July 30, 1957 C. G. HOLMQUIST 2,800,998

TILE SOAKING RACK

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FIG. 1.

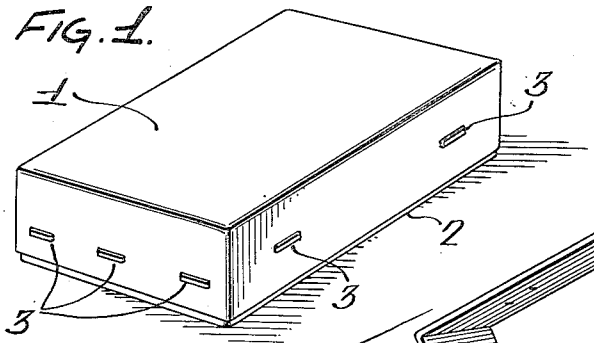


FIG. 2.

FIG. 3.

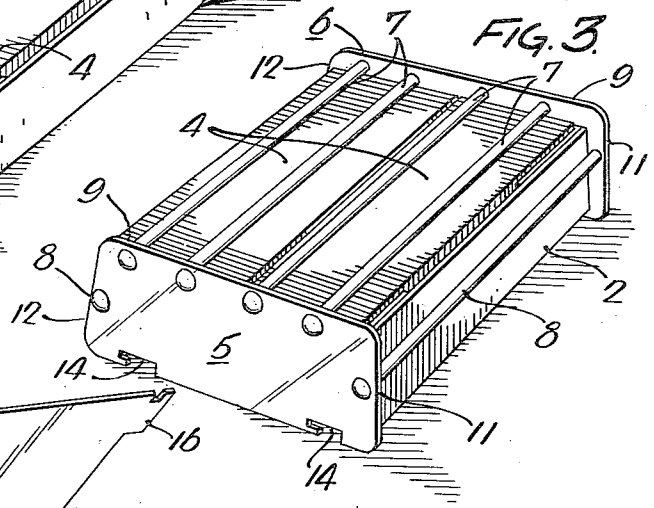
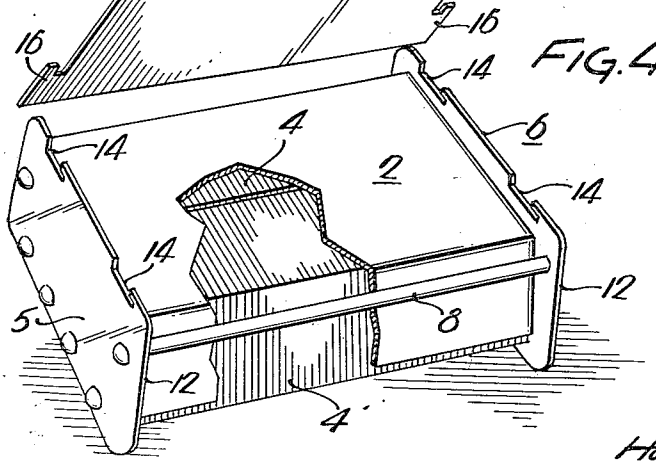


FIG. 4.



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FIG. 5.

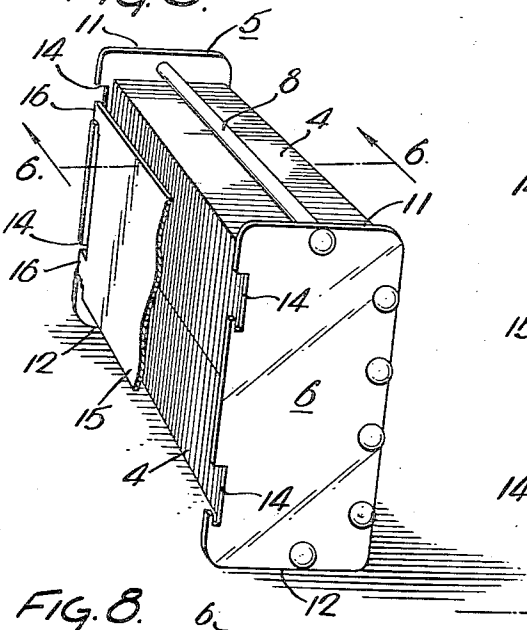


FIG. 6.

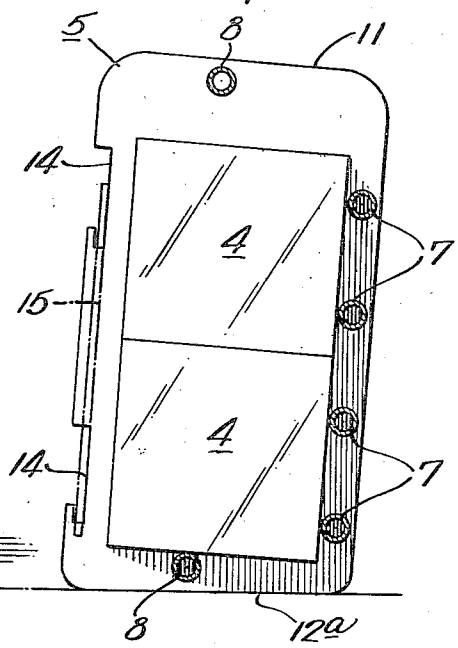


FIG. 8.

