July 20, 1943. J. H. PHILLIPS 2,324,643

COPING TILE

Filed Nov. 15, 1940

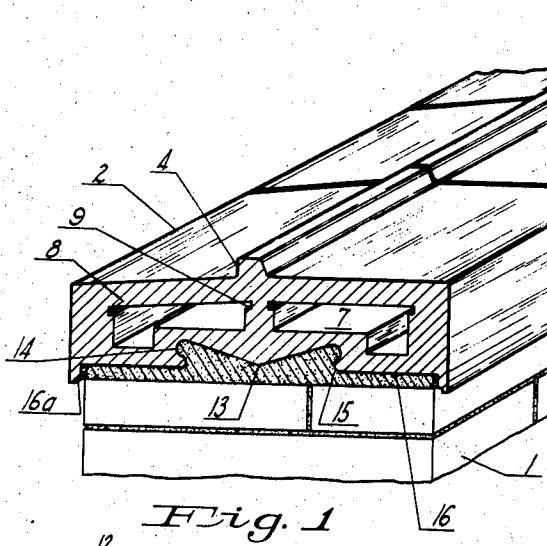


Fig. 1

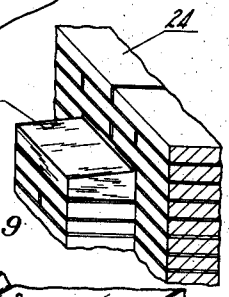


Fig. 9

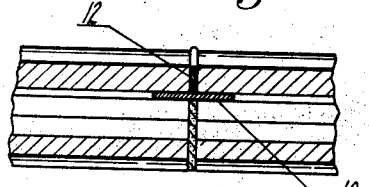


Fig. 3

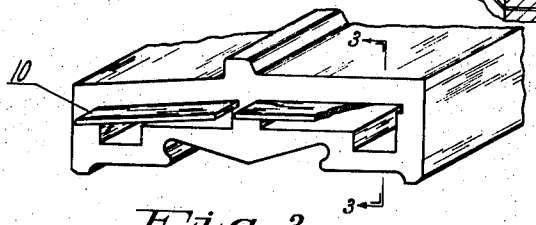


Fig. 2

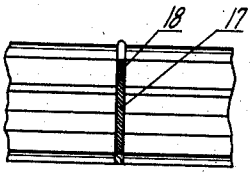


Fig. 5

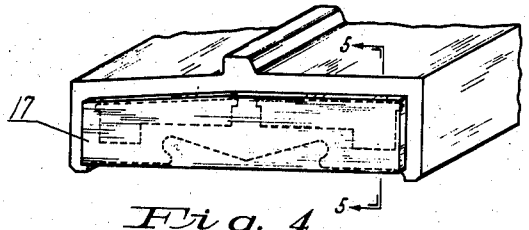


Fig. 4

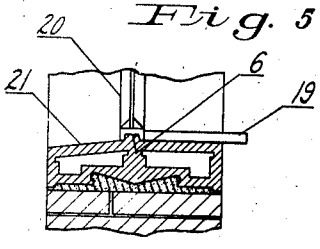


Fig. 6

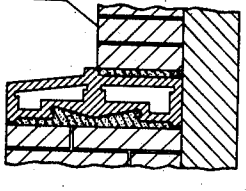


Fig. 7

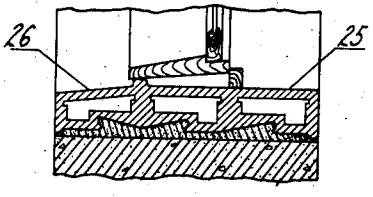


Fig. 8

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COPING TILE

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5 Claims. (Cl. 72—86)

This invention relates to new and useful improvements in building units, more particularly to wall coping, and it is among the objects thereof to provide a tile unit which may be employed as wall coping at the top of the wall, or a sill for windows, and sill for water tables on off-set portions of building walls.

It is a further object of the invention to provide a coping and sill unit adapted to be interlocked with the mortar joint.

A further object of the invention is the provision of such a building unit cored-out to receive sealing gaskets in the joints.

A further object of the invention is a design for a combination wall coping and window sill block embodying a stop designed to receive sash or frames when used as a sill for windows and which produces an ornamental effect when used as wall coping.

Still another object of the invention is the provision of a combination wall coping and window sill unit having the under and inside of the vertical face portions of the unit formed with a downward curve to prevent water travel from the face of the unit to its bed in the wall and to cause such water to drop from the unit.

Still another object of the invention is the provision of a combination coping and sill unit of rugged mechanical construction of minimum weight and designed to be conveniently gripped for handling in its application to a building wall.

These and other objects of the invention will become more apparent from a consideration of the accompanying drawing constituting a part hereof in which like reference characters designate like parts and in which:

Fig. 1 is an end elevational view partially in section of a building wall and wall coping embodying the principles of this invention;

Fig. 2 a view in perspective of the combination coping and sill block with gasket material inserted therein;

Fig. 3 a cross-section of a joint taken along the line 3—3, Fig. 2;

Fig. 4 a view in perspective of the combination coping and sill block with an end sealing gasket employed between the block joints;

Fig. 5 a cross-section taken along the line 5—5, Fig. 4;

Fig. 6 a cross-sectional view of a combination coping and sill block, used as a sill for a steel window sash;

Fig. 7 a cross-sectional view of the combination coping and sill block used as a water table;

Fig. 8 a cross-sectional view of a modified form of combustion coping and sill block used when employed with window frames having a wood sub-sill; and

Fig. 9 a view in perspective of a portion of a building wall illustrating the application of the coping as a pilaster cap.

