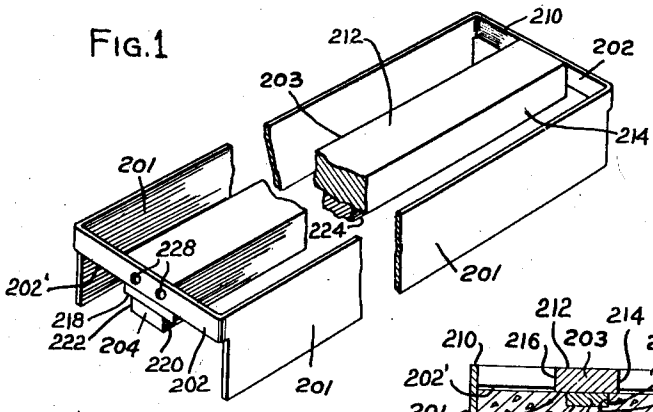
Feb. 5, 1963 H. SUNUKJIAN 3,076,246

MORTAR BED FORMS FOR INTERENGAGING WALL UNITS

Original Filed Feb. 18, 1958

FIG. 1



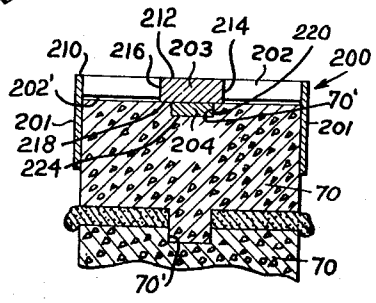


FIG. 2

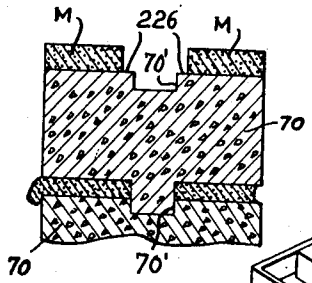


FIG. 3

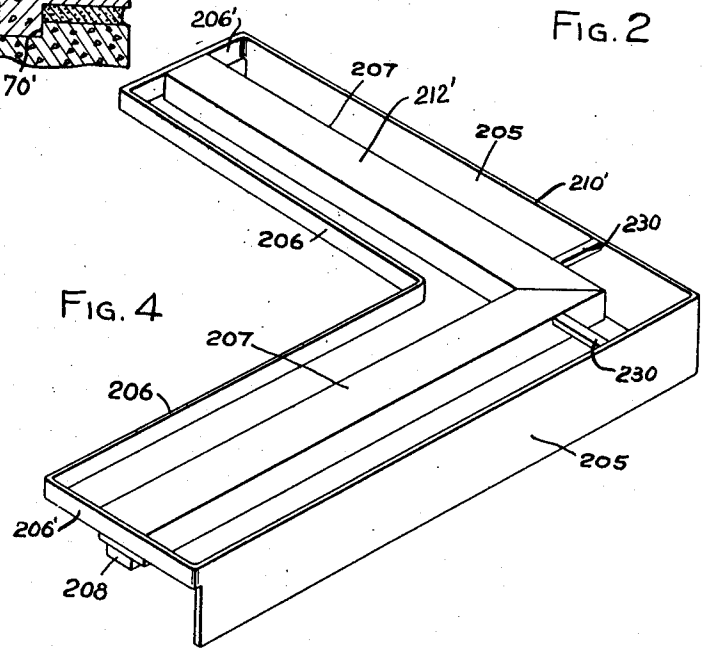


FIG. 4

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MORTAR BED FORMS FOR INTERENGAGING WALL UNITS

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Original application Feb. 18, 1958, Ser. No. 715,959, now Patent No. 3,012,377, dated Dec. 12, 1961. Divided and this application July 11, 1961, Ser. No. 123,251
1 Claim. (Cl. 25—118)

The present invention relates to mortar bed forms for use with interengaging wall units. This application is a division of my copending application Serial No. 715,959 filed February 18, 1958, entitled "Interengaging Wall Units," now United States Letters Patent 3,012,377, issued December 12, 1961.

