

No. 640,338.

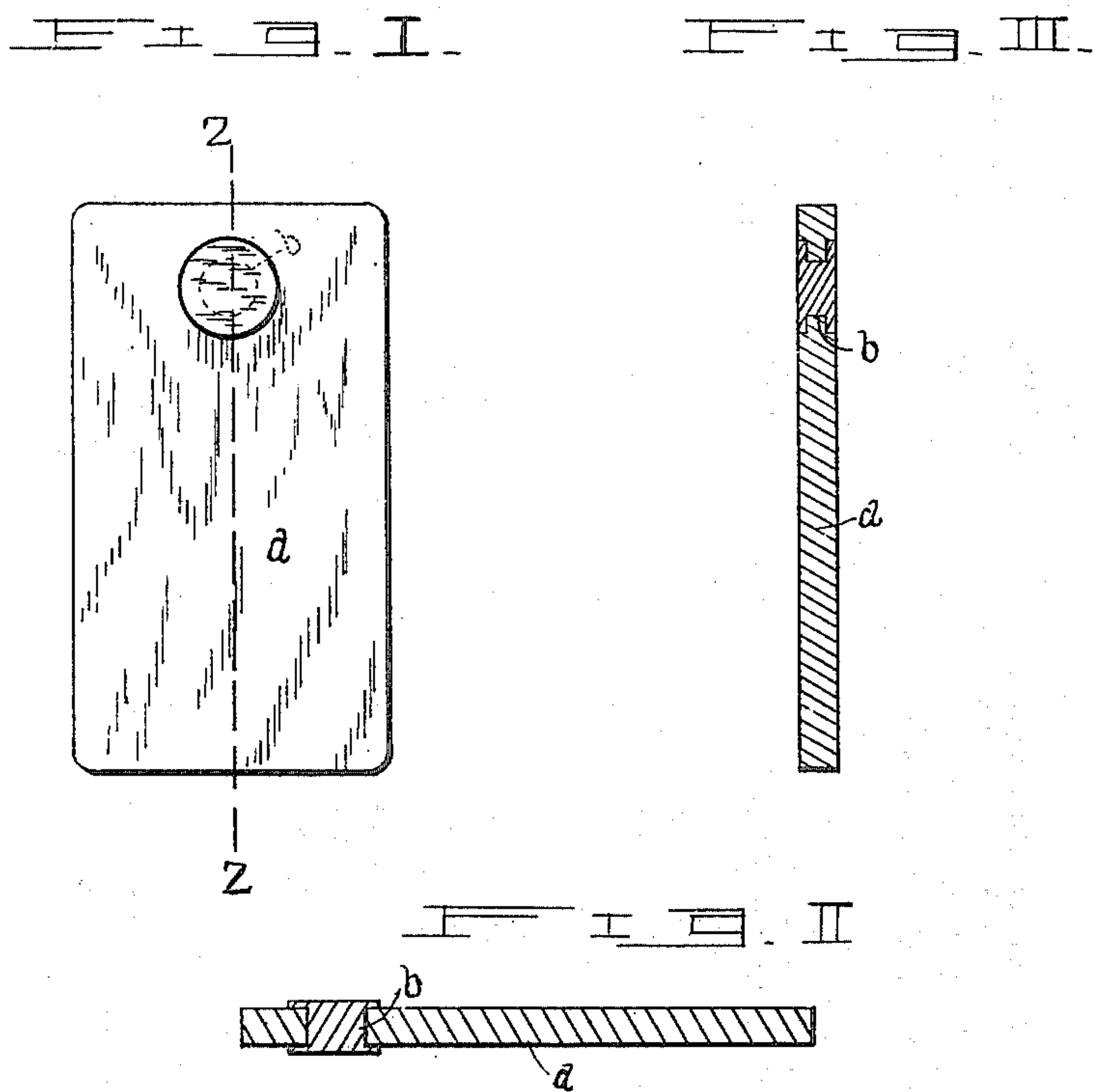
Patented Jan. 2, 1900.

W. D. TURNLEY.

TILE.

(Application filed Apr. 19, 1899.)

(No Model.)



William D. Turnley

Inventor

Witnesses

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UNITED STATES PATENT OFFICE.

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TILE.

SPECIFICATION forming part of Letters Patent No. 640,338, dated January 2, 1900.

Application filed April 19, 1899. Serial No. 713,666. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DAVIS TURNLEY, a citizen of the United States, residing at Clarksville, in the county of Montgomery, State of Tennessee, have invented certain new and useful Improvements in Tiles; 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 tiles, and has for its object to provide a transparent or translucent tile of such structure that the tiles may be secured in place without injury to them during the operation of securing, and also in such a manner that the entrance of moisture about the securing means will be prevented.

In the drawings forming a portion of this specification and in which like symbols of reference represent corresponding parts in the several views, Figure 1 is a plan view of a tile constructed in accordance with my invention, and Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a modification of my invention.

Heretofore in the manufacture of fragile tiles it has been found that the operation of nailing or securing them in place has resulted in the cracking of the tile and in much consequent loss. Moreover, in order to enable the nailing of the tile in place it has been necessary to form a hole of rather large dimension and one which the securing nail or screw would not fit closely, so that there would be no breaking strain upon the tile. These defects I have overcome by making an opening in the tile for the reception of a nail or screw and in filling this opening with a metal which flows readily and which will form a cushion, moreover, for the head of the securing means.

Referring now to the drawings, in operating in accordance with my invention I form a tile *a* of glass or other fragile material in which I make one or more perforations *b* for the reception of securing means, such as nails, screws, &c. Into the perforation I then place a plug, preferably of lead, the ends of which are then upset to cause the lead to flow in a disk on each face of the tile, as shown in the drawings. The result is a lead filling for the perforation, held in place by a head bearing upon each face of the tile. In attaching the

tile with a nail the nail is driven through this lead plug, the lead being forced so as to cause it to flow and permit a passage of the nail therethrough. When the nail is driven home, there will be a washer of lead between the head of the nail and the upper face of the tile, so that the vibration of subsequent blows upon the head of the nail will be absorbed by the lead and will not result in fracture of the tile. Moreover, the lead will yield to the passage of the nail, but will retain a close fit, effectually preventing the passage of moisture between the nail and the plug and the consequent leaking of the roof of which the tile forms a part. Also there being the yieldable inclosure for the nail there will be practically no strain radially of the opening which would tend to throw the tiles apart.

It will be readily understood that I may employ any metal that flows readily, and also that I may secure such metal in position in any desired manner, and that I may apply the invention wherever desired to secure any of the objects thereof.

In Fig. 3 I have shown a modification, in accordance with which the portion of the tile adjacent the perforation is countersunk to receive the ends of the plug.

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

1. The combination with a tile having an opening therein, of a plug for the opening, said plug being composed of a readily-flowing and easily-penetrated metal, the ends of the plug being upset upon the face of the tile to form cushions.

2. The combination with a tile having an opening therein, of a plug of metal in the opening having its ends upset upon the faces of the tile, said metal having the property of readily flowing and of easy penetrability.

3. The combination with a tile having an opening therein, of a lead plug in the opening, the ends of the plug being upset upon the faces of the tile to form a cushion.

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

WM. DAVIS TURNLEY.

Witnesses:

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