

No. 631,139.

Patented Aug. 15, 1899.

F. H. URBAN.
FIREPROOF CHIMNEY.

(Application filed Feb. 7, 1898.)

(No Model.)

Fig. 1.

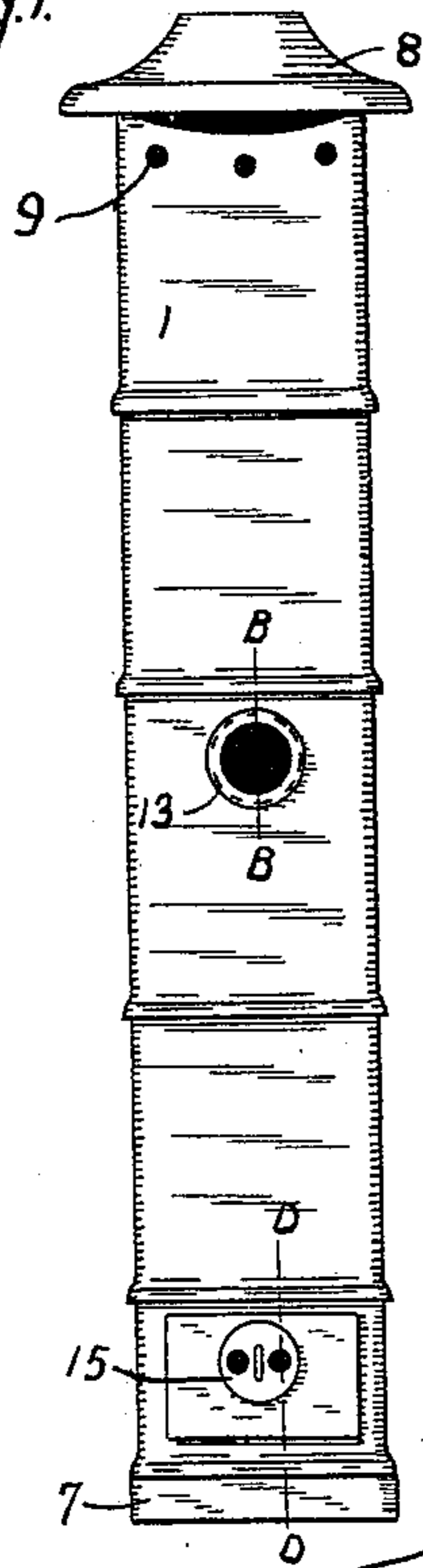


Fig. 2.

