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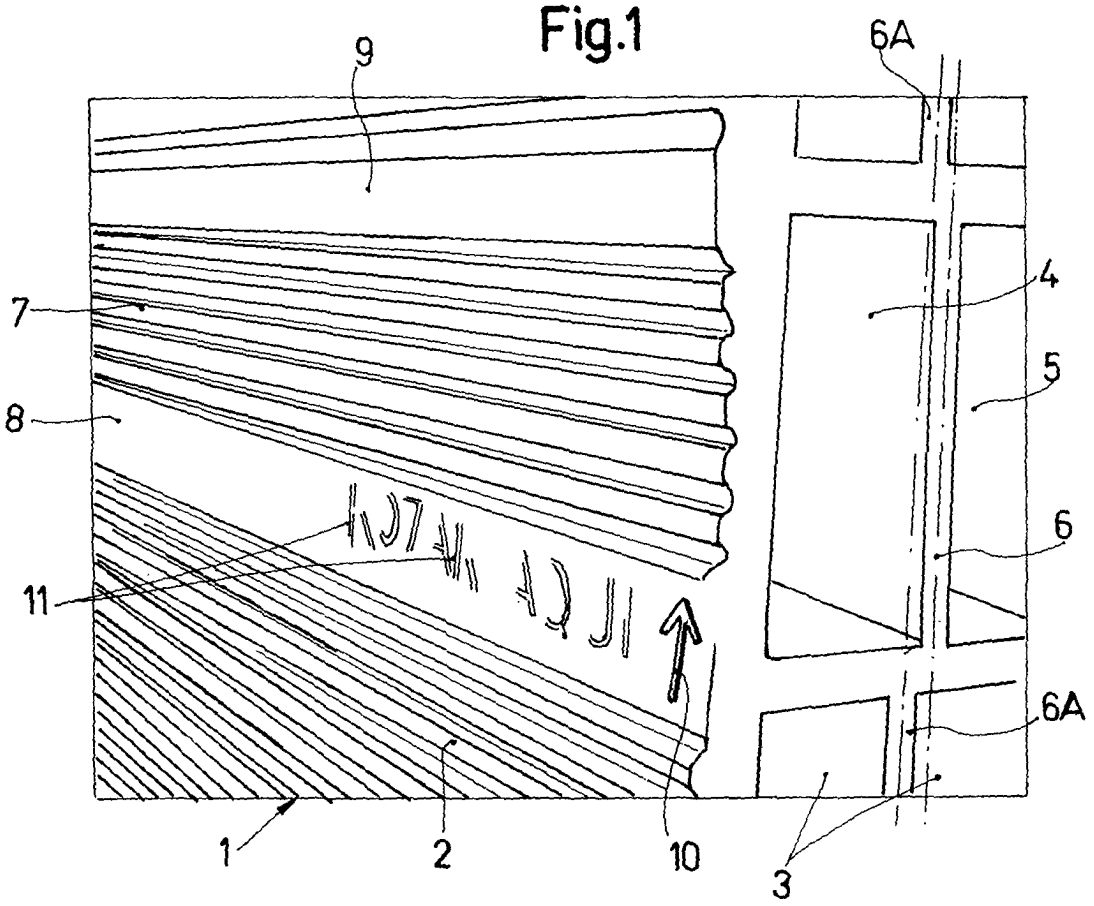
(54) Hollow brick with space for chasing

(57) The present invention relates to a hollow brick with a space (4) for chasing with a symmetrical double cavity (3) in which one or more of these cavities is provided with a space (4) of a larger width than the width of the symmetrical cavity (3) and the cavity adjacent to the former is provided with a space or width that is smaller than the width of the symmetrical cavity in a manner that is directly proportional to the first one, an the outer part is marked for opening said first cavity, including with signs and indications for unmistakably making the chasing.

Fig.1



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Description

OBJECT OF THE INVENTION

[0001] This invention is based on a large hollow brick, this not being a limitation of sizes because the solution provided by the invention is applicable to smaller sizes or traditional sizes provided that the conditions of the cavity so allow, taking into account that the aim is to provide said hollow bricks with the option of opening up the chasings necessary for installing service conduits, pipes, tubing, cable troughs or others without damaging or unduly weakening the construction piece.

[0002] As is known, in walls, partitions, faces or the like built with ceramic materials, specifically with double cavity bricks, which is most customary and general practice in construction today, it is necessary to open up chasings in certain parts of the brick, which advisably must coincide with one of the grooves of the brick, leaving the space necessary for installing the aforementioned service conduits.