Generally speaking, there are in widespread use today two types of building blocks or units: one type is the ordinary clay brick which has a parallelepipedal body, each surface of which is a rectangle and all surfaces are either parallel or at right angles to each other. The other type of building block or unit commonly used is the so-called cement block or cinder block, this block having only two planular, uninterrupted faces, two of the other faces of this block have grooves therein, and the remaining two faces are penetrated by openings which extend entirely through the block.

While these bricks and blocks have been widely used, they are not readily usable by unskilled persons, it being most difficult to one not familiar with the art of bricklaying to place the proper amount of mortar on the surfaces of the bricks or cinder blocks to result in a wall which is true, i.e., a wall which is planular and in which each course of brick or cinder block is level. Thus, those not skilled with the art of laying bricks often find that they have constructed a wall which is undulating, or in which there is a rise or fall in a course of bricks or blocks.

There are known in the prior art building block configurations which attempt to overcome the above-noted difficulties by providing for interengagement between the bricks. However, the prior art attempts to solve the problem have resulted in building blocks which either interfitted with each other so closely that no mortar was deemed necessary, or else they resulted in blocks of unique shape modified on many surfaces of the generally parallelepipedal configuration and thus necessitating much new equipment in the manufacture and handling of this type of building unit. Those bricks which fitted together so that no mortar was deemed necessary were objectionable on the basis that many building codes require the use of mortar between bricks, so that such building units were completely incompatible with existing building codes. In addition, prior art attempts failed to provide a simply shaped building unit which provided for interengagement between an upper and a lower course, and also between adjacent blocks in the same course. A primary object of the present invention is to provide a novel mortar bed form including means facilitating erection of a wall of the character involved in applicant's United States Letters Patent 3,012,377.

A more specific object of the present invention is to provide a novel mortar bed form which includes means for striking of a uniformly thick layer of mortar on a ground block, and means for positively orienting the form on the blocks as well as providing a mortar relief space adjacent the male key of a block cooperating with the one upon which mortar is being deposited.

Other objects and the nature and advantages of the instant invention will be apparent from the following description taken in conjunction with the accompanying drawings wherein:

FIG. 1 is a view in perspective of my new mortar bed form with built-in mask for masking the interlocking grooves in the bricks or blocks.

FIG. 2 is a vertical sectional view through a fragment of a vertical wall with mortar bed form shown in FIG. 1 in position ready to receive mortar.

FIG. 3 is a view similar to FIG. 2 with the mortar bed form removed after the mortar has been applied with the use thereof.

FIG. 4 is a view in perspective of another mortar bed form specifically adapted for use at corners.

Referring to FIGS. 1, 2 and 3, the mortar bed form **200** comprises a rectangular frame having parallel tall side plates **201** which fit over the sides of the bricks or blocks **70**, short end plates **202** which are adapted to extend over the top of the bricks or blocks **70**, and a centrally located masking member **203** which overlies and fully covers the grooves **70'** in the tops of the bricks or blocks **70**, and a narrower depending element **204** for registration with the interior of said grooves.

The frame or side and end plates **201** and **202**, respectively form an uninterrupted, upper, coplanar, marginal edge **210** which is in coplanar relation with the upper planar surface **212** of the masking member **203**. The masking member **203** includes mutually parallel side edges **214** and **216** in substantially parallel relation to side plates **201**.

The end plates **202** have lower coplanar edges which are disposed above the lower surface **218** of the masking member **203**. The lower surface **218** of the masking member **203** is parallel to the upper surface **212** of the masking member and provide inwardly of the edges **214** and **216** support surfaces for engaging flush on the upper surface of the blocks **70** outwardly of the grooves **70'**.

The depending member **204** includes spaced parallel side edges **220** and **222** which are normal to lower surface **218** and disposed inwardly of the side edges **214** and **216**, respectively, and the lower surface **224** of the member **204** will substantially bottom in the grooves **70'**; see FIG. 2.

The depending member **204** substantially conforms to the shape of the grooves **70'**, and the overhang of the masking member, as clearly seen in FIG. 2 will provide a mortar relief portion as indicated at **226** in the upper portion of FIG. 3. The relief portion **226** provides a space into which the mortar M may readily move to facilitate the laying of a course of blocks as seen in FIGS. 2 and 3.