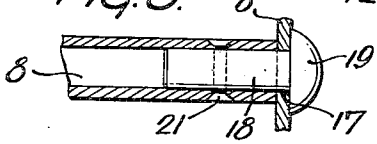
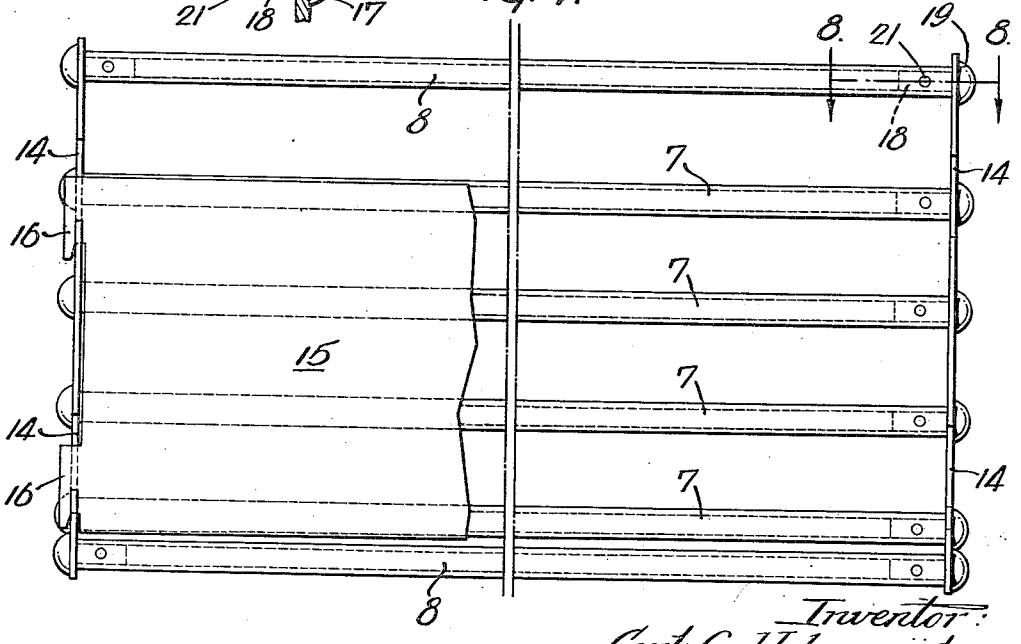


FIG. 7.



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TILE SOAKING RACK

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Application September 16, 1953, Serial No. 380,511

1 Claim. (Cl. 206—46)

This invention is related to the conventional process of wetting ceramic tile by immersion preparatory to installation.

A principal object of the invention is to provide a novel and effective means to facilitate the aforesaid "soaking" operation.

More specifically, an object is to provide a novel form of rack designed to facilitate transfer of the tile from the shipping container to the soaking bath.

To this end the invention contemplates provision of a soaking rack which will cooperate with the shipping container to facilitate transfer of the tile from the container to the rack, and which will function after the soaking operation has been completed as a dispensing container from which the tile may be readily removed, individually or collectively, for installation.

The invention resides also in certain novel structural details hereinafter described and illustrated in the attached drawings wherein:

Figure 1 is a view in perspective of a conventional cardboard tile-shipping container;

Figure 2 is an exploded view in perspective of the container showing the cover member removed;

Figure 3 is a view in perspective of the rack which forms the subject of the present invention and illustrates the rack in its cooperative relation with the base portion of the container illustrated in Figure 2 in the initial step of transferring the tile from the container to the rack;

Figure 4 is a view in perspective of the rack and container assembly illustrated in Figure 3 in a reversed position and illustrates also a detachable side plate which forms an element of the rack structure;

Figure 5 is a perspective partly in section view of the rack containing a full load of tile and with the aforesaid side plate in place;

Figure 6 is a sectional view on the line 6—6, Figure 5 illustrating a structural detail of the rack whereby the latter may be supported within or without the soaking bath upon a suitable supporting surface in a stable position precluding accidental dislodgment of the contained tile;

Figure 7 is a front elevational view of the rack in the position in which it is shown in Figure 5 but with the tile removed and,

Figure 8 is a section view on the line 8—8, Figure 7.

It is customary in installing ceramic tile to pre-soak the tile with water so as to be assured of a strong cement-to-tile adherence. Tile of this class are customarily shipped and delivered to the consumer in cardboard containers of the type illustrated in Figures 1 and 2, such containers consisting of upper and lower telescoping halves, 1 and 2 respectively, which in assembly are secured together by staples 3. In this container, the tile stand on edge in two rows as illustrated in Figure 2 wherein the tile are designated by the reference numeral 4. When the tile are to be used, the staples 3 are withdrawn and the cover 1 removed as illustrated in Figure 2.

