Nov. 13, 1934. A. C. BRETLAND 1,980,906

METAL TILING

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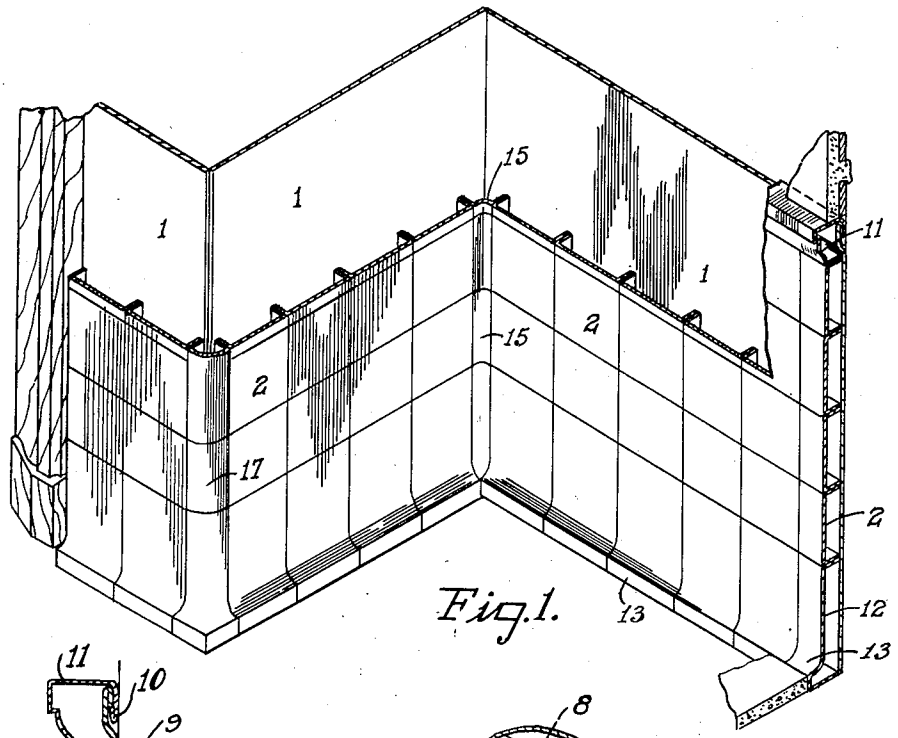


Fig. 1.

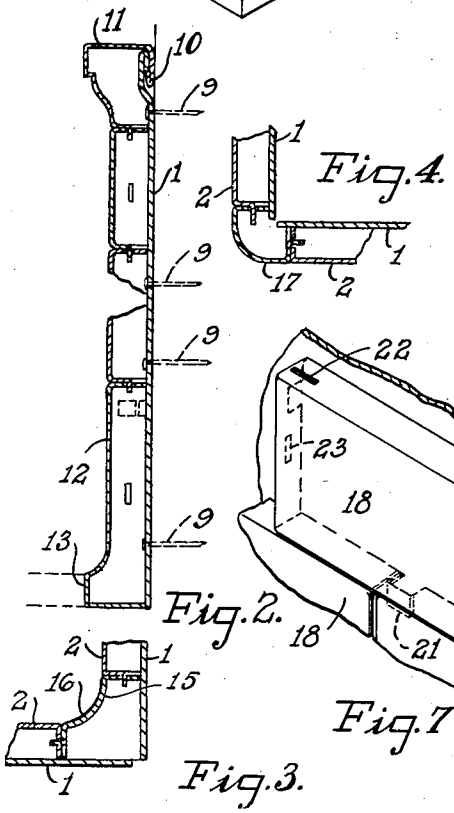


Fig. 2.

Fig. 3.

Fig. 4.

Fig. 7

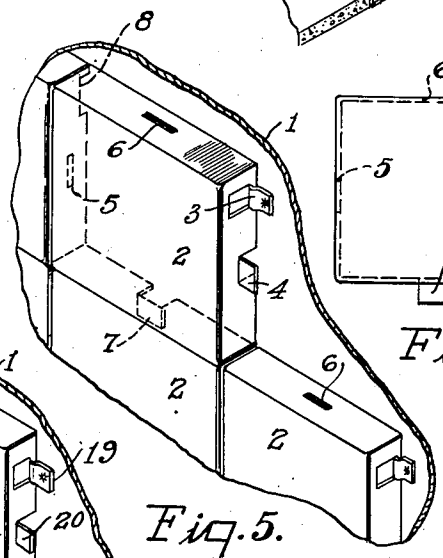


Fig. 5.

Fig. 6.

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METAL TILING

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4 Claims. (Cl. 189—85)

This invention relates to new and useful improvements in metal tiling.

It is one of the principal objects of this invention to provide for dwellings, office buildings, pullman cars, airplanes, refrigerators and other structures, an interlocking metal tile with concealed welds for firmly securing it to a foundation sheet. The tile is easily interlocked over the welds to conceal them from view.

The cost of my tile is less than clay tile, it is more durable and the cost of installation is very low.

The tile will not fall off because it is welded to the foundation sheet. There is no celotex or wood behind the tile, nor is it held on by glue or cement, but by a welded steel band that is stronger.