When the mortar bed form **200** is disposed in the position shown in FIG. 2, a trowel or the like may readily be used to strike off excess mortar in a single pass over the edge **210** and upper surface **212** of the masking member. The relief **226** is automatically formed in the layer of mortar M upon which a keyed block **70** is to be laid, and the male key **70''** can be readily inserted into a groove **70'** of an underlying, previously laid block **70**. The depending portion **204** will orient the form **200** in its proper position, and the mason using the mortar bed form and laying a wall of the character in which this invention is used, does not necessarily have to have the degree of skill normally required when laying bricks or blocks without the keying portions.

Referring to FIG. 4, the mortar bed form adapted to be used for the corner of a wall comprises an angular frame including tall side plates **205** arranged at right angles to each other and a generally W-shaped short plate connected to the outer ends of said tall plates **205**, the interior legs **206** of the W being parallel to the corresponding plates **205** and the outer legs **206'** of the W being perpendicular thereto. A centrally located L-shaped masking member **207** is supported by said frame so as to completely overlay and cover the grooves

in upper surfaces of the bricks and blocks forming a corner of the wall. Depending from said masking member **207** is a corresponding L-shaped narrower element or depending member **208** which registers with the interior of said grooves. The mortar bed form of FIG. 4 is essentially the same as that of FIGS. 1–3, it being noted that the members **203** and **204** when considered as a single unit have a T-shaped cross section as do the members **207** and **208**.

The masking members **203**, **207** and **204**, **208** are secured in the frames in any suitable manner, for example, by means of rivets **228** in FIG. 1, and suitable support braces **230** may be used as shown in FIG. 4.

Briefly, the form of FIG. 4 includes an uninterrupted upper marginal edge **210'**, the masking member **207** includes a planar upper surface **212'**, and the masking and depending members **207** and **208**, respectively have the same relationship with side plate **205** and end plates **206'** as does the members **203** and **204**, respectively, with respect to end plate **202** and one of the side plates **201**.

It will be apparent that applicant has provided a relatively simple and economical mortar bed form which is used in a system by which one having a minimum of skill in the art of bricklaying can construct a true or plumb wall using a minimum of mortar and leaving relief spaces to accommodate keying of cooperating blocks as well as orienting the form in its proper position of use.

It will be obvious to those skilled in the art that various changes may be made without departing from the spirit of the invention and therefore the invention is not limited to what is shown in the drawings and described in the specification but only as indicated in the appended claim.

What is claimed is:

A mortar bed form comprising a frame of a closed geometrical figure including a coplanar, uninterrupted upper marginal edge, at least one planar side plate and two planar end plates normal to said side plate, said end plates being of a height less than said side plate and having lower coplanar edges, an elongated masking and depending member having a T-shaped cross section and secured in said frame at least at one end in abutting relationship to the inner surface of one of said end plates and extending parallel to and substantially the length of said side plate, said masking member comprising an upper surface coplanar with said coplanar, uninterrupted upper marginal edge of said frame for permitting uninterrupted movement of a mortar-striking-off tool over said uninterrupted upper marginal edge and upper surface to strike off the surface of deposited mortar disposed between the masking member and said side plate, said masking member including an undersurface portion parallel to the uninterrupted, upper marginal edge of said frame and disposed below the lower, coplanar edges of said end plates, the undersurface portion of said masking member inwardly of the side edges of said masking member providing means for resting on the upper planar surface of a longitudinally grooved block for orienting and supporting the mortar bed form on said blocks, said depending member including a portion having a substantially rectangular cross section and including side edges parallel to said side plate and disposed inwardly of opposite parallel sides of said masking member and depending below the lower coplanar edges of said side plates for keyed receipt in the longitudinal groove of the block upon which mortar is to be deposited, the overlap of said masking member with respect to said rectangular portion of said depending member defining a relief portion whereby mortar poured between said masking member and said side plate will not pass to accordingly provide a space into which mortar will move when a keyed block is laid on a layer of mortar oriented by said mortar bed form.

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