

May 14, 1940.

F. CLARKE

2,200,382

FACING UNIT

Filed March 8, 1938

Fig. 1.

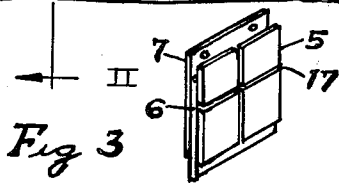
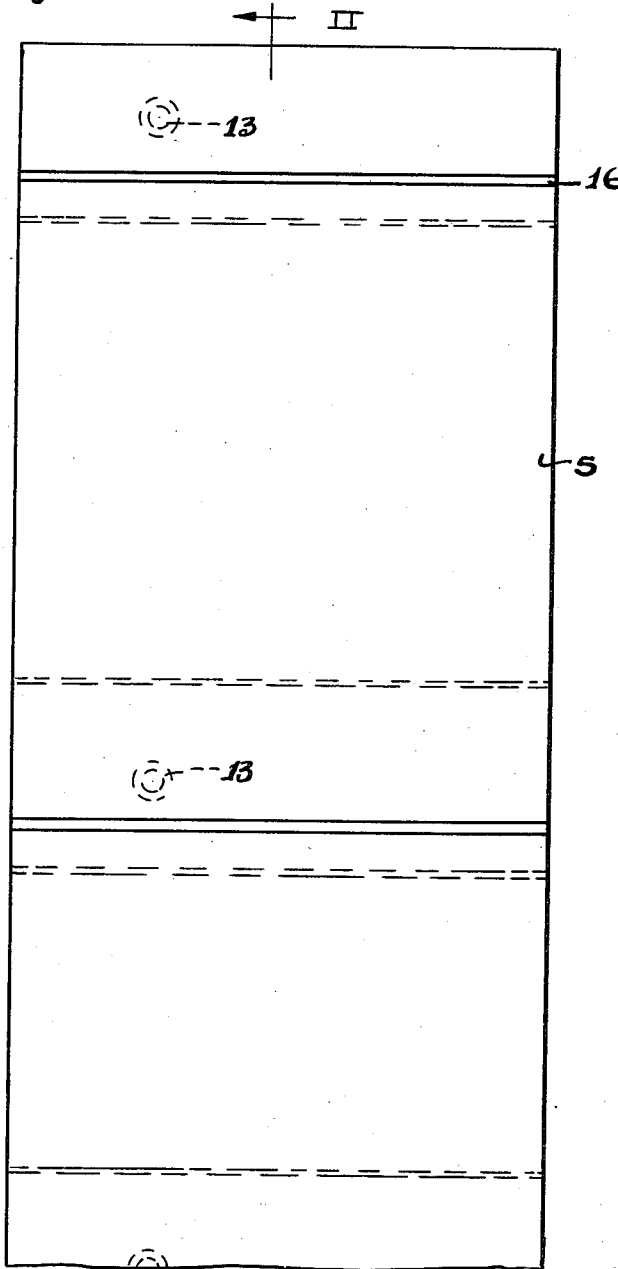
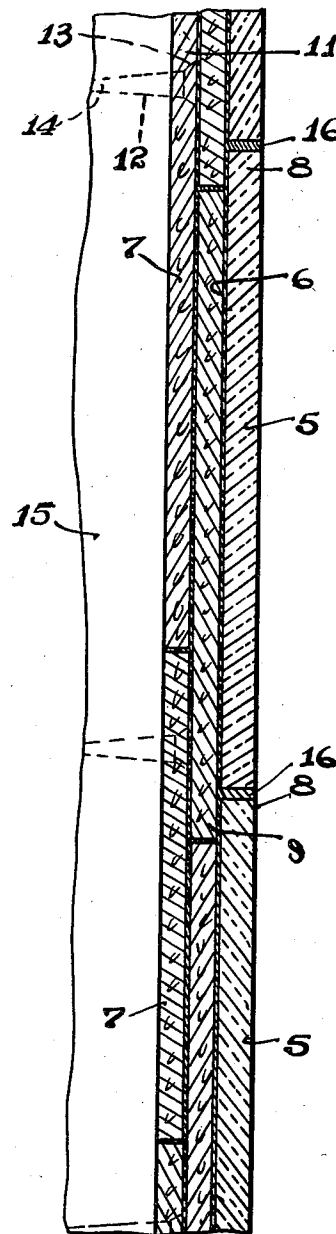


Fig 3

Fig. 2.



