United States Patent

de Barros

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[54] **METHOD FOR THE CONSTRUCTION OF BRICK WALLS**

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[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** **52/747,** 52/436, 52/603, 52/749

[51] **Int. Cl.** **E04b 2/46,** E04q 21/18, E04q 21/20

[58] **Field of Search**.....52/747, 749, 415, 436, 603, 52/586; 264/259, 279

[56] **References Cited**

FOREIGN PATENTS OR APPLICATIONS

138,959	10/1950	Australia	52/603
1,494,660	7/1967	France	52/586
1,125,637	3/1962	Germany	52/749

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[57] **ABSTRACT**

A wall of bricks is built with perfect alignment in a comparatively short time and with less mortar than is generally used in comparable walls. Each of the bricks in the wall has at its top a groove which has on each of its sides upwardly extending lips so that a caulking ruler can be positioned in the grooves of contiguous bricks to align them and a sled filled with mortar can be pushed over the top of a tier of bricks to deposit mortar on either side of the groove and thereby prepare the tier of bricks for a subsequent tier.

4 Claims, 4 Drawing Figures

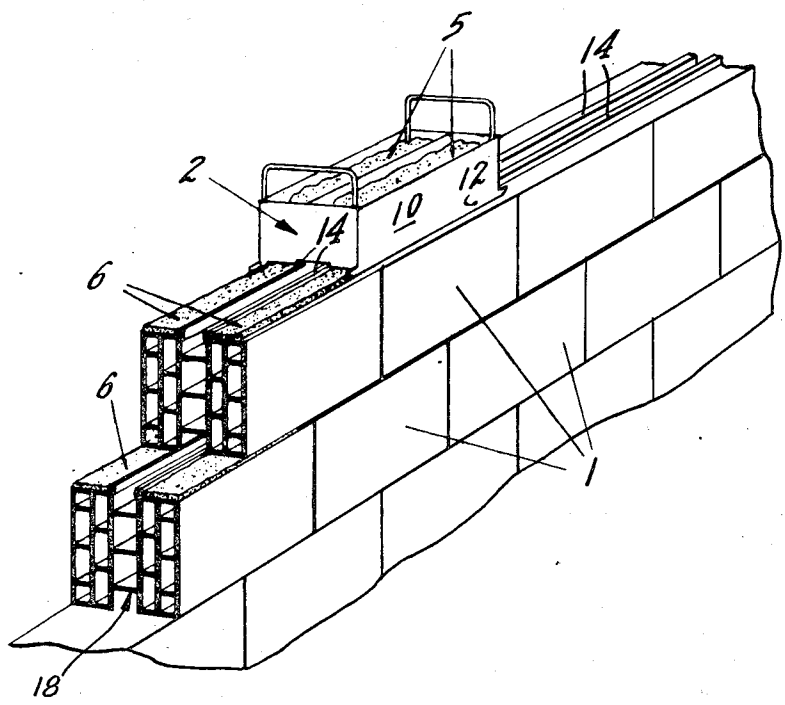


Fig. 1

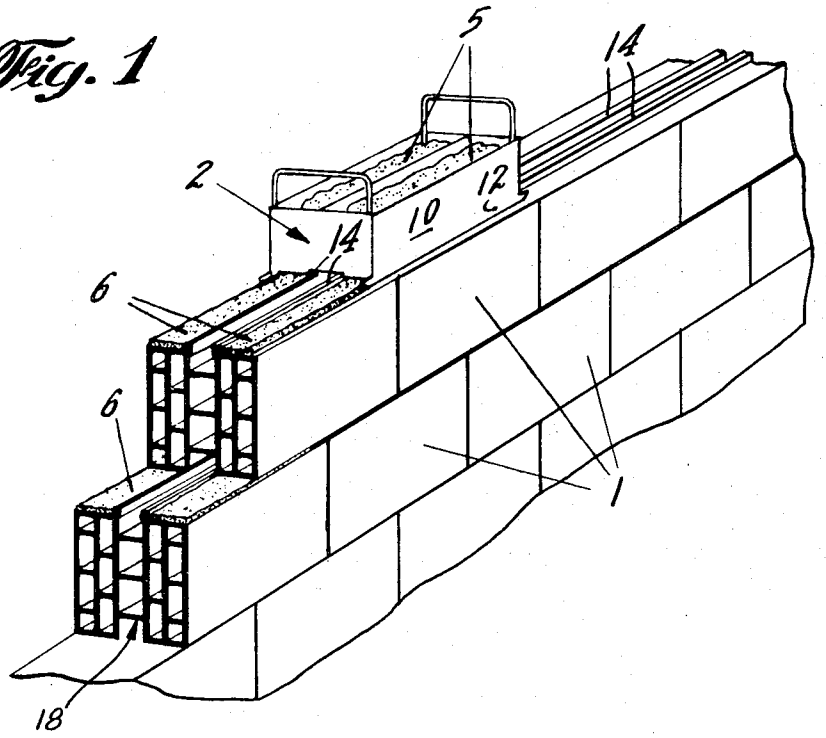


Fig. 2

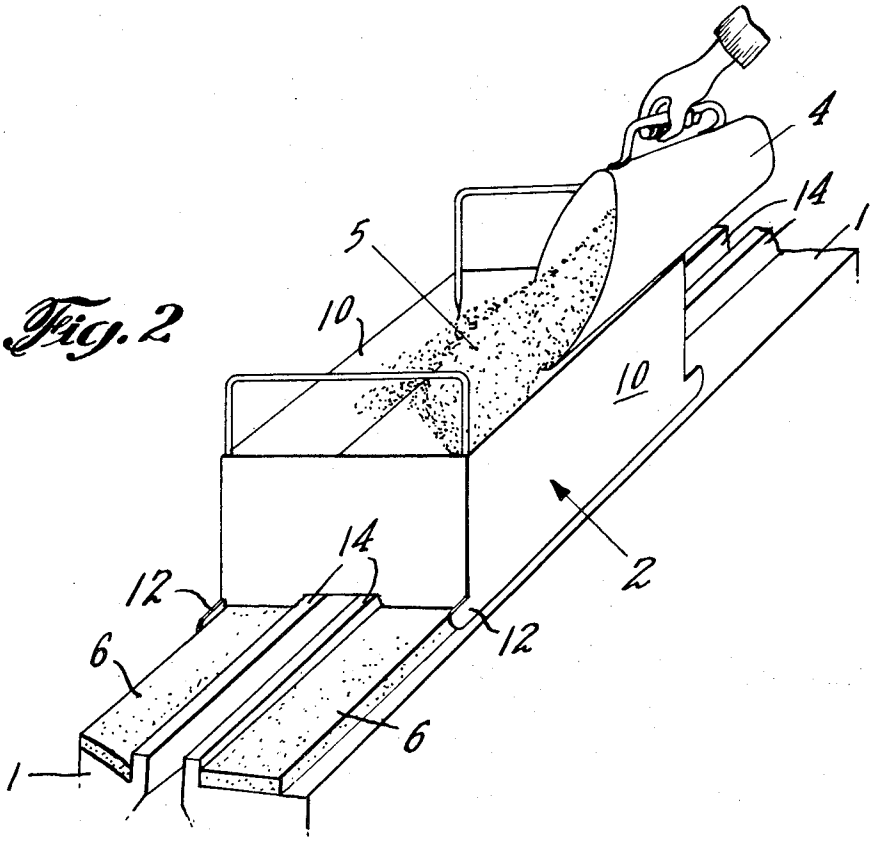


Fig. 3

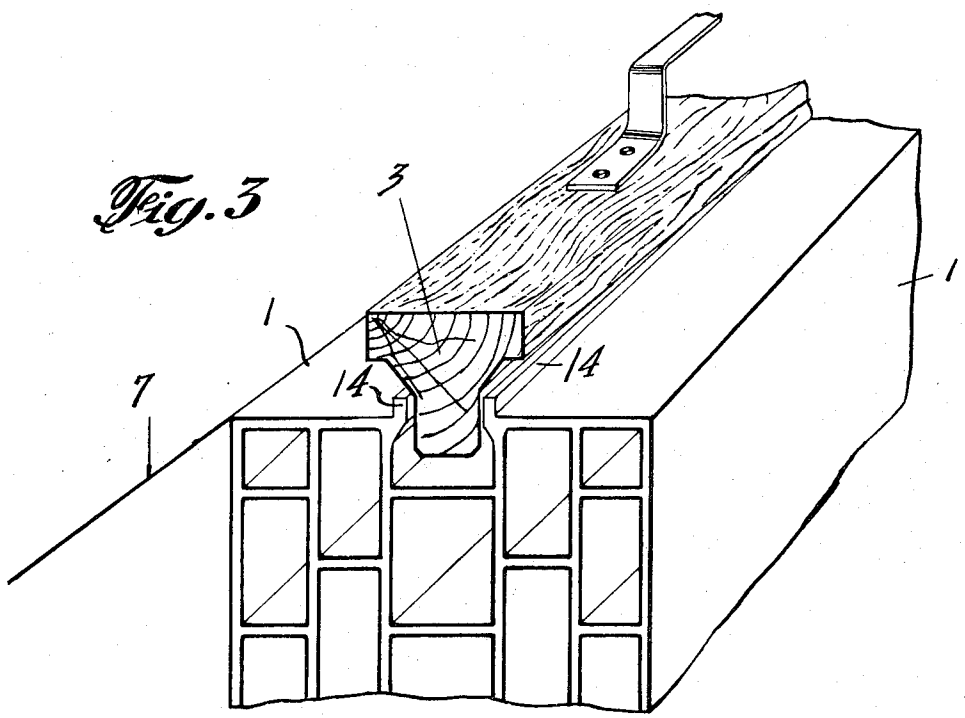
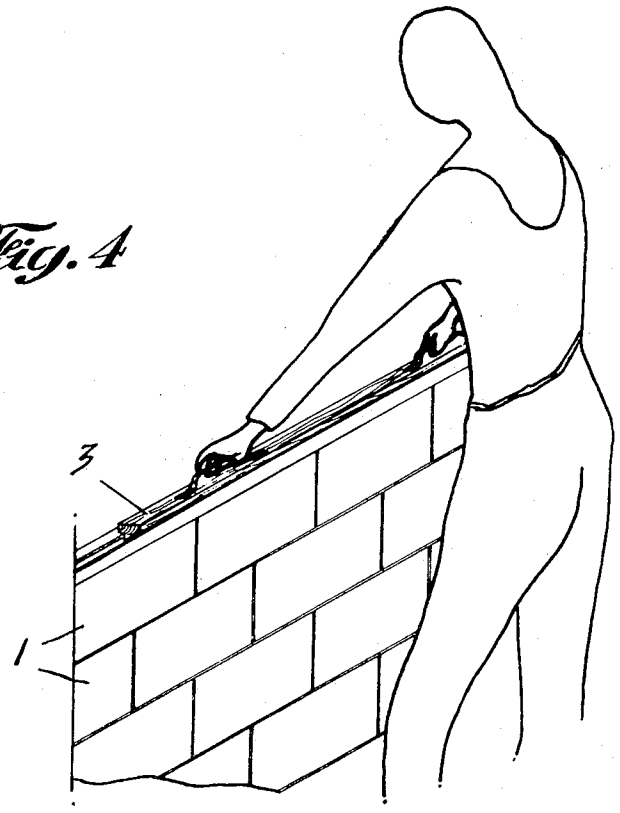


Fig. 4



METHOD FOR THE CONSTRUCTION OF BRICK WALLS

BACKGROUND OF THE INVENTION

At the present time costs of goods and services are increasing at such a pace that the cost of living is rising more rapidly than it has in many years.

One of the areas where prices have recently risen noticeably is in the construction field. The costs of building homes and other buildings is showing a rapid increase because of a steady and dramatic rise in the cost of labor and building materials. The recent rise in the price of lumber is at present being investigated by the Federal Government because increases in construction costs have an adverse effect on the ability of our society to provide shelter for its citizens.

In spite of the spectacular increase in lumber prices, wood is still used more than masonry as the primary material in home construction. This is so because of the high labor costs incurred when bricks are used. Mortar must be applied by hand to each brick and the brick must be properly aligned with the bricks already in place. Excess mortar must then be removed from the newly positioned brick. These time consuming manual operations make for a high labor cost when bricks are used and this discourages the use of bricks as a building material in many applications.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a method whereby brick walls can be perfectly constructed quickly with a resultant saving in labor cost. The bricks are provided with longitudinal grooves at their tops so that a caulking ruler can be positioned in the grooves of contiguous bricks to align them. A mortar sled is then passed over the aligned bricks to deposit mortar on either side of the longitudinally aligned grooves to thus prepare the bricks for a subsequent tier.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a wall being constructed in accordance with the present invention wherein a tier of bricks is being provided with mortar to prepare it for a subsequent tier;

FIG. 2 shows the sled which is used to apply mortar to the bricks being filled with mortar;

FIG. 3 is a fragmentary view in perspective showing a brick and a caulking ruler used to align it with contiguous bricks;

FIG. 4 is a view showing how the caulking ruler of FIG. 3 is used by a workman to perform its aligning function.

DETAILED DESCRIPTION OF THE DRAWING

In FIG. 1 bricks 1 have been put in place to form a brick wall. A mortar sled 2 is being moved over the upper tier of bricks. The sled contains mortar 5 which passes through openings in the bottom of the sled to provide bands 6 of mortar on the tops of the bricks. The bands 6 are parallel and extend adjacent to the side edges of the bricks.

When the sled has been moved far enough over the upper tier of bricks so that no mortar is left in it, mortar 5 can be supplied by means of a shovel or loading ladle 4 as shown in FIG. 2. The sled has at its bottom openings which are of a size and shape to assure that the proper amount of mortar can be applied.

Each of the sides 10 of the sled includes a lower portion 12 which slides over the bricks and which defines the outer limits of the bands 6 of mortar. The inner margins of the bands 6 are defined by upwardly extending lips 14. After the upper tier of bricks 1 has been provided with bands of mortar 6 another tier of bricks is put in place. The bands of mortar 6 are of the thickness, width and height which are necessary for a perfect setting of each tier. Thus, there is no need to remove waste mortar.

The upper row of bricks is aligned by means of a caulking ruler 3 which is positioned between the lips 14 which as shown in FIG. 3 define the upper portion of a groove 16. As shown in FIG. 1, the lips 14 extend into and engage the side walls of a channel 18 in the bottoms of the bricks in the upper tier. This assures alignment and adds to the strength of the wall. Guide line 7 serves as a check to see that the tier of bricks being set is in alignment with the tier below it.

As shown in FIG. 4, it is preferred that the caulking ruler 3 is long enough that it extends over several bricks when being used to align them.

It is to be noted that the present invention does not provide for mortar in the vertical joints between the bricks. It has been found that these joints need not be filled with mortar to give a strong wall. It is also to be noted that the bricks made in accordance with the present invention are preferably hollow as shown in FIG. 3 and therefore will have better insulating characteristics without mortar at the vertical joints because no mortar will seal off the air spaces between contiguous bricks in the same tier.

The method and means described infra can be modified without exceeding the scope of the present invention.

I claim:

1. A method of constructing a brick wall comprising the steps of providing a plurality of bricks having along their bottoms a channel and at their upper surfaces a groove both extending parallel to the longitudinal axes of the bricks an upwardly extending lip on each side of said groove; laying a plurality of bricks end to end to form a line of bricks; inserting an alignment ruler into said groove over the length of several of said bricks to align said bricks; removing said ruler; applying parallel bands of mortar over said line of bricks, one band on either side of said grooves; positioning a second line of bricks over said first line and aligning said second line of bricks on top of said one line of bricks in the upper tier so that said lips engage against the side walls of said channels.

2. The method of constructing a brick wall according to claim 1 wherein said bands of mortar are applied by a mortar sled pulled over said bricks.

3. The method defined in claim 2 further comprising the step of applying said bands of mortar so that they are the same height as said lips.

4. The method defined in claim 2 wherein said sled is provided with openings at the bottom thereof with a shape and dimension which will assure that the proper amount of mortar is distributed over said bricks.

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