

TILE.

Patented Nov. 29, 1921.

Fig. 1.

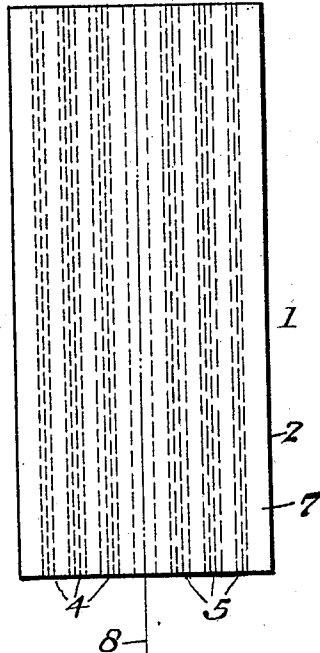
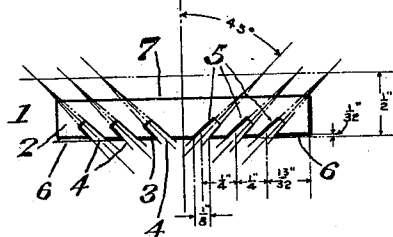
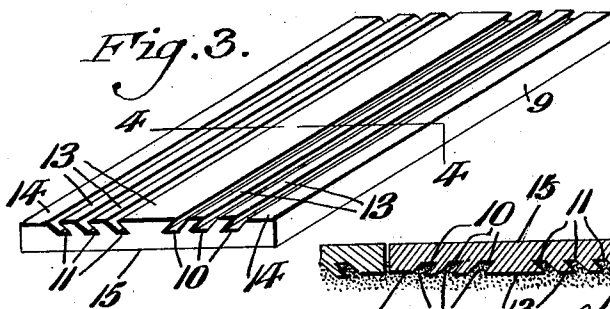


Fig. 2.



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TILE.

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Specification of Letters Patent.

Patented Nov. 29, 1921.

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To all whom it may concern:

Be it known that I, JOHN B. LANCASTER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Tile, of which the following is a specification.

My invention consists of a novel construction of tile which is provided on the back thereof with longitudinally extending grooves which extend into the body portion of the tile and are arranged on each side of the longitudinal median line thereof, in such a way that one set of grooves on one side of said median line are substantially parallel and incline or diverge or converge in an opposite direction to the opposite set of parallel grooves on the other side of said median line, whereby I am enabled to provide the back of the tile with 125% more adhesive surface than now exists in a plain back tile, so that when the cement, mortar or other adhesive material is forced into these crevices, dove-tails or grooves, it forms a clencher-like joint which will effectively fasten the tile to the wall or ceiling in a dove-tailed manner.

By my invention, not only is the adhesive surface of the tile very largely increased, but the shape of the grooves permits a ready application of the cement or other adhesive-medium thereto, so as to allow of contraction and expansion thereof, hence there is no likelihood of breaking or fracturing either the tile or the fastening means, nor is there any likelihood of cracking the body portion of the tile by any expansion or contraction of the cement or other holding material.

For the purpose of illustrating my invention, I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same will give satisfactory and reliable results in practice, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a plan view of a tile embodying my invention.

Fig. 2 represents an end elevation of Fig. 1.

Fig. 3 represents a perspective view of the

back or attaching surface of another form of tile embodying my invention.

Fig. 4 represents a sectional view of a plurality of tiles, in assembled position, similar to the tile seen in Fig. 3, the section being taken on line 4—4 Fig. 3.

Similar numerals of reference indicate corresponding parts in the figures.

Referring first to Figs. 1 and 2:—

1 designates my novel construction of tile, the same comprising a suitable body portion 2, whose back or attaching surface 3 is provided with a series of longitudinally extending grooves 4, whose walls 5 converge inwardly toward each other, as will be understood from Fig. 2. The longitudinal edge back surfaces 6 of the tile are preferably faced off $\frac{1}{2}$ of an inch from the main attaching surface 3, as indicated at the right of Fig. 2, so that the distance from the front or outer surface 7 of the tile to the attaching surface 3 is $\frac{1}{2}$ of an inch greater than from said outer surface 7 to the longitudinal edge surfaces 6.

It will be understood from Fig. 2 that I arrange the longitudinally extending grooves 4 preferably in a series of three at each side of the longitudinal median line 8 of the tile, and that the walls 5 of said grooves converge inwardly into the body of the tile, and that each set of longitudinally extending grooves on each side of said median line converge toward said median line, so that by reason of this construction, when the mortar, cement or other holding or adhesive material is inserted in said grooves 4, it will effectively be interlocked therewith and the tile will be thus effectively secured against the wall or ceiling, and any slight excess of the mortar or similar material, can occupy the space along the surfaces 6, or if desired a suitable implement can be inserted under the edges 6, when it is desired to remove a tile.

In Figs. 3 and 4, I have shown another embodiment of the principle of my invention, wherein 9 designates the body of the tile and 10 a set of longitudinal grooves arranged on the back thereof on one side of the longitudinal median line of the tile, while 11 indicates another set of longitudinal grooves arranged on the opposite side of said median line, it being observed that the two sets of grooves 10 and 11 converge inwardly toward each other or toward the longitudinal median line of the tile, so that

when said grooves are filled with mortar, cement or the like, as indicated at 12 in Fig. 4, the tiles will be effectively secured in the desired location.

5 In the construction seen in Fig. 3, I construct the body of the tile so that the surfaces 13 are all in the same rectilinear line and extend slightly beyond the surfaces 14, or in other words, the body portion of the tile is
10 thicker or the distance is greater from the outer face 15 to the surface 13 than it is from said outer face 15 to the faces 14 substantially as explained with respect to Fig. 2, whereby the surfaces 14 are provided to
15 receive any slight excess of the cement, when the tile is placed or pressed in position, and also permits the tile to be more easily lifted from its position on the wall or ceiling than
20 would be the case if the surfaces 13 and 14 were all on the same rectilinear line.

The walls of the grooves 10 and 11 may slightly converge inwardly toward each other as in the case of the walls 5 of the grooves 4 seen in Fig. 2.

25 The grooves may be formed in the tile at any suitable stage of its manufacture and by any suitable means, and the tile may be made of any of the conventional materials usually employed.

30 The efficiency of my novel tile is evidenced by the fact that its back has 125% more adhesive surface than the plain backed tile, since for example an ordinary two-inch tile

has two inches of adhesive surface, whereas a two-inch tile embodying my invention, 35 has four and one-half inches of adhesive surface, the advantages of which will be apparent to those skilled in the art.

It will now be apparent that I have devised a novel and useful tile which embodies 40 the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described 45 a preferred embodiment which will give in practice satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of 50 its advantages.

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

As an improved article of manufacture, a 55 tile having a series of tapered grooves, embedded in the back thereof, and extending longitudinally from one end to the other, said grooves being inclined in opposite directions in each half section of said tile, 60 and said tile being thicker at its body portion than at its longitudinal outer edges.

JOHN B. LANCASTER.

Witnesses:

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C. D. McVAY.