Jan. 7, 1969 D. CASTELLI 3,420,031

MASONRY CONSTRUCTION

Filed Nov. 16, 1966

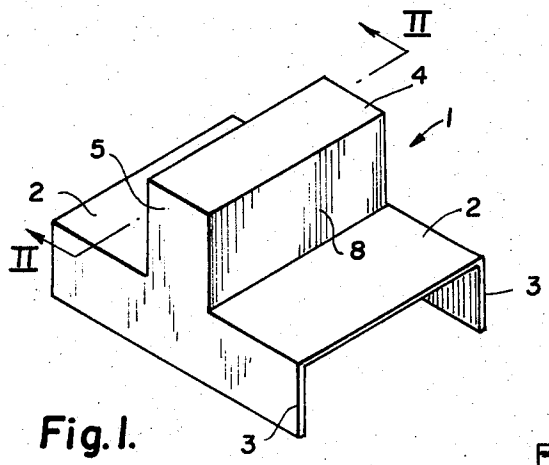


Fig. 1.

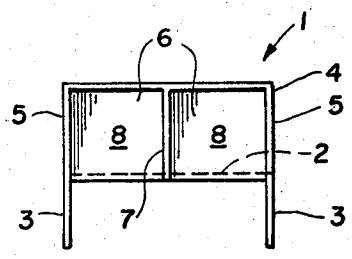


Fig. 2.

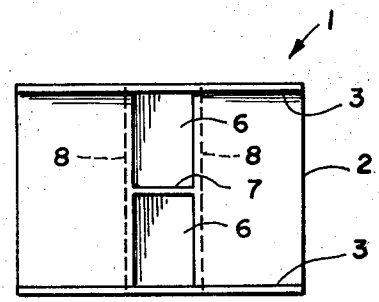


Fig. 3.

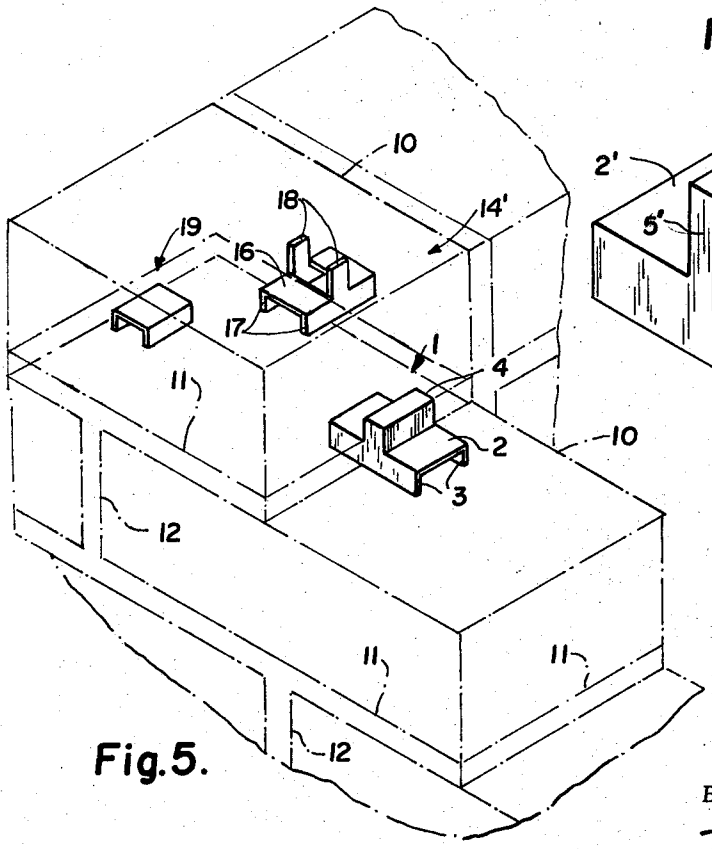


Fig. 5.

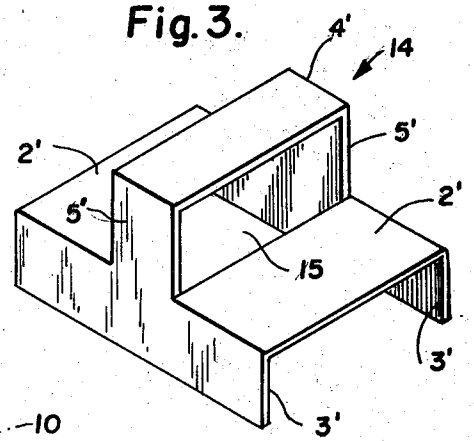


Fig. 4.

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MASONRY CONSTRUCTION

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This invention relates to masonry construction and, more particularly, it relates to an element for providing uniform spacing between bricks of a brick wall so as to provide uniformly thick mortar between courses extending horizontally as well as uniformly thick spacing between the ends of bricks.

In my prior Patent No. 3,196,581, I disclosed a number of gage elements which were highly useful in providing the uniform spacing of bricks in the construction of a wall. These gage elements were efficient enough to provide accurate spacing and yet simple enough so that an unskilled person would be able to get excellent results using my invention. However, one disadvantage of one solid form of the invention was that it pushed the mortar away or would seat on the mortar rather than the brick and thereby provide inaccurate spacing.

An object of the present invention is to provide an improved gage element for insuring uniform thickness of mortar, both horizontally between courses and vertically between the ends of the bricks, so as to enable an unskilled person to erect brick and stone walls and obtain results comparable to those obtained by skilled bricklayers.