With reference to Fig. 1 of the drawing, numeral 1 comprises a building wall of tile or brick having a wall coping 2 of building blocks embodying the principles of this invention. The block is of any desired thickness and may be of substantially the same thickness as the tile or brick with which it is used.

As shown in Fig. 1, a stop 3 is provided off-set from the center with a straight side 4 and a flared side 5, the width of the stop being such as to accommodate the channel faces 6 of steel sash for windows, as shown in Fig. 6, which will be further described hereinafter.

Again referring to Fig. 1, the tile is of hollow construction, being provided with air chambers 7, the upper walls of which are recessed at 8 and 9 to receive gasket material 10, as shown in Fig. 2, which seals with a caulking compound 12 at the top thereof. The bottom face of the tile of Fig. 1 is recessed in dovetail shape with a depending central wedge 13, and with inwardly extending grooves 14, the grooves with the projecting ledge 15 forming a grip for the setting mortar pushed into the grip by the central wedge.

The bottom face of the block is further relieved at 16 to receive the excess grouting or mortar which becomes wedged into the dovetailed grooves when the block is placed in the position, as shown in Fig. 1 on top of the mortar or grouting. The effect of the mortar in the dovetail recess is to mechanically interlock the coping block with the mortar and the wall to prevent displacement. This wedge and dovetail mortar gripping combination is also applicable to building blocks of any character placed either with the wedge and dovetail key horizontally on the bed or with the wedge and dovetail key vertically to bind blocks together with mortar at cross joints.

The bottom corners of the tile are rounded as shown at 16a to provide drip for water running down the face of the block.

In Figs. 4 and 5 the coping blocks are shown provided with a gasket material 17 extending along the end face of the block to form a seal when joined, as shown in Fig. 5, caulking compound 18 being forced into the joint around the gasket material as shown.

The construction of Fig. 1 illustrates the use

of the tile as a wall coping. It also may be used as a sill with a finished window stool **19**, Fig. 6. The steel sash **20** is placed on the stop **3** which becomes seated in the channel **6** of the sash. The window stool **19**, which may be a marble slab is mounted on the inner side of the sill, and the outer portion of the block designated by the numeral **21** acts as a water table. In the construction of Fig. 7, the coping block is employed only as a water table with the wall **22** extending from one-half portion of the wall vertically upward, leaving a water table on the outside.

In Fig. 9 the coping block designated by the numeral **23**, functions as a pilaster cap, the unseen portion of the block being built into the wall **24**.

In Fig. 8 a modified form of the block of Fig. 1 is shown, which is like the block of Fig. 1, with an extension designated by the numeral **25**, which may be employed for a wall of greater thickness than walls employing the block as in Fig. 7. It also shows the block employed under a wood window frame, leaving a sill inside and outside of the building, the outside sill **26** acting as a water table.

A building block as herein illustrated and described may be employed generally as wall coping and window sills and adapted to either steel sash or wood frame sill structures, and may be generally utilized for finishing portions of the building such as when used as a pilaster cap. It greatly adds to the appearance of buildings and because of the grip and mortar wedge it becomes mechanically interlocked and bonded with the wall. By reason of the joints being made with a combination of a composition or metallic gasket and caulking compound, they are water-tight and absorb movements of contraction and expansion in the blocks.

Although one embodiment of the invention has been herein illustrated and described, it will be evident to those skilled in the art that various modifications may be made in the details of construction without departing from the principles herein set forth.

I claim:

1. A building block having its mortar-engaging face recessed to form a dovetail the full length of the block, and the bottom wall of the dovetail portion having a projection extending therefrom in the shape of a V and acting as a wedge to displace the mortar into the mortar gripping grooves.

2. A hollow building tile as described in claim 1 having the vertical face members dropped below the mortar line of the tile and the inside bottom edges of said members formed with a curve toward the outside to prevent water from reaching the mortar.

3. A hollow building block having a vertical web in the center thereof and having a wide recess in the bottom wall of the block terminating near the side faces thereof and extending the full length of the block to constitute a covered mortar joint, the center of the recess having a dovetail-shaped groove with a V-shaped center projection acting as a wedge to displace the mortar into the groove.

4. A coping for building walls comprising a hollow tile having a vertical center web and having a projection extending from the top wall offset from the center web, the bottom wall of the tile having a wide mortar recess extending the full length of the block and a dovetail-shaped groove in the center of the recess with a depending V-shaped wedge for displacing the mortar into the groove.

5. A coping for building walls comprising a hollow tile having a vertical partition dividing the inner chamber, the vertical walls of said chambers being provided with juxtaposed anchorage grooves and the bottom wall of the tile having a wide recess, the full length of the block, with a dovetail groove in said recess having a depending wedge for displacing the mortar in the groove.

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