This invention relates to improvements in the art of building material and more particularly to building material for use on walls, ceilings, floors or on any other surface where tiling or plastic block surfacing material might be used.

The invention has reference to the economical formation of a section of surfacing material comprising a multiplicity of tiles or plastic blocks wherein the section may be applied to the surface as an individual unit. The invention may, however, be utilized in such form that each tile or block formation is applied separately.

With the usual method of laying tiling or blocks wherein cement or the like is utilized as a securing means, a number of disadvantages and unattractive conditions and unattractive practices are present. It is necessary to obtain a bond between the substance forming the block and the substance used as the binder between blocks, and if the binder is a dry mortar, quick setting will take place and a non-waterproof joint will result. If the binder is of a cream-like consistency, it frequently oozes out between blocks and stains the face of the latter and the surface surrounding it. In addition to the above-mentioned objectionable feature of present day practices, shrinking frequently takes place when the mortar between blocks sets and an imperfect bonding results. If a gum or asphalt of a hard variety is employed as the binder, checking in the binder results. A gum or asphalt of the soft variety permits displacement of one unit with respect to another. As a result of the oozing before mentioned it is necessary under present practices to perform a finishing operation on the wall or other surface after it has been covered with the blocks and this finishing operation consists of an acid or abrasive treatment to produce a clean, unstained finish.

It is one of the objects of the present invention to overcome the above-mentioned objectionable features of present methods of laying tiling or blocks by providing building material in which displacement of one block with respect to another is eliminated, in which the cozing of mortar or other binding material is prevented, and in which the laying of a wall, ceiling or the like is greatly facilitated.

A further object of the invention is to provide an improved method of laying tiles or blocks or the like wherein the latter may be pre-formed in groups and wherein binding material is caused to enter the spaces between the individual tiles of each group and between the tiles of adjacent groups in a very novel manner to prevent staining of the surface of the blocks.

A further object of the invention is to provide an improved method of laying tiles or blocks as above described wherein the binding material may be so formed as to cause it to be either flush with the surface of the blocks, in the form of grooves, or in the form of ridges.

With the above and other objects in view, the invention consists of improvements in the art of building material and all its parts and combinations as set forth in the claims and all equivalents thereof.

In the accompanying drawing in which the same reference numerals indicate the same parts in all of the views:

Fig. 1 is an elevational view showing the webbing used as a base with a multiplicity of blocks formed thereon, the mesh of the webbing being omitted in parts for purposes of clarity;

Fig. 2 is a broken elevational view of the complete article showing the covering sheet thereon;

Fig. 3 is a perspective view of a fragment of a wall showing the novel construction, parts being broken away;

Fig. 4 is a cross-sectional view showing a modified form of covering sheet;

Fig. 5 is a similar sectional view showing another form of covering sheet;

Fig. 6 is an elevational view of another form of unit;

Fig. 7 is an elevational view showing a modified form of unit wherein only a single block or tile is utilized, part being broken away; and

Fig. 8 is a cross-sectional view of another modified form of the invention wherein the mesh is intermediate the blocks to permit reversal.

The article may be made in various other forms and shapes, those illustrated being merely shown by way of example.

Referring more particularly to Figs. 1 and 2, the unit utilizes a backing or webbing 1 made of either a flexible or rigid mesh of any suitable material such as metal or cloth, or the webbing may be formed of netting, perforated sheet material or exceptionally porous material. Secured to the face of the webbing and embedded at least flush with its back is a plurality of blocks 2 formed of a plastic material which have been cast or molded into position and formed to represent bricks or other building units. The blocks may also be preformed veneer blocks to which a backing of plastic material has been applied, the layer of plastic material being of sufficient thickness to provide for penetration of the webbing.
thereinto. When the plastic material has set, the blocks become a permanent and rigid attachment to the webbing as shown in Fig. 3. The blocks when cast or formed on the webbing are spaced apart and staggered in a brick-like relation to form the spaces 3. It is preferred to form a plurality of rows of blocks on the webbing as shown and the blocks of one row are so offset as to cause staggering of the blocks at the ends of the unit to provide for an interlocking fit with adjacent units and thereby provide a continuous surface when the sections or units are secured in position. The webbing in Fig. 1 is shown at the left and at the top so as to permit blocks of a section laid at the left and above to overlap the backing of the first section. While this is the preferred form, the webbing can be cut so that its ends can be keyed into proper relation with the webbing of adjacent units and abut the latter.

With the form of construction illustrated in Fig. 7 only one tile or block 2a is formed on the webbing 1a and the webbing is shaped to extend beyond all of the edges of the block as at 3a.

In the form of invention illustrated in Fig. 6, a plurality of blocks 2 are cast on a backing 1 in the same manner as above described but the ends of the unit are formed in regular step-like formation, the webbing being cut to coincide with the step-like formation at one end of the unit and better to project beyond the unit at the other end and at the top.

With the form of the invention shown in Fig. 8, half blocks or tiles 5 are deposited or molded simultaneously onto the webbing from opposite sides to form a construction in which the webbed material is midway between the blocks.