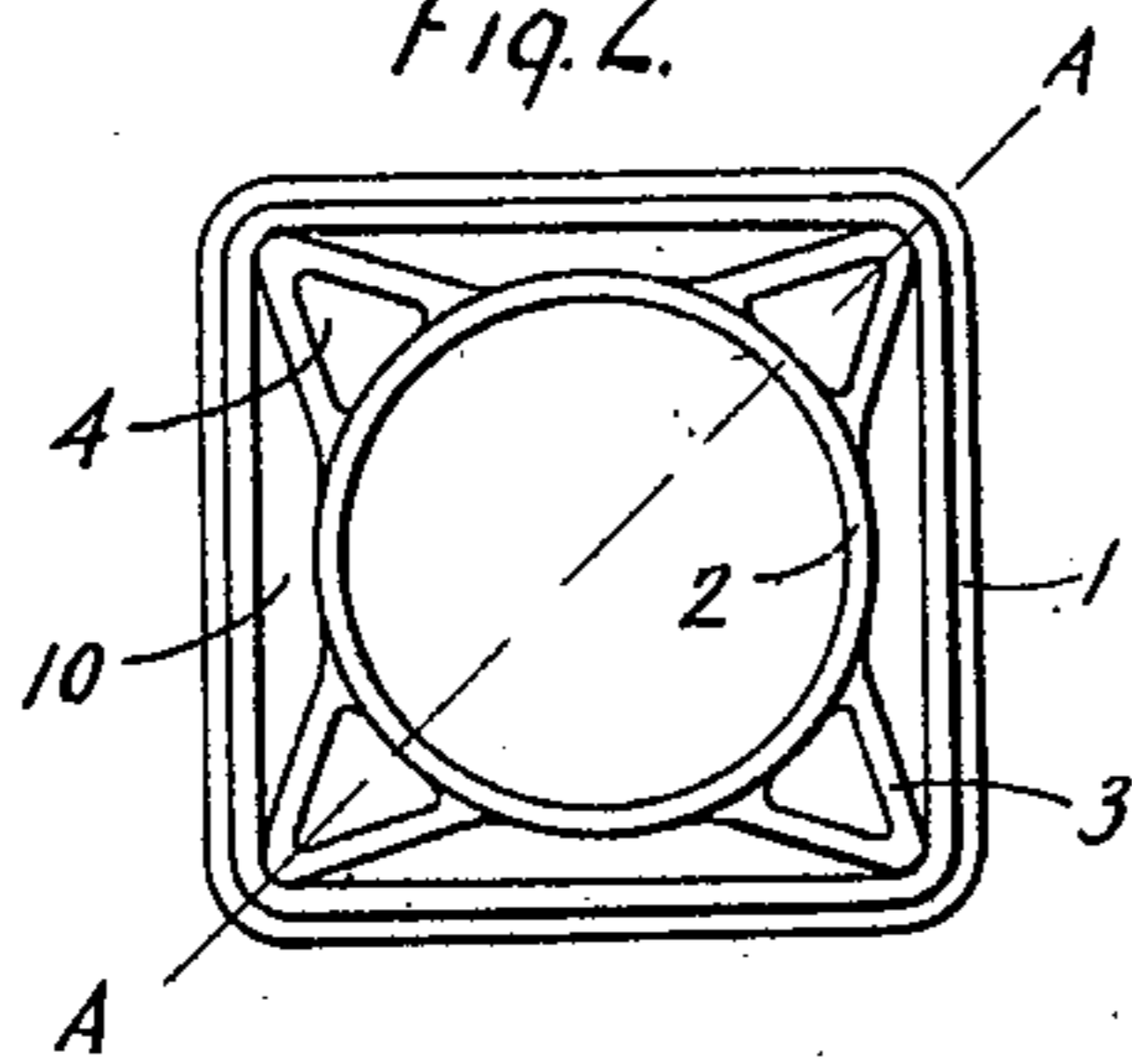


Fig. 4.



Fig. 5.



Fig. 3.

