Jan. 20, 1942. R. L. KAYE 2,270,808

BUILDING UNIT

Filed March 3, 1941

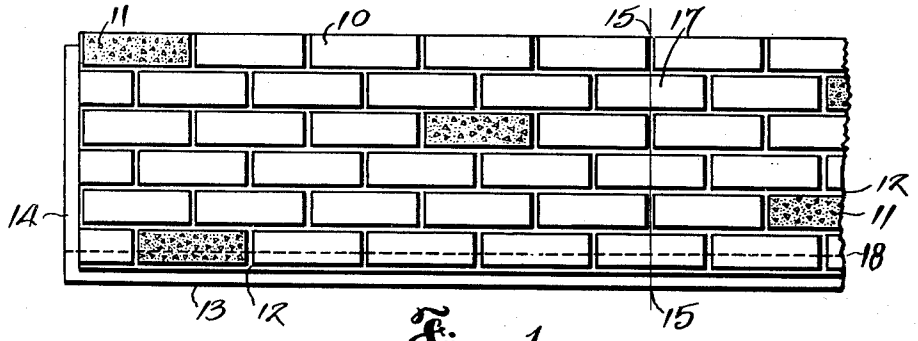


Fig. 1.

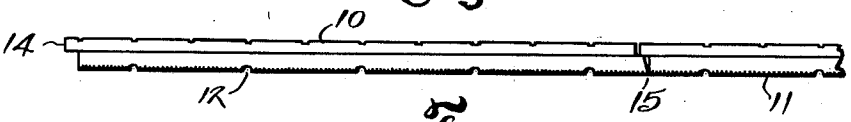


Fig. 2.

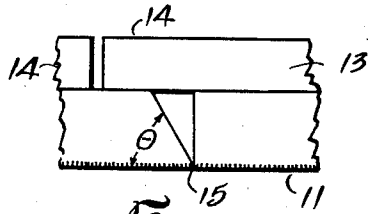


Fig. 3.

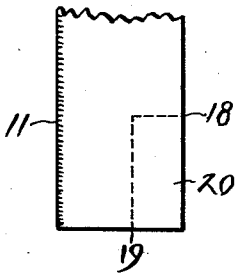


Fig. 5.

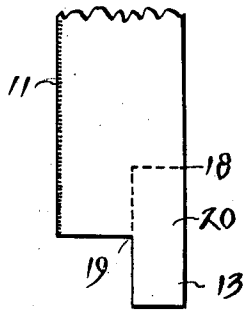


Fig. 4.

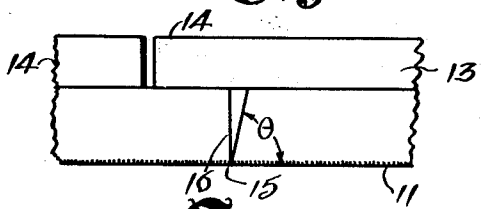


Fig. 6.

Inventor

ROBERT LEE KAYE.

By Nelson M Moore

Attorney

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2,270,808

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2,270,808

BUILDING UNIT

Robert Lee Kaye, Newark, N. J.

Application March 3, 1941, Serial No. 381,593

4 Claims. (Cl. 20—5)

The present invention is an improvement over the subject matter of my previous invention disclosed in Letters Patent 2,224,351 granted to me December 10, 1940. Reference is made to the specification and drawing of that patent for construction details of the building unit. In the use of my previous invention certain desirable improvements were conceived by me.

It is an object of the present invention to provide an improved building unit made of cellulose, fiber board, paper board coated and impregnated with a compound containing asphaltum in which are embedded granules of crushed slate or the like arranged in such a manner as to simulate brick, tile or other allied building material.

It is an object of the present invention to provide a building unit simulating brick, tile or the like in which the mortar joints are formed in a most convincing manner, but in which the actual joinder of sheet to sheet is skillfully concealed and the appearance of a solid continuous wall of masonry or the like is achieved.

It is an object of the invention to provide means whereby the lowest tier may be readily made to more accurately simulate tile or brick construction on the job.

Other objects and advantages will suggest themselves in the following description and in the drawing in which like numerals refer to like parts throughout.

In the drawing:

Figure 1 is a fragmentary elevation of two building units joined together.

Figure 2 is a fragmentary bottom side view of structure of Figure 1.

Figure 3 is an enlarged portion of Figure 2 showing the joint between two building units in detail.

Figure 4 is a fragmentary side elevation of the bottom portion of Figure 1.

Figure 5 is a modification of Figure 4.

Figure 6 is a modification of the structure of Figure 3.

Building unit 10 is made of pressed integrated fiber board or the like which has been dipped in and impregnated with an asphalt compound. After treatment the unit 10 is coated with a mastic such as filled asphalt into which are embedded granules 11 of crushed stone or the like. Mortar joints 12 are normally then impressed into the unit.

To provide a tight weather proof joint the unit 10 may be shiplapped as at 13 and 14.

One feature of the present invention is the provision for obtaining a virtually perfect fit at the front face joint between adjacent units as at 15. Where it is desired to simulate a continuous wall of masonry and especially a continuous wall of plaster or paneling or the like, the entire effect is spoiled if a crack appears. Such cracks are occasionally caused by the premature butting of members 14, but more often because the edges at 16 are not square. Again there is some tendency for the granules 11 to be rubbed off the very edges. This last affects the result only where it is desired to have a whole brick, stone, panel or plane wall simulated as at 17. The effect of continuity as in a solid continuous wall is obtained with great uniformity by making the dihedral angle θ acute. A three or four degree decrease from the perpendicular has been found ample.

This arrangement causes adjacent units 10 to meet along a line at the very outer edge first. There may be some slight upsetting which will increase as the angle θ decreases, but just enough to form a closed joint with some fusion of materials without raising a ridge. As a result the wall seems continuous and a brick or the like as at 17 appears to be a single piece. The meeting in the mortar joints is taken care of by the slight upset at 15. However the depth of the joints is not so great as to prevent substantial meeting.

The form shown in Figure 6 is preferred to Figure 3 since the shiplap 14 projects beyond the sharper edge at 15 and protects it. While this type of joint may be confined to the ends of the units as at 15 it is intended that it be used at all joints for a better fit all the way around.

Where a series of units is intended to be used as a base course, over windows or as a band around a house between stories there should be no shiplap on the bottom. When used anywhere else however there should be a shiplap on the bottom. By cutting the shiplap part way on the bottom edge of a panel it is adapted to be used in the base course or anywhere else as desired.

Near the bottom and in the rear surface of the unit a number of elongate incisions 18 such as knife cuts are made throughout the length of the unit. In the bottom edge similar incisions or cuts 19 extend upwardly into the unit and either meet cuts 18 or come so close to them, as by lateral displacement, that a workman on a job can readily remove the portion 20 when the unit is to be used where shiplap is desired. The incisions while being sufficient to enable the ready removal of a portion of the unit by means of a knife, screwdriver or like instrument are not of sufficient size or depth to materially weaken the unit or interfere with its use.

The effect of incisions 18 and 19 can be obtained, though less satisfactorily, with a single series of diagonal incisions. This diagonal lap may be substituted for shiplap but is not as satisfactory.

Other modifications will suggest themselves to one skilled in the art after studying the above teaching. The present disclosure is to be regarded as illustrative only and not as limiting. Applicant looks to the wording of the claims for the determination of his monopoly.

I claim:

1. A fiber base building unit having a face covered with a mastic and presenting a pattern a portion of which is incomplete, said incomplete portion being so arranged that it may be completed by a next contiguous building unit, the edge of said unit at which said pattern portion is incomplete having a dihedral angle of less than ninety degrees granules embedded in said mastic, said mastic being in substantially plastic condition whereby the full and complete joinder of the incomplete pattern portions is obtained with a slight molding of the mastic and fusion thereof with the mastic of a next adjacent unit together with a substantial interlacing of the edge granules yielding a continuous solid effect.

2. A fiber base building unit having a finished face comprising a mastic and adapted to form a portion of a larger surface made up of a plurality of substantially similar units, an edge of said unit making an acute angle with said finished face said mastic being in substantially plastic condition whereby the first line of butting contact with a next adjacent unit is at said finished face with a slight upsetting of the mastic against the mastic of a next adjacent unit yielding a continuous effect.

3. The combination set forth in claim 2, incised portions along an edge of said unit whereby removal thereof on the job is facilitated.

4. In a building unit adapted to form a portion of a larger surface made up of a plurality of substantially similar units, a fiber base, a coating of mastic asphaltum compound on a face of said base, granules embedded in said compound, said face having configurations formed in part by said granules, certain of said configurations being incomplete and constructed and arranged so that such incomplete configurations are completed by a mating portion on a next adjacent unit, said granules extending out to the mating edge of said incomplete portion of a configuration, said mating edge of said incomplete portion forming the apex of an acute dihedral angle, said mastic being in substantially plastic condition, said edge portion being constructed to contact the mating edge portion of a next adjacent unit with a slight moulding of the mastic and fusion thereof with the mastic of a next adjacent unit together with a substantial interlacing of the edge granules whereby granules next adjacent said edge may be brought into position should granules at the very edge become detached by rubbing or handling and a continuous effect is obtained.

ROBERT LEE KAYE.