The units are further formed with a flat adhesive covering 4a, 4b, 4c and 4d and this covering is formed of any suitable material either flexible or rigid, and preferably relatively thin, which will permit temporary sealing of the spaces 3 between the blocks. The covering may be so formed that two adjacent ends will form a flap of sufficient length to seal the space between the end blocks of adjacent sections when the sections are secured in position on a wall or the like.

If it is desired to have the binding material so formed that there are valleys between blocks on the finished wall a covering of the type shown at 4d in Fig. 4 may be utilized, said covering being provided with grooves which fill in the spaces between the blocks. Similarly if it is desired that the binding material appear in the form of ridges, a covering of the type shown at 4b in Fig. 5 may be employed.

In carrying out the improved method of laying the sections, the entire unit as illustrated in Figs. 2, 6 or 7 is pressed with its mesh side inwardly into a layer of suitable binding material when the latter is in a plastic state, the layer being preferably on the face of the surface which is to be covered, causing said material to be forced through the openings in the webbing and into the spaces between the blocks until the material contacts with the underside of the covering 4, 4a, 4b or 4c. This permits a bond to be made between the back and the sides of each block and the web connecting them and between the adjacent sides of blocks of adjacent units.

After the binding material has set the covering sheet is removed and an unstained exterior surface results, the surface, of course, resembling the usual brick construction. If a covering sheet such as that shown at 4a has been used, when it is removed the binding material will be in the form of grooves in the spaces 3 and if the covering material is in the form of ridges the binding material will be in the form of ridges.

It is sometimes desirable in assembly to first take a section formed with the blocks and to force some mortar through the webbing as an initial step before mounting. This will result in the front facing of the mortar joint being smooth and in the elimination of holes or unfilled points when the covering material is removed.

When a large section is being placed in position and pressed into the mortar, if the covering material is of a dense nature, some air may be trapped in the spaces between blocks and leave as an only outlet the open ends of the sections. The above may result in blow holes or pits in the front face of the mortar joints when the covering is removed. To avoid this, it is preferred to employ a covering material 4, 4a, 4b or 4c which is of such porosity as to permit the passage of air and yet prevent the passage of mortar or binding material therethrough.

The individual units shown in Fig. 7 are laid in an identical manner to the multiple block units.

With the type of unit shown in Fig. 8 either side may form the exterior surface of the wall, the covering sheet, of course, being positioned on the side selected. With the reversible unit shown in Fig. 8 one side may be formed of one color and the other side of another color making it possible for a color selection to be made.

All of the various units shown are so laid as to present a continuous brick-like appearance. The blocks may, of course, be made in the form of squares, diamonds, hexagons or the like to simulate various other types of building units.

Other changes and modifications may be made without departing from the spirit of the invention and all such changes are contemplated as may come within the scope of the claims.

1. The method of forming siding or the like comprising providing a block of plastic material on an apertured web wherein the web extends beyond the edge of the block, applying a layer of binding material to a wall or the like to be covered, and pressing the mounted blocks into spaced apart position on the layer of binding material while the latter is in a plastic state, forcing the binding material through the apertured web into the spaces between the blocks above the web and causing a union between blocks and between projecting web portions in said spaces.

2. The method of forming siding or the like comprising providing a block of plastic material on an apertured web wherein the web extends beyond edges of the block, securing to the face of the block to be exposed a temporary protecting means which also projects beyond the edges of the block, applying a layer of binding material to a wall or the like to be covered, pressing the mounted blocks into spaced apart position on the layer of binding material while the latter is in a plastic state and with projecting portions of the protecting means covering the projecting portions of the blocks, forcing the binding material through the apertured web into the spaces between the blocks and above the web to the face protecting means and causing a union between blocks and between projecting web portions in said spaces.

3. The method of forming siding or the like comprising providing a plurality of blocks of...
plastic material in spaced apart relation on an apertured web wherein the web extends beyond edges of the blocks, applying a layer of binding material to a wall or the like to be covered, and pressing a plurality of sets of mounted blocks into spaced apart position on the layer of binding material while the latter is in a plastic condition, forcing the binding material through the apertured web into the spaces between blocks and sets of blocks and above the web and causing a union at said spaces between the blocks and between projecting web portions.

4. The method of forming siding or the like comprising providing a plurality of blocks of plastic material in spaced apart relation on an apertured web wherein the web extends beyond edges of the blocks, securing to the blocks a temporary covering closing the spaces between blocks at the sides to be exposed to protect said sides during application, applying a layer of binding material to a wall or the like to be covered, pressing a plurality of sets of mounted blocks into spaced apart position on the layer of binding material while the latter is in a plastic condition, forcing the binding material through the apertured web into the spaces between blocks and sets of blocks and causing a union between the blocks and above the web to the temporary covering and between projecting web portions in said spaces.

