

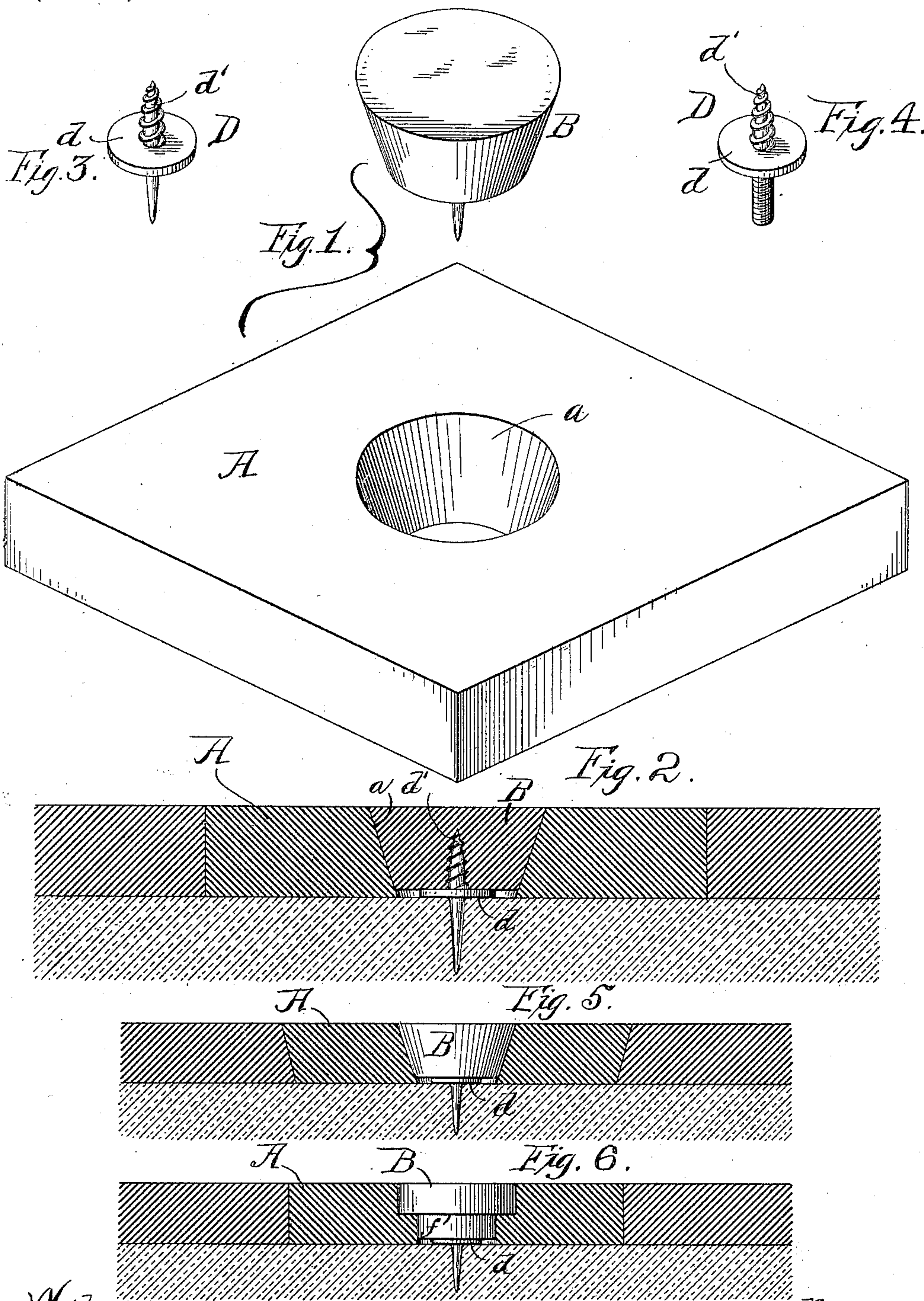
No. 652,716.

Patented June 26, 1900.

F. FURNESS.  
TILE.

(Application filed Nov. 13, 1899.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

FRANK FURNESS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-THIRD TO DAVID H. WATTS, OF SAME PLACE.

## TILE.

SPECIFICATION forming part of Letters Patent No. 652,716, dated June 26, 1900.

Application filed November 13, 1899. Serial No. 736,890. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK FURNESS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain  
5 Improvements in Tiles, of which the following is a specification.

The object of my invention is to secure tiles to their base without the use of cement or other adhesive material.

10 In the accompanying drawings, Figure 1 is a perspective view of a tile with the securing-plug detached. Fig. 2 is a sectional view through the tile and plug. Fig. 3 is a perspective view of one form of fastening device.  
15 Fig. 4 is a perspective view of another form of fastening device, and Figs. 5 and 6 are modifications of tiles and fastening devices.

A is the tile as shown in Fig. 1 and in the present instance is shown as a quadrangular  
20 tile having vertical sides. It will be understood, however, that the tile may have any construction desired and may have an ornamented or smooth face and beveled edges, the purpose of these beveled edges being to lock  
25 the adjoining tiles to the base, as fully described in the application filed by me on the 3d day of November, 1899, Serial No. 735,706.

The essential feature of the present invention is the fastening device for securing the  
30 tile to its foundation.

The tile A has a central opening *a*, preferably tapered, as shown in Fig. 2, and adapted to this opening is a plug B. When the plug is drawn in place, it snugly fits the opening  
35 in the tile and its surface is preferably flush with the surface of the tile, so that it is practically part of the tile.

D is the fastening device I prefer to use. This device consists of a washer *d*, having a  
40 screw-stem *d'* at one side, which is fastened to the tile, and having at the opposite side a pin or nail, as shown in Fig. 3, or a screw, as shown in Fig. 4.

My invention is especially adapted for use in connection with rubber tiles or tiles made  
45 of yielding material, as I find that by using a coarse screw I can screw the stem *d'* into the body of the plug, as shown in Fig. 2, and the rubber adheres tenaciously to this stem.

When the tile is set into position on its  
50 foundation—for instance, cement or wood—the plug is centered and the nail or pin is drawn into the foundation until the plug snugly fits the opening in the tile, as shown in Fig. 2. In Fig. 5 the tile is shown with  
55 overlapping sides which overlap the adjoining tiles. Thus each alternate tile of a series only need be fastened by the plug.

In Fig. 6 I have shown a different form of plug having a flange *f*, adapted to a flanged  
60 opening in the tile, as before remarked.

The shape of the plug may be varied, also the shape of the tile, without departing from my invention.

I claim as my invention—

65 1. The combination of a tile, having an opening extending through the body thereof, a plug seated in the opening, and overlapping the tile, a securing device attached to the plug and having a portion projecting therefrom,  
70 adapted to be driven into the foundation, whereby the tile is secured in place by the plug, substantially as described.

2. The combination of a tile, having a central opening, a plug adapted to the opening,  
75 and overlapping the tile, a washer having a screw on one side, adapted to be screwed into the plug, and having a pin or nail on the opposite side, substantially as described.

In testimony whereof I have signed my  
80 name to this specification in the presence of two subscribing witnesses.

FRANK FURNESS.

Witnesses:

WILL. A. BARR,  
JOS. H. KLEIN.