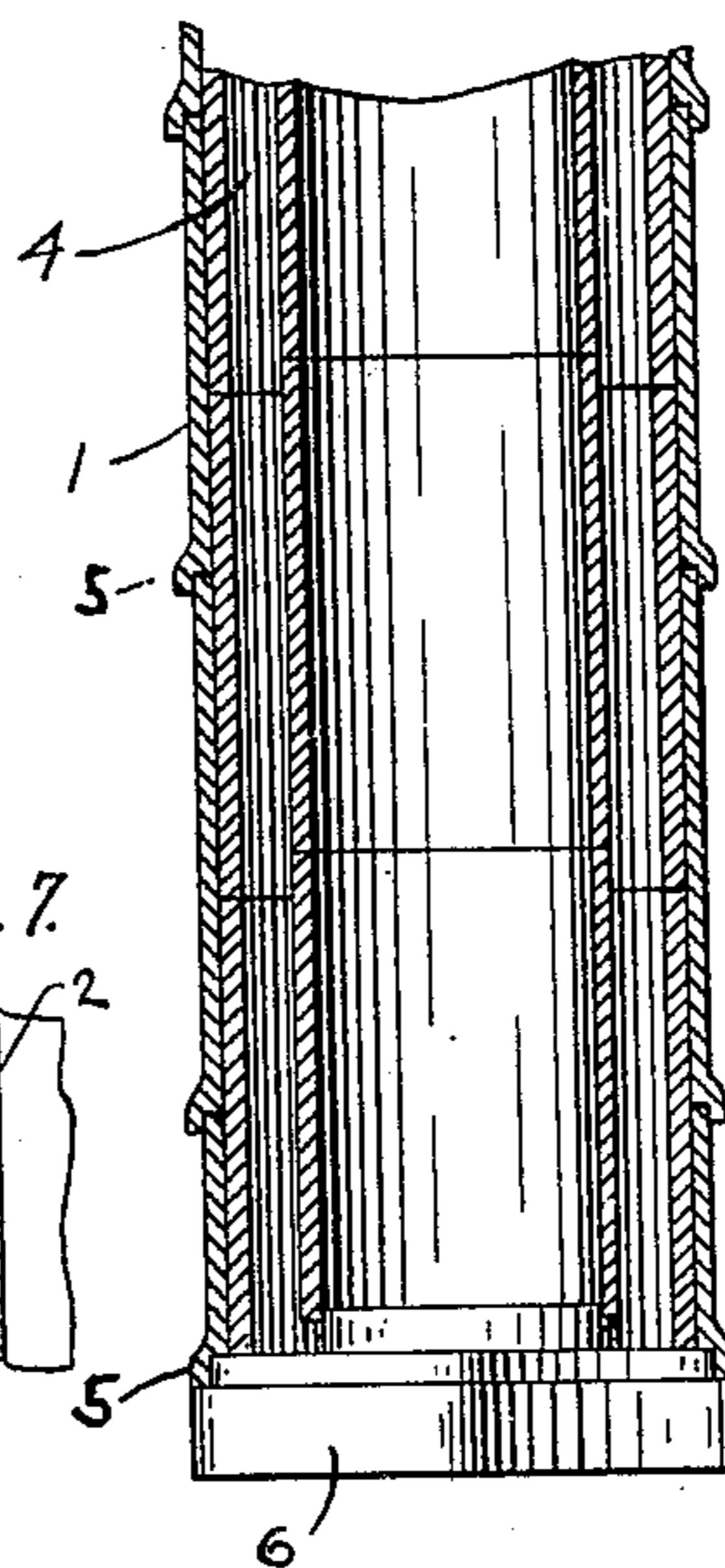


Fig. 7.