INVENTOR.
FRANK CLARKE
BY *Bradley & Bee*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,200,382

FACING UNIT

Frank Clarke, St. Louis, Mo., assignor to Pittsburgh Plate Glass Company, Allegheny County, Pa., a corporation of Pennsylvania

Application March 8, 1938, Serial No. 194,562

1 Claim. (Cl. 72—18)

The present invention relates to facings for the surfaces of buildings and it has particular relation to facings comprising a plurality of units which are adapted to be secured to a wall, floor or other building surface in abutting relationship with respect to each other, in order to provide substantially continuous protective and decorative surfaces.

One object of the invention is to provide a wall surfacing unit preferably of vitreous material and of simple, conventional outline and comprising means by which it can be secured to a wall or other backing without the use of mastic or other cementing material.

A second object of the invention is to provide units of the foregoing type in which the securing means, when the units are assembled upon a wall, are completely concealed.

These and other objects of the invention will be apparent from consideration of the following specification and the drawing relating thereto.

A conventional method of securing tiles of decorative material such as glass or ceramic substances to walls, floors or like surfaces, involves coating the surfaces to be decorated with a cementing material such as mastic or similar substance, and then pressing the units into contact therewith with their edges in abutting relationship with respect to each other. Such method of course requires preliminary treatment of the wall surface with the cement and in order to provide a smooth surface, also, requires considerable experience and skill upon the part of the workman employed. Furthermore, bonding of the units to the cement is not always satisfactory and loosening of the units often occurs.

In accordance with the provisions of the present invention decorative tiles of glass or ceramic substances are mounted upon a plurality of layers of backing material so disposed with respect to each other and with respect to the facing material as to provide interlocking tongues and grooves at the edges of the units. Certain of the tongues having sufficient projection with respect to the remainder of the units as to provide portions for the reception of screws or other fastening devices, and the tiles are then secured upon a wall without the use of cements and in such manner that the securing devices are completely concealed.

For a better understanding of the invention reference may now be had to the drawing in which: Figure 1 is a fragmentary plan view of a portion of a building wall showing a plurality

of facing units constituting the subject matter of the present invention secured thereupon.

Figure 2 is a fragmentary cross-sectional view taken substantially upon the line II—II of Figure 1 and

Figure 3 is an isometric view of a single unit.

In the drawing like numerals refer to like parts throughout.

In the form of the invention illustrated, facing plates or tiles 5 of tempered or untempered glass, ceramic materials or other suitable vitreous substances are formed in any conventional size and thickness. To these tiles are secured backings comprising two layers 6 and 7 each of the two backing layers being of substantially the same face dimensions as the plate or tile 5 and being formed of any convenient backing material. Suitable materials for forming such layers comprise ply wood, "Masonite" asbestos-cement boards, squares of ordinary wood of suitable thickness and such like materials. It might also be desirable to form the backings of plates of glass, ceramic materials, etc. The layers 6 and 7 are secured to each other and to the facing material 5 by means of a cement such as asphalt, glue, vinyl resin or the like. The plates may be tempered or untempered glass and may be opaque, clear or translucent. If they are clear the cements and backing layers may be so chosen as to produce effects resembling polished marble, costly woods and other pleasing effects. Layers 6 and 7 may be molded or pressed as units.

It will be observed in Figure 2 that the backing layer 6 is so offset with respect to the facing layer 5 that projecting lips 8 and 9 are respectively provided at the edges thereof. It will also be observed that backing layer 7 is offset with respect to the layer 6 in the same direction as the facing layer 5, but to a substantially greater degree, thereby providing a second projecting lip 11 which extends substantially beyond the lip 8. The backing layer 7 at the edge opposite the lip 11 is overhung by the layer 5 an amount equal to the projection of the lip. Lip 11 is bored and countersunk to receive the stem 12 and the head 13 of securing screws 14 which are threaded into any suitable support 15 which may comprise an ordinary building wall or may even comprise studdings of a wall or slats, or bars which are mounted upon a wall.

Layers 5, 6, and 7 are shown as being offset in a vertical direction to provide tongues and grooves or recessions along the upper and lower edges. However, offsetting may be horizontal to

provide the interlocking portions along the vertical edges. The layers may also be offset in both vertical and horizontal directions to provide interlocking portions along all four edges.

- 5 The spaces between contiguous facing units is closed, for example by means of such caulking material as mastic 16 or by means of a suitable cement of any type. Caulking in some cases may not be required. As shown in Fig. 3 the faces
- 10 of a unit may be scored as indicated at 17 into a plurality of sections. The mode of assembling a facing comprising the units herein disclosed is substantially obvious. The edge portion of the composite facing preferably is built up of a row
- 15 of units disposed in side to side relationship, the space between the units being filled with caulking material such as indicated at 16. Screws are then threaded into the openings in the projecting portions 11 of the backing layer 7 in order
- 20 to fasten the units in position. Screws may be replaced by nails if preferred. Subsequently a second row is secured in position by hooking the lip 9 between the lip 8 upon the glass or vitreous sheet 5 and the lip 11 of the backing layer 7.
- 25 When the screw is secured in the projecting lip of this second unit the latter is firmly anchored in position upon the wall at its top and bottom edges. Subsequently additional units are mounted in similar manner in order to provide the entire surfacing. When it is desired to disassemble
- 30 the facing the units can be liberated without damage thereto by mere retraction of the screws in lips 11. Of course the rows should be taken down in reverse order to that in which they
- 35 were assembled. Assembly may be such that the grooves between the plates 5 and backings 7 open either upwardly or downwardly. If the units are assembled without the use of caulking materials in the joints, the grooves are preferably
- 40 disposed downwardly, in order to avoid the possibility of collection of water therein.

The units may be employed for facing or forming new walls, floors, ceilings and the like, but are of particular value for laying over old surfaces for redecorating the latter. The lips 11

45 project sufficiently to admit of nailing or screwing them to the wall without breaking or chip-

ping the plates 5. These nails or screws are completely covered and protected by the backing layers 6, thus obviating any possibility of contact between them and the glass 5. Even where the glass is transparent or translucent and the backing layer 6 is employed to give a decorative effect, the securing devices are completely concealed and it is impossible to detect that the units are not set in mastic or cement in conventional manner. The edges of the units are automatically aligned by the action of the interlocking tongues and grooves so that but little skill is required in setting them.

Although only a preferred form of the invention has been described it will be apparent to those skilled in the art that the form illustrated is merely exemplary and that numerous modifications may be made therein without departure from the spirit of the invention or the scope of the appended claim.

What I claim is:

A structural building unit comprising a facing tile of vitreous material, a first backing layer cemented to the tile and having one edge overhung by the corresponding edge of the tile, the opposite edge of the layer projecting beyond the corresponding edge of the tile and providing a tongue, a second backing layer of fibrous material cemented upon the back of the first backing layer and having its edges offset with respect to the corresponding edges of the first backing layer in the same direction as the corresponding edges of the tile, but to a substantially greater degree, whereby one edge is overhung by the tongue portion of the first backing layer and also by the corresponding edge of the tile and the opposite edge projects substantially beyond the overhanging edge of the tile to provide a groove to receive the tongue portion of a corresponding block and a lip along the same edge of the tile as the groove projecting beyond the overhanging portion of the tile to be accessible from the front of the tile to receive devices for fastening it to a supporting wall, the backing layers and the tile being of substantially the same face dimensions.

FRANK CLARKE.