TILED WALL OR THE LIKE

The invention relates to the production of tiled surfaces of the general type disclosed in Patent No. 1,894,614 granted August 3, 1926, to George D. Haines. The construction shown in said patent comprises a foundation sheet to which enameled sheet metal tiles are secured to form the tiled surface.

The object of the present invention is to provide a construction in which either ceramic or sheet metal tiles may be used, which construction includes a foundation sheet adapted to position the tiles accurately in accordance with any prearranged plan with a minimum of attention and skill on the part of the workman. This object is attained by providing on said foundation sheet ribs or lugs forming pockets into which the base of the tile fits, the ribs or lugs being concealed by the grouting between the tiles.

In the accompanying drawings:

Figure 1 is a fragmentary view in elevation of a tiled wall embodying the features of the invention.

Figure 2 is a vertical section taken on the line 2—2 of Fig. 1.

Figure 3 is a fragmentary perspective view of the foundation sheet.

Figure 4 is a fragmentary view in elevation of a modified form of tiled wall.

Figure 5 is a vertical section taken on the line 5—5 of Fig. 4.

Figure 6 is an enlarged fragmentary section showing a detail of a joint between adjacent tiles.

While the invention is susceptible of various modifications and alternative construction, we have shown in the drawings and will herein describe in detail the preferred embodiment, but it is to be understood that we do not thereby intend to limit the invention to the specific form disclosed, but intend to cover all modifications and alternative constructions falling within the spirit and scope of the invention as expressed in the appended claims.

The invention is adapted for use in connection with interior or exterior walls, floors, wainscoting, fire places, tiled surfaces around built-in bath tubs, store counters, and the like. The supporting structure to which the tile surface is to be applied may be of any preferred construction, that shown herein consisting of a plurality of vertical wooden studs 10 constituting the ordinary supporting structure or frame work of a wall or partition. To the studs are nailed or otherwise secured a rigid base or foundation sheet 11 of mineral or fibrous material.

On the face of the sheet 11 is a plurality of sets of parallel projecting portions or ribs 12 which form pockets 13 in the face of said sheet.

A preferred form of tile, shown in Fig. 2, comprises a ceramic block having a base portion 14 and a face portion extending beyond the area of the base to form flanges 15. The pockets 13 are of substantially the same size as the base portions 14 and are adapted to receive the base portions, while the flanges 15 extend over the face of the ribs 12.

In the step of mounting the tile on the foundation sheet, the base portion of the tile is coated with cement 11a (Fig. 6) and placed in the pocket 13, part of the cement being forced between the ribs 12 and the sides of the base portion 14, thus causing the tile to be rigidly held in place when the cement has set. Between the adjoining tiles, a groove is formed by the adjoining flanges 15 and the face of the rib 12 which is filled with cement, indicated at 12a (Figs. 2 and 6) in the grouting operation.

It is obvious that tiles may be made without the flanges 15 but with straight sides. Such tiles provide a wider groove for grouting, if it is desired.

In the modified form of wall shown in Figs. 4 and 5, the foundation sheet 11 is provided with projecting portions in the form of raised crosses 16, the corners of which constitute accurate means for positioning the tile.

The tile illustrated in Fig. 5 comprises an enameled sheet metal plate 17 having rearwardly extending flanges 18. It is obvious that this form of tile may be used in connection with the foundation sheet illustrated in Figs. 1, 2 and 3, or that the two forms of ceramic tile mentioned above may be used
with the foundation sheet illustrated in Figs. 4 and 5.

In mounting the sheet metal tile on a foundation sheet such as is shown in Figs. 4 and 5, the back of the tile is coated with cement slightly over the level of the flanges 18 and then set against the sheet with its corners fitting in the corners of the raised crosses 16. Slight pressure is then applied to the tile to seat it and the excess cement is forced out between the flanges 18 and the sides of the raised crosses 16 and between the flanges of the adjoining tiles, thus firmly bonding each tile to the sheet and to the adjoining tiles.

If ceramic tiles are employed, it is apparent that they will be similarly bonded.

We claim as our invention:

1. A tiled wall comprising, in combination, a rigid foundation sheet constituting a part of the wall and having projecting portions forming pockets on its face, and rigid tiles cemented to said sheet and fitting within said pockets with the projecting portions closely surrounding said tiles, the tiles projecting above said projecting portions, whereby grooves are formed between adjacent tiles, part of the cement being forced between the projecting portions and the sides of the tile when the tile is set in place.

2. A tiled wall comprising, in combination, a rigid foundation sheet constituting a part of the wall and having projections forming pockets on its face, and ceramic tiles fitting within said pockets, said tiles having a thickness greater than the height of said projections whereby said projections will be covered in grouting said tiles.

3. A tiled wall comprising, in combination, a rigid foundation sheet, and rigid tiles mounted on said sheet, said sheet having projecting portions forming pockets having the shape of a tile and in which the tiles are placed with the projecting portions surrounding the sides of the tiles, said projecting portions being arranged according to a predetermined plan for setting the tiles.

4. A tiled wall comprising, in combination, a foundation sheet having projecting portions on its face, and tiles having a base portion fitting between said projecting portions and cemented to said sheet and a face portion extending outwardly beyond said projecting portions, the face portions of adjoining tiles forming grooves with said projecting portions in which cement is placed in grouting.

5. A tiled wall construction comprising, in combination, a supporting framework, a foundation sheet of composition material secured to said framework, means on the front face of said sheet forming a plurality of contiguous and similarly shaped pockets therein, and tiles having base portions arranged to fit snugly within said pockets and having face portions extending beyond the margins of said base portions partially to overlie said pocket forming means, the margins of the face portions on adjacent tiles being spaced apart when the tiles are assembled to permit cement to be placed therebetween.

In testimony whereof we have hereunto affixed our signatures.

OWEN E. GRIGSBY.

GEORGE D. HAINES.