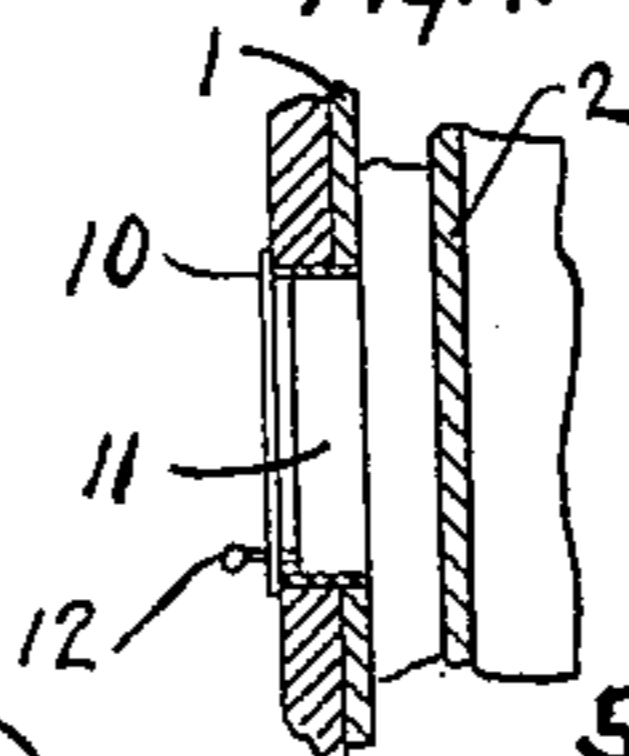
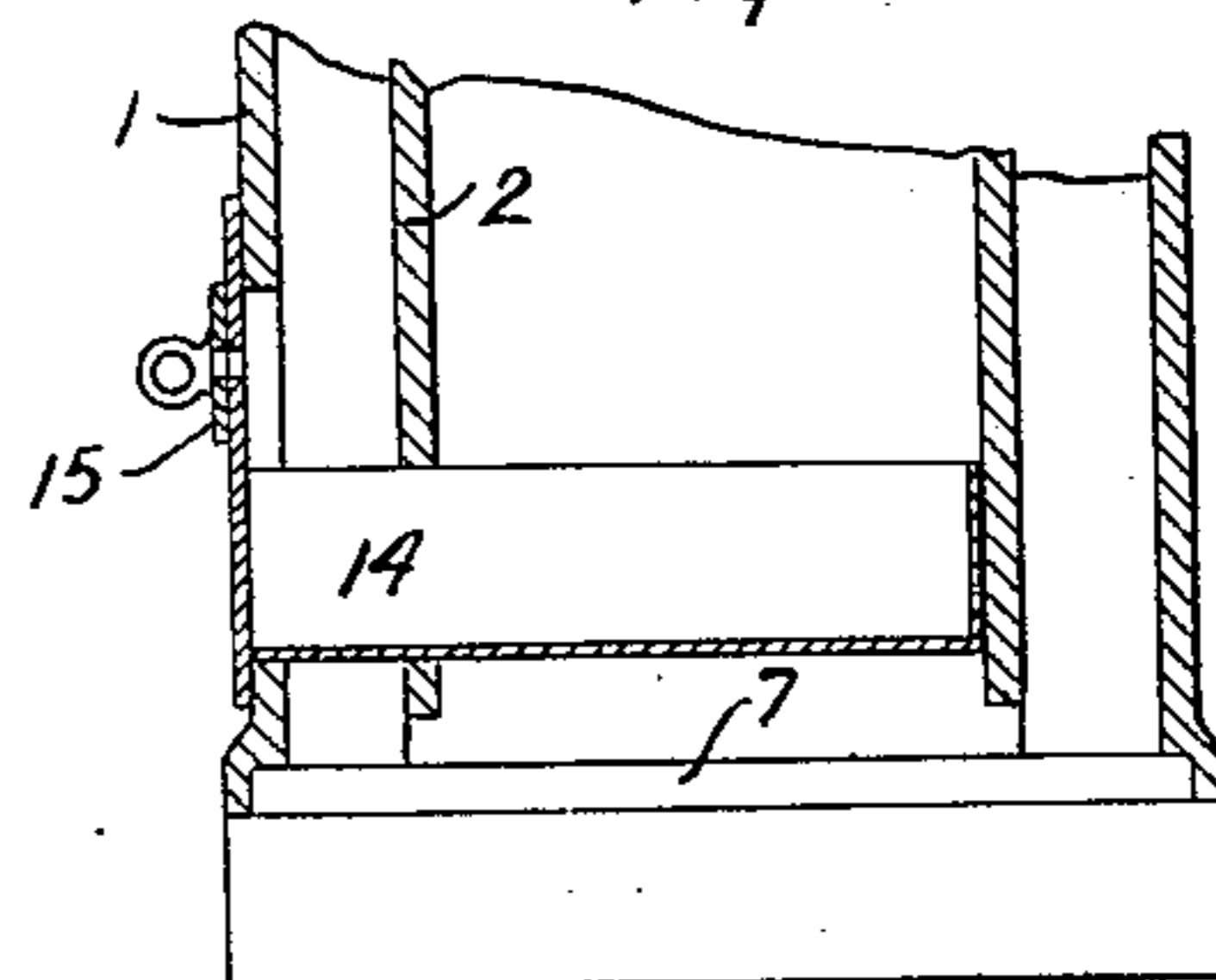


Fig. 8.



Witnesses
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FREDRICK H. URBAN, OF BRAZIL, INDIANA.

FIREPROOF CHIMNEY.

SPECIFICATION forming part of Letters Patent No. 631,139, dated August 15, 1899.

Application filed February 7, 1898. Serial No. 669,459. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK H. URBAN, of Brazil, county of Clay, and State of Indiana, have invented a certain new and useful Fireproof Chimney; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

10 This invention relates to a chimney so constructed in sections of peculiarly-shaped tiles as to render it fireproof. Furthermore, it is rendered stable by the peculiar arrangement of the tiles and is a very economical chimney
15 so far as the original cost of construction is concerned and also the durability of it. In this construction ventilating air-conduits around the central flue are provided, which not only tend to render the chimney fireproof
20 by keeping the shell of the chimney at a low temperature, but also ventilate the room in a desirable manner.

The features of the invention will be understood from the accompanying drawings and
25 the description and claims following.