My tile is also water-proof, acid-proof, fireproof, weather-proof and fool-proof in construction, and sound-proof when filler is used. A competent mechanic can easily cut and fit my tile around both fixtures and tubs with neatness and dispatch, the cap mould and corners leaving a beautiful finished job.

Other important and incidental objects will be brought out in the following specification and particularly set forth in the subjoined claims.

In the accompanying drawing illustrating my invention, Figure 1 is a perspective view of a side wall to which my metal tiles are applied. Figure 2 is a vertical sectional view taken through said tiled wall. Figure 3 is a sectional view, showing an internal corner of said tiled wall. Figure 4 is a sectional view taken through an external corner of said wall. Figure 5 is a perspective view of a portion of a wall made up of square tile members. Figure 6 is a front view of one of my square tile members. And Figure 7 is a perspective view of a portion of a side wall made up of rectangular tile of my construction.

In the accompanying drawing illustrating one form of embodiment of my invention, the numeral 1 in Figures 1, 5 and 7 designates a foundation sheet to which my interlocking tile members are applied to form a tiled wall with concealed welds. The foundation sheet 1 is of sufficient thickness to be entirely self-supporting when attached to the structural framework. Such framework may be the metal channel studs employed with modern building construction, or the framework of aircraft, railway cars, and metal furniture.

The metal tiles employed in Figure 1 are square. In Figure 6 the numeral 2 designates one of these tiles. It is preferably a pan tile of sheet steel, with two ears 3 and 4 on one side and a slot 5 in the middle portion of the opposite side. The ears 3 and 4 are preferably not in the same vertical planes. In the middle portion of the top flange of the tile 2 there is a slot 6, while there projects downwardly from the flange below it an ear 7.

As shown in Figures 1 and 5, these square tiles 2 are alined up and down. After each tile is properly set, its ear 3 is welded to the foundation sheet 1. The ear 4 below it projects into the slot 5 of the tile that is placed next to it, the flange containing that slot being recessed as at 8 in Figure 5, to fit over the welded ear 3 of the first tile to conceal the weld. The slot 6 in the first tile receives the ear 7 of the tile mounted upon it. When all the tiles have been placed to complete the wall, they will not only be welded firmly to the foundation sheet, but interlocked over the welds to conceal them. Also, in the case of metal furniture and buildings having metal framing, welding is not only a speedy and economical method of attaching the individual units, but, due to the total absence of wood and similar materials forming a nailing medium, it is necessitated.

As shown in Figures 1 and 2, the foundation sheet 1, which may be secured to its support by nails 9, or by spot-welding in the case of the metal framework, is offset and bent upon itself at its upper end to receive the hook-shaped ends 10 of the cap tile 11. The base tiles 12 are longer than the other tiles and are formed with forwardly projecting foot portions 13.

In Figure 3 is shown one of my metal tiles for forming the internal corners of the wall. This tile, which will be designated by the numeral 15, has a cove 16 to form the internal corner in a graceful curve.

The tile 17 for forming an external curve in the wall is illustrated in Figure 4. This tile has a convex outer surface to round out in a pleasing way the external corners of the wall.

In Figure 7 I have illustrated my pan-shaped metal tile made in rectangular form. Each rectangular tile, which will be designated by the numeral 18, may have ears 19, 20 and 21 similar to the ears 3, 4 and 7 respectively of the square tile. Since these rectangular tiles overlap, the slot 22 in the top flange of each tile is at its end, and not in the middle, as in the case of the slot 6 in the square tile 2. The end slot 23, however, is in the same position as the end slot 5 in the square tile. The ears 19 of the rectangular tiles are welded to the foundation sheet, like the ears 3 of the square tile, with the welds being covered

in the same way by the interlocking ears and grooves.

I do not desire to be limited to the details of construction and arrangement herein shown and described, and any changes or alterations may be made therein within the scope of the subjoined claims.

Having described my invention, I claim:

1. The combination with a foundation sheet, of a plurality of metal pan tiles welded to said sheet to form a tiled covering for the latter, and means for interlocking said tiles together to conceal the welds.

2. The combination with a foundation sheet, of a plurality of metal pan tiles welded to said sheet to form a tiled covering for the latter, ears formed on said tiles, said tiles also formed with recesses to receive the ears on the adjacent tiles, the tiles, when interlocked through the entrance of the ears into the recesses, concealing the welds.

3. The combination with a foundation sheet of a plurality of metal pan tiles, ears formed on said tiles, said tiles also formed with recesses to receive the ears on the adjacent tiles, certain ones of said ears being welded to the foundation sheet, the tiles, when interlocked through the entrance of the ears into the recesses, covering the welded ears.

4. The combination with a metal foundation sheet, of a plurality of metal pan tiles, a welding ear and an interlocking ear formed on one side of each tile, each tile also formed with a slot on its opposite side, to receive the interlocking ear of the adjacent tile after the welding ear is welded to the foundation sheet, an interlocking ear formed on a bottom flange of each tile, a top flange provided with a slot to receive said bottom interlocking ear of the adjacent tile next above, an offset bend formed on the top marginal edge of the foundation sheet, and a cap member having a hook-shaped end behind said offset bend for locking engagement with the latter.

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