With reference to the remaining figures of the drawings, the rack which forms the subject of the present invention consists of two flat end plates, 5 and 6 respectively, which are joined together by a plurality of rods 7 and 8. The rods 7 are arranged in parallel relatively spaced series along one of the relatively long edges 9 of the respective plates, and the rods 8 occupy positions adjacent the opposite relatively short edges 11 and 12 of the respective plates. Since the plates are identical in form, these edges are designated by the same reference numerals. It will be noted that the rods 7 and 8 with the end plates 5 and 6 form in effect an open-top basket or rack which is adapted to support tile in stable manner as hereinafter described.

This rack is dimensioned with respect to the shipping container 1, 2 so as to fit freely over the base portion 2 of the rack with its contained tile 4 as shown in Figure 3. This materially facilitates transfer of the tile from the shipping container to the rack in that, after placing the rack over the container as described and thereafter reversing this assembly as illustrated in Figure 4, the base portion 2 of the container may be withdrawn leaving the tile contained by and supported in the rack. It will be noted by reference to Figures 3 and 4 that the tile when thus supported in the rack will rest upon their edges and in vertical planes upon the rods 7, the respective adjoining pairs of rods underlying the tile of the respective rows, and the rods 8 confining the tile at the outer sides of the rows.

To insure safe handling of the rack with its tile contents, a suitable attachable cover or side plate 15 is provided (see Figure 4), this plate having lugs 16 at its opposite end edges which are adapted to engage and to interlock with recesses 14 in the edges 13 of the end plates 5 and 6, the lugs and recesses forming a typical bayonet joint which, after initial insertion of the lugs in the recesses, may be secured by sliding the plate 15 in its own plane relative to the body of the rack. It will be noted also by reference to Figure 5 that these joints are formed so that when the rack is supported on edges 12 of the end plates 5 and 6, the cover plate 15 will be held in the interlocked relation by force of gravity.

Reference is also made to Figure 8 which illustrates the manner in which the rods 7 and 8 may be secured in the end plates 5 and 6. The said rods in this instance take the form of tubes and the end plates are apertured, as indicated at 17, in alignment with the ends of these tubes for reception of a headed pin 18 which is passed through the aperture 17 and into the end of the tube with the head 19 seating against the outer face of the plate 6. The pin is secured by means of a rivet 21 passed through the wall of the tube and the shank of the pin. Obviously, other suitable means may be employed to secure the rods in place without departure from the invention.

After transfer of the tile from the shipping container to the rack as described and application of the cover or side plate 15, the rack with the contained tile may be lifted, by one of the rods 8 for example, and placed in the soaking bath wherein the water has free access to all surfaces of the tile. At the termination of the soaking period and when the tile is to be installed, the rack may be removed from the bath and placed in an accessible position supported upon the edges 12 of the rack as shown in Figure 5. Detachment of the plate 15 in obvious manner will then expose the tile for removal as required in the tile-setting process. In order to insure against inadvertent displacement of the tile from the rack, the edge 12 may be formed at an angle to the longitudinal edges of the end plates 5 and 6 as illustrated at 12a in Figure 6. When supported on these edges, the rack will be given a slight rearward inclination as shown,

In another procedure the rack with the adequately wetted tile may be removed from the bath and placed face down on a suitable supporting surface with the cover plate 15 at the underside of the rack. This plate may then be slid edge-wise with respect to the rack to release the bayonet joints which permits the body of the rack to be lifted away vertically from the tile leaving the latter entirely exposed on the supporting surface.

It is evident also that the cover plate 15 may be removed while the rack is in the bath and the tile then removed individually or in groups from the rack and from the bath as required.

I claim:

A tile soaking rack comprising a pair of elongated, substantially rectangular end members each of a length approximately a multiple of the width thereof; a pair of rods extending between and rigidly connecting said end members to maintain the same in parallel, spaced relation, the rods of said pair being secured to said end members each at points adjacent each short edge thereof and intermediate the long edges thereof; a plurality of pairs of laterally-spaced rods extending between and rigidly connecting said end members, the rods of each pair of said plurality of pairs of rods being secured to each of said end members at points adjacent one of the corresponding long edges thereof, said end members, said pair of rods, and said plurality of pairs of rods forming an open-top rack having end, side and bottom portions wherein tile is closely confined in a plurality of contiguous parallel rows extending lengthwise between the end members with the tile of each row in upright face to face relation with the lower edges of each row of tile overlying one pair of said plurality of pairs of rods and

with the outer edges of the outermost parallel rows of tile in edgewise engagement with a rod of said pair of rods at opposite sides of said rack; one of the short edges of each end member at the same side of the rack being inclined inwardly from a point adjacent the open top of the rack to a pint adjacent the bottom thereof so that the rack when placed in an upright position supported on said inclined edges will tilt rearwardly from the open top side of the rack whereby the contained rows of tile will tend to gravitate to assume positions bearing against said plurality of pairs of rods; a detachable cover for said open top operative in conjunction with the said end members, said pair of rods and said plurality of pairs of rods to completely confine the tile to the interior of the rack; and complementary retaining means on said end members and cover for attaching said cover to the rack.

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