisting of a facing-tile, a neck-piece integral therewith and extending therefrom and formed with a concave channel across its
70 face, and a body part adapted to set within a wall and formed with a vertical flange across one edge adjacent to the neck-piece and a recess similarly located across the opposite edge, adapted to interengage with coincident
75 flange and recess of companion pieces, and a mortar-relief groove across the face of the body, substantially as described.

17. A combined brick and tile-facing for walls, consisting of a facing-tile extending
80 vertically in both directions beyond its support, a supporting neck-piece extending at right angles to the facing-tile and integral therewith, and having a concave channel across its face and intersecting air-passages,
85 and a body part adapted to set within a wall and formed with a vertical flange across one edge adjacent to the neck-piece, a recess similarly located across the opposite edge, adapted to interengage with coincident recess and
90 flange of companion pieces, a mortar-relief groove across the face of the body, and a position-groove to indicate the position of the device in the wall, substantially as described.

18. In a wall, the combination of combined
95 bricks and facing-tiles, each comprising a body having openings communicating horizontally throughout the lines of layers, said body being formed at its forward upper and lower edges respectively with a vertical flange
100 and a recess to interengage with contiguous elements of the wall, a neck portion projecting horizontally from the body and having intersecting horizontal and vertical air-passages therethrough and concave channels in the
105 surface of the neck, and facing-tiles integral with the neck portions and having their ends and sides contiguous to each other, substantially as described.

19. A wall composed of reversible combined
110 brick and tile-facings, each composed of a body part constituting the structure, neck-pieces projecting from the body parts, and tile-facings integral with the neck-pieces, and formed with upwardly and downwardly
115 extending flanges, whereby when the body portions are reversed in the wall in alternation, the tile-facings present a continuous facing on both sides of the wall, substantially as described.
120

20. A wall composed of reversible combined
125 brick and tile-facings comprising a body part constituting the supporting-wall of the structure, neck-pieces projecting from the body parts and provided with intersecting air-passages therethrough, and tile-facings integral
130 with the neck-pieces and formed with upwardly and downwardly extending flanges, whereby when the body portions are reversed in the wall in alternation, the tile-facings present a continuous facing on both sides of the wall, and air-passages are formed which

traverse both sides of the wall throughout the area, substantially as described.

21. A combined brick and facing-tile having an integral connection between them, and
5 the brick portion formed with oppositely-disposed flanges and recesses opposite to the flanges, substantially as described.

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

DAVID WILEY ANDERSON.

Witnesses:

R. B. FELTHAUS,
CHAS. G. PETTIT, Jr.