[0003] However in practice, the breaking of the brick or the opening up of the chasing has some drawbacks, such as the fact that the space of the cavity or section of the groove, resulting from its standardized 7 cm thicknesses, is not enough for the correct or complete housing of said installations, forcing the central rib of said brick to be broken, implying undue and highly unadvisable weakening of the brick which at this point would be joined only at the rib opposite to the chasing.

[0004] Another drawback is that the location of the grooved part of the brick where the chasing must be made, generally in the central groove of small or large bricks, must be done by approximately calculating the area, which does not always give the right result, though the outside of bricks today indicate the horizontal intersection ribs with a section that is wider than the common ribbing of the brick.

[0005] The invention has as its purpose adapting bricks in a simple manner so as to not alter their structure and not complicate the manufacturing process, such that they adapt to the need for the chasing without weakening their structure, even facilitating locating the groove corresponding with this adaptation. Nor is it necessary to weaken the area "to be chased" because most bricks must be used with full strength, although it could be an optional or exceptional alternative.

BACKGROUND OF THE INVENTION

[0006] In reference to the state of the art, the invention is carried out on common double cavity bricks with a regular format of 25 x 12 x 9 cm and also for double cavity ceramic plates such as those disclosed in K 158712-1-2 "HOLLOW BRICK", in which double cavities are alternatively arranged in a combined version of different widths in which their distribution is calculated for better performance under the working stresses of said brick according to plate measurements.

DESCRIPTION OF THE INVENTION

[0007] The invention consists of providing the brick with one or more grooves or cavities of double cavity bricks, having a section with a width that is greater than the adjacent one, the latter being reduced in the same proportion by which the first one has been increased such that the central separation rib between them is eccentric with respect to the central rib of the remaining grooves of the brick, to the two remaining grooves in double cavity bricks and greater in number in the ceramic or large double cavity plates.

[0008] Another detail of the invention is that the groove of the hollow brick chosen for extension is preferably the central groove. Said extension is provided so as to obtain sufficient space for the housing and passage of the installation of the service conduits once the chasing is opened up in said groove, assuring the structural reliability of the brick given that the central rib or separation rib of this cavity and the adjacent one, now with a smaller section, would not be affected by the chasing.

[0009] The invention likewise foresees providing the brick with external means for identifying from the outside the place where the chasing must be made with absolute certainty, which indication may be an arrow introduced on the lower rib of the groove pointing out the space to be chased, and even a legend engraved on the clay with an expression such as "make chasing here", or similar instructions, marking the space to be chased between said rib and the top portion of the groove prepared for being opened up with no confusion.

[0010] The chasing is opened up traditionally, leaving a continuous chasing open throughout the bricks of the same tier which, according to the measurements of the prepared cavity, shall be enough so as to prevent the intermediate rib from breaking and completely housing the standard conduits for receiving the wall.

[0011] A broader idea of the features of the invention will be given below in reference to the sheets of drawings attached to this specification which, in a somewhat schematic manner and only by way of example, show the preferred details of the invention.

DESCRIPTION OF THE DRAWINGS

[0012]

Figure 1 shows a foreshortened perspective view of a double cavity plate (1) from one end thereof with a groove (4) prepared for chasing.

Figure 2 shows a view equal to the previous one from the opposite end of said plate (1).

Figure 3 shows a front elevational view of the plate (1) with the cavity (4) for the conduits (12).

Figure 4 shows a view similar to the previous one with the cavity (4) open (13) at the chasing (7).

Figure 5 shows a side elevational view of said cavity

(4) cut away, open at the chasing (7).

Figure 6 shows a front elevational view with the proportion of the cavities (3) and (4).

PREFERRED EMBODIMENT

[0013] A preferred embodiment of the invention is determined by the example shown in said drawings, representing a hollow plate (1) of the ribbed type (2) and symmetrical double cavity (3), in which essentially one of them is a cavity or groove (4) with a larger section or width in the same proportion by which the adjacent cavity (5) is of a lesser section or width, and in which the intersection partition (6) between the cavities (4) and (5) is proportionally eccentric with respect to the symmetrical partitions (6A) of the remaining symmetrical cavities (3).

[0014] A cavity (4) for chasing is externally demarcated by the space (7) comprised between the longitudinal ribs (8) below and (9) above, the first one or any of the two externally provided with an engraved message (10) indicating the place where the chasing must be made, and even an inscription (11) engraved in the clay, such as "make chasing here", so as to unmistakably indicate the place where the cut for the chasing must be made.

[0015] As can be seen in Figure 4, the chasing (13) internally houses the tubing (12) for installing the conduits (14) such that said tubing (12) does not overflow the space of the surface (7), having the required size inside the cavity (4) for the purpose of preventing any alteration or projection on the outer side of the brick (1) for the corresponding treatment of the wall when the layer of mortar is spread.

[0016] Having sufficiently described the nature of the invention, it is hereby stated for all intents and purposes that said invention is not limited to the exact details of this specification, rather on the contrary, those modifications considered appropriate shall be introduced provided that they do not alter the essential features of thereof claimed below.

Claims

1. A hollow brick with a space for chasing, consisting of bricks or plates (1) with symmetrical double cavities (3), **characterized in that** one or more of said longitudinal cavities or grooves (4) arranged for chasing has a space or width (4) exceeding that of the symmetrical groove (3) and the adjacent groove has a space or width (5) that is smaller in a directly proportional manner than cavity (4), between which the vertical rib (6) between the two cavities has an asymmetrical displacement, also proportional with respect to the symmetrical ribs (6A) of the brick (1).

2. A hollow brick with a space for chasing in which the space for chasing, according to claim 1, demarcated by the cavity (4), is externally **characterized in that** it is a space (7) comprised between the bottom (8) and top (9) longitudinal ribs in which the first one, or either one of them or both, has an engraved message (10) and a guidance inscription (11) also engraved in the clay, such as "make chasing here", or a similar equivalent, giving rise to the chasing (13).

Fig.1

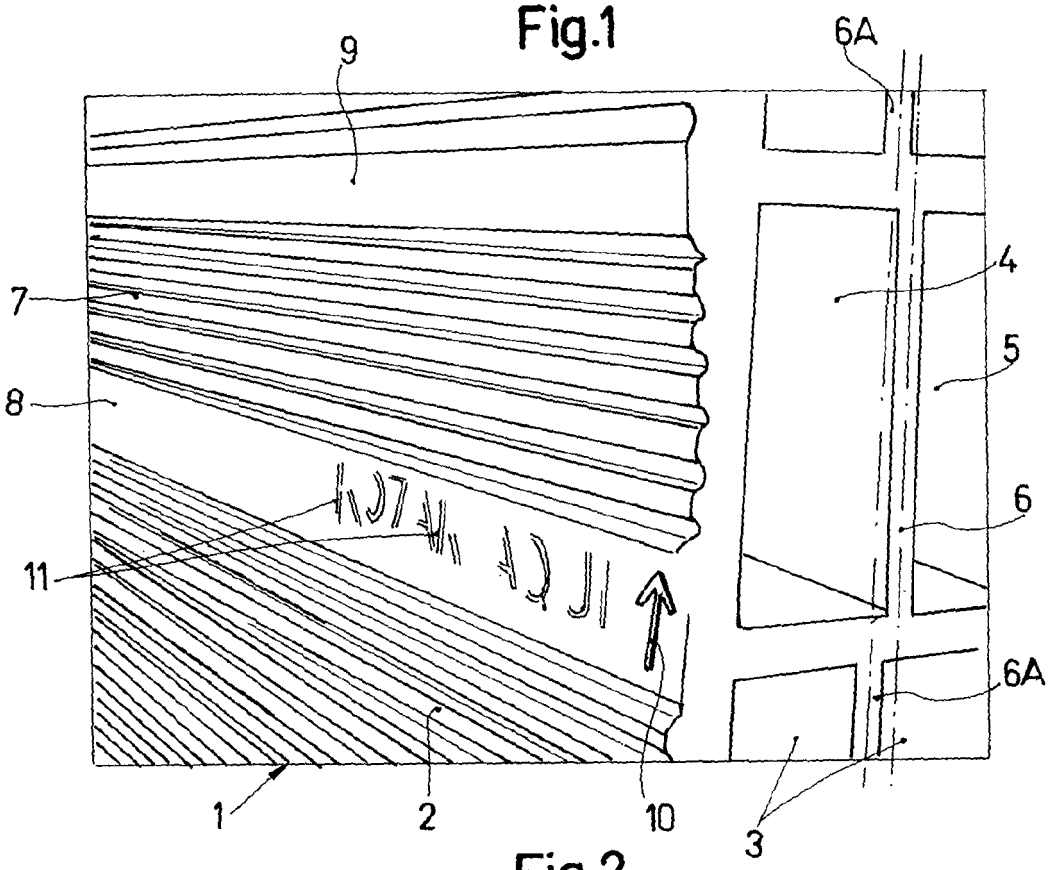


Fig.2