Figure 1 is an elevation of my chimney. Fig. 2 is a plan view of a section thereof. Fig. 3 is a vertical section on the line A A of Fig. 2. Fig. 4 is a quarter-section of the cap-pieces
30 of the chimney. Fig. 5 is a section on the line B B of Fig. 1. Fig. 6 is an elevation of the fireplace and the wall above, showing the ventilator for the chimney. Fig. 7 is a section on the line C C of Fig. 6. Fig. 8 is an enlarged
35 sectional view on the line D D of Fig. 1.

The main body of this chimney is composed of the outer tile 1 and the inner tile 2, formed of clay in the form shown and then burned like other tiling. The inner tile-section 2 is com-
40 posed of a circular portion, with extensions 3 therefrom, as shown in Fig. 2. There are four of these extensions at equidistant points. They are in cross-section V-shaped, with the point of the V outward and with the open end
45 of the V integral with the circular body portion of said tile 2. The extensions 3 extend from top to bottom for the full length of the body of the tile, thus forming a passage-way 4, as seen in Figs. 2 and 3.

50 The outer tile is square in cross-section and of such dimensions that the tile 2 will fit snugly into it, the extensions 3 entering the

four corners of the square tile. Thus the triangular extensions 3 both separate and brace the said tiles. The V-shaped extensions 3 in
55 the form shown extend below the body portion 2, as seen in Fig. 3, so that when the tiles are joined they will somewhat overlap the body portion of the adjoining tile. This causes the inner tiles 2 to be closely joined
60 and held in place within the outer tiles 1. The outer tiles 1 have at their lower ends overlapping annular flanges 5, that surround the upper end of the adjacent tile below, so that the joint between said tiles will be firm
65 and strong. The length of the tiles 1 and 2 is such that their joints will break, the joint of the inner tiles being about midway between the joints of the other tiles. These tiles are built upon a base 6, provided with a collar 7,
70 on which the lower section of the outer tile 1 rests, leaving a groove in which the flange 5 in said outer tile fits.

At the top I place the cap 8, which is provided with a recess that causes it to fit snugly
75 on the top end of the circular portion of the inner tile 2. The outer tile 1 is so formed as to leave the opening between its upper end and the cap 8. If desired, said outer tile at that point can be provided with apertures 9,
80 as shown. It is thus seen that in this chimney there are two sets of ventilating passage-ways or flues—namely, the passage-way 4 within the extensions 3 and the passages 10 between the two sections. There are four of
85 each of these passage-ways, and all eight of said passage-ways are continuous from the lower to the upper end of said chimney. By reason of the openings between the cap-piece and the upper end of the outer tile a suitable
90 outlet is provided for these passage-ways. Where the chimney is built upon a fireplace, as shown in Fig. 6, a ventilating-opening 11 may be provided in the wall above the fireplace, that leads from the room into
95 the passage-way 10, thereby affording ventilation for the room. A suitable damper 12 may be used to close this ventilating-opening. For the stovepipe a sleeve 13 is provided, as shown
100 in Fig. 5, leading from the room to the inner passage-way or flue portion of the chimney. A ventilating-opening is also provided when a stove is used at the lower end of the opening, as seen in Figs. 1 and 8. There an ash-

pan 14 slides in the chimney, as shown, and in its front a suitable ventilating-damper 15 is provided.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A chimney including a series of angular outer tiles, a series of circular tiles within said outer tiles, and vertical extensions V-shaped in cross-section integral with the inner tiles and with their points fitting in the corners of the outer tiles, substantially as set forth.

2. A chimney including a series of rectangular outer tiles with their ends adapted to fit together whereby they can be built upon each other, a series of circular tiles within said outer tiles with their joints between the

joints of the outer tiles, V-shaped vertical extensions integral with said inner tiles and with the points thereof fitting in the corners 20 of said outer tiles, whereby passage-ways are formed from the bottom to the top of the chimney, ventilating means in the lower part of the chimney entering the passage-ways between said outer and inner tiles, and a cap so 25 mounted on said chimney as to leave an outlet from said passage-ways between it and the upper outer tile.

In witness whereof I have hereunto set my hand this 17th day of January, 1898.

FREDRICK H. URBAN.

Witnesses:

CHAS. HUTCHINSON,
C. E. LUSK.