A more specific object of the invention is to provide an insert with longitudinal runners that glide over and through the mortar placed between the courses of the bricks so as to be positioned between the bricks without pushing, scraping, or scooping the mortar out of place.

A still further object of the improved gage element is to provide a spacing element that is substantially hollow in construction so that mortar between the courses of brick will flow into and fill the hollow recesses of the spacing element, thereby becoming more integrally bonded by the mortar so that the wall is more sturdily constructed.

Other objects and advantages will become more apparent from a study of the following description taken with the accompanying drawings wherein:

FIG. 1 is a perspective view of a gage element embodying the present invention;

FIG. 2 is a cross-sectional view thereof taken along line II—II of FIG. 1;

FIG. 3 is a bottom view thereof showing the internal structure;

FIG. 4 is a perspective view of a modification of the gage element shown in FIG. 1; and

FIG. 5 is a fragmentary perspective view of a brick wall showing another modification of the element in FIG. 1 as used in laying a corner section of the brick wall.

Referring more particularly to FIG. 1 of the drawing, numeral **1** generally denotes a gage of spacer element made of any suitable material, such as metal, for example steel or aluminum, but preferably of plastic material, and comprising a flat portion **2** integrally connected with and at right angles to a pair of runners **3** which are of a height corresponding to the desired thickness of the mortar in courses between edges **11**, that is, between the layers of brick **10** (shown in dotted outline in FIG. 5). Runners **3** are so constructed to glide through the layer of mortar **11** without scooping or scraping the mortar from between the bricks. There is one element at each joint, and it is left in the wall as a permanent spacer. Side runners **3** insure that the spacer rests on the surface of the brick rather than on a layer of mortar.

Lug **8** is perpendicular to and in the center of flat portion **2**, which lug has a thickness corresponding to the

desired thickness of the motar between the ends **12** of the bricks.

Walls **5** and ceiling **4** contain a hollow chamber **6** interior to lug **8**. Brace **7** connects the interior of ceiling **4** with the edges of flat portion **2** for greater strength under the weight of the brick layers.

A modification of the invention, as seen in FIG. 4, has a flat portion **2'** integrally secured to runners **3'** and to a hollow faced lug **4'** with vertical walls **5'** and ceiling portion. A longitudinal opening **15** is provided through lug **4'** so that when the gage element is in place (as in FIG. 5) a complete layer of mortar remains between the ends of the bricks and is not displaced by a solid lug section.

Another modification of the invention is shown in FIG. 5 which illustrates a corner wall. Spacer **14'** is similar to spacer **14** except that the top ledge is omitted. More specifically, it comprises a flat portion **16** integrally secured to runners **17** and to a pair of vertical flanges **18** at right angles to the flat portion.

In the method of laying a corner section of the wall, one spacer element **1** is placed between the courses of the bricks and between the confronting ends of the last brick and the corner brick. Another spacer **14'** is placed between the corner brick and the last brick of the intersecting wall. A third support element **19** comprises a channel shaped spacer made to the dimensions of about ½ by ¾ inch, or made by cutting off one end including the flat portion **2'** of a spacer element. Said support element is placed underneath the corner brick and opposite the other spacer elements so as to provide a three point support for laying of the end brick.

The above described elements may be of any desired thickness, both horizontally and vertically, depending on the thickness of the mortar desired between the courses and between the ends of the bricks. A suitable dimension may be ⅜ inch for the thickness of the mortar, horizontally between courses, and perhaps the same thickness for the vertically extending position, which determines the thickness of the mortar between the ends of the bricks. The runners and walls of the lug are 1/16 inch thick.

These measurements, of course, may vary to accommodate different types of bricks, stones, and mortar thickness.

Thus it will be seen that I have provided an improved element for serving as a gage element for determining the thickness of mortar between courses of a brick wall or the like, and between the ends of adjoining bricks; furthermore, I have provided an improved and very inexpensive plastic insert that will not scoop or scrape mortar from between the bricks, and which will imbed itself within the mortar so as to become substantially integral with the mortar and become a permanent part of the brick wall.

While I have illustrated and described several embodiments of my invention, it will be understood that these are by way of illustration only, and that various changes and modifications may be made within the contemplation of my invention and within the scope of the following claim.

I claim:

1. For use in a masonry wall comprising a plurality of courses of bricks laid end-to-end, with end-to-end joints staggered between courses; a gage element having two integral seats mounted on depending runners for supporting the bottom end portions of said bricks at said end-to-end joints and having an integral central upstanding portion to gage the distance between adjoining ends of bricks, said central upstanding portion being hollow and having a top cover portion bridging said runners, said runners and said central upstanding portion having com-

mon sidewalls of inverted T shape, said central upstanding portion being in the form of a frame having a rectangular opening superimposed on and parallel to a second rectangular opening below said integral seats and arranged to permit mortar to move freely therethrough in the direction of said courses.

References Cited

UNITED STATES PATENTS

1,246,585	10/1917	Geraerdts	52—285
1,334,101	3/1920	Kealy	52—582
2,029,082	1/1936	Odam	52—275
2,031,684	2/1936	Berger	52—603
2,141,397	12/1938	Locke	52—744
2,483,560	10/1949	Peterson	52—604
2,930,135	3/1960	Rodtz	52—604

FOREIGN PATENTS

40,470	1915	Sweden.

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U.S. Cl. X.R.

52—125, 285, 442