5. The method of forming siding or the like comprising providing a block of plastic material on an apertured web wherein the web extends beyond edges of the block, securing to the block at the side to be exposed when laid a temporary covering sheet projecting beyond edges thereof and formed to create a desired surface effect on the binding material adjacent the sides of the block when laid, applying a layer of binding material to a wall or the like to be covered, pressing the mounted blocks into spaced apart position on the layer of binding material while the latter is in a plastic state, forcing the binding material through the apertured web into the spaces between blocks to the covering sheet and causing a union between blocks and between projecting web portions.

6. A building unit comprising an apertured web, a block formed of plastic material rigidly mounted on said web adjacent one of its sides, and a covering sheet temporaril y secured to a face of the block to be exposed and projecting beyond edges thereof, said projecting covering sheet adapted to prevent exudation of binding material to the face of the block when laid.

7. A building unit comprising a mesh web, a block formed of plastic material rigidly mounted on said web adjacent one of its sides, and a covering sheet temporarily secured to another side of the block and projecting beyond edges thereof, said covering sheet being pervious to air and substantially impermeable to a binding material when securing the unit to a base.

8. A building unit comprising an apertured web, a plurality of blocks formed of plastic material rigidly mounted on said web in spaced relation to one another, and a covering sheet temporarily secured to the side of the unit to be exposed and projecting beyond edges thereof to seal the spaces between blocks, and binding material in the spaces between blocks and adjacent the covering sheet, said covering sheet preventing exudation of binding material before and during application of the unit.

9. A building unit comprising an apertured web, a block formed of plastic material rigidly mounted on said web and having the web imbedded therein on one side thereof, and a covering sheet temporarily secured to another side of the block and projecting beyond edges thereof, the web also projecting beyond edges of the block but a lesser amount.

10. A reversible building unit comprising an apertured web, facing blocks formed of plastic material mounted on opposite sides of the web in coincident positions and having the web imbedded into the juncture thereof, the faces of the blocks on opposite sides of the web presenting contrasting colors.

11. A reversible building unit comprising a mesh web, facing blocks formed of plastic material with a veneer facing mounted on opposite sides of the web in coincident positions and having the web imbedded into the juncture thereof, the faces of the blocks on opposite sides of the web presenting contrasting effects.

12. A reversible building unit comprising an apertured web, blocks formed of plastic material mounted on opposite sides of the web in coincident positions and having the web imbedded into the juncture thereof, and a covering sheet temporarily secured to the face of the block on the side to be exposed when laid and projecting beyond edges thereof, the faces of the blocks on opposite sides of the unit presenting contrasting colors.

13. A building unit comprising a plurality of blocks, apertured means in rigid connection with said blocks for holding the same in assembled spaced apart relation to one another, and means for temporarily covering one side of the unit to prevent binding material entering from another side thereof and passing through said apertured web and into the spaces between blocks, from staining the first mentioned side.

14. A building unit comprising an apertured web, a block formed of plastic material rigidly mounted on said web, and a covering sheet temporarily secured to a face of the block to be exposed and projecting beyond edges thereof, the projecting portions of the covering sheet being formed to create a desired surface impression on binding material applied adjacent the sides of the block.

15. A building unit comprising an apertured web, a block formed of plastic material rigidly mounted on said web, and a covering sheet temporarily secured to a face of the block to be exposed and projecting beyond edges thereof, the projecting portions of the covering sheet being formed to create surface grooves on binding material applied adjacent the sides of the block.

16. A building unit comprising an apertured web, a block formed of plastic material rigidly mounted on said web, and a covering sheet temporarily secured to a face of the block to be exposed and projecting beyond edges thereof, the projecting portions of the covering sheet being formed to create surface ridges on binding material applied adjacent the sides of the block.

17. A building unit comprising an apertured web, a block formed of suitable material mounted on said web, and a covering member temporarily secured to a front portion of the block and projecting beyond edges thereof, the projecting portions of the covering sheet being formed to create a desired surface effect on binding material applied adjacent the sides of the block.

18. A building unit comprising a plurality of...
4. spaced apart blocks, apertured means in connection with one side of said blocks for maintaining definite spacing thereof, and covering means porous to air secured to an opposite portion of said blocks to seal the spaces therebetween, to prevent oozing of binding material in application to the portions of said unit to be exposed but to permit the escape of air.

19. The method of forming siding or the like comprising providing a plurality of blocks in spaced apart relation and secured by one side thereof to an apertured web, securing to an opposite portion of said blocks to seal the spaces therebetween a suitable covering means, applying a layer of binding material to a wall or the like to be covered, mounting said unit with its apertured web side adjacent said binder, filling the spaces between blocks so as to unite blocks and web portions, and removing said covering means after the binder has set.

20. The method of forming siding or the like in which the face to be exposed is protected from defacement, which comprises providing a plurality of blocks of plastic material in spaced apart relation upon an apertured web wherein the web extends beyond the edges of the blocks, securing to the faces of the blocks to be exposed a temporary protecting means, said means also sealing the spaces between blocks, applying a layer of binding material to a wall or the like to be covered, pressing the mounted blocks into position on the layer of binding material while the latter is in a plastic condition, the binding material oozing through the apertured web, filling the spaces between blocks, and causing a union between blocks and between projecting web portions, and thereafter removing the temporary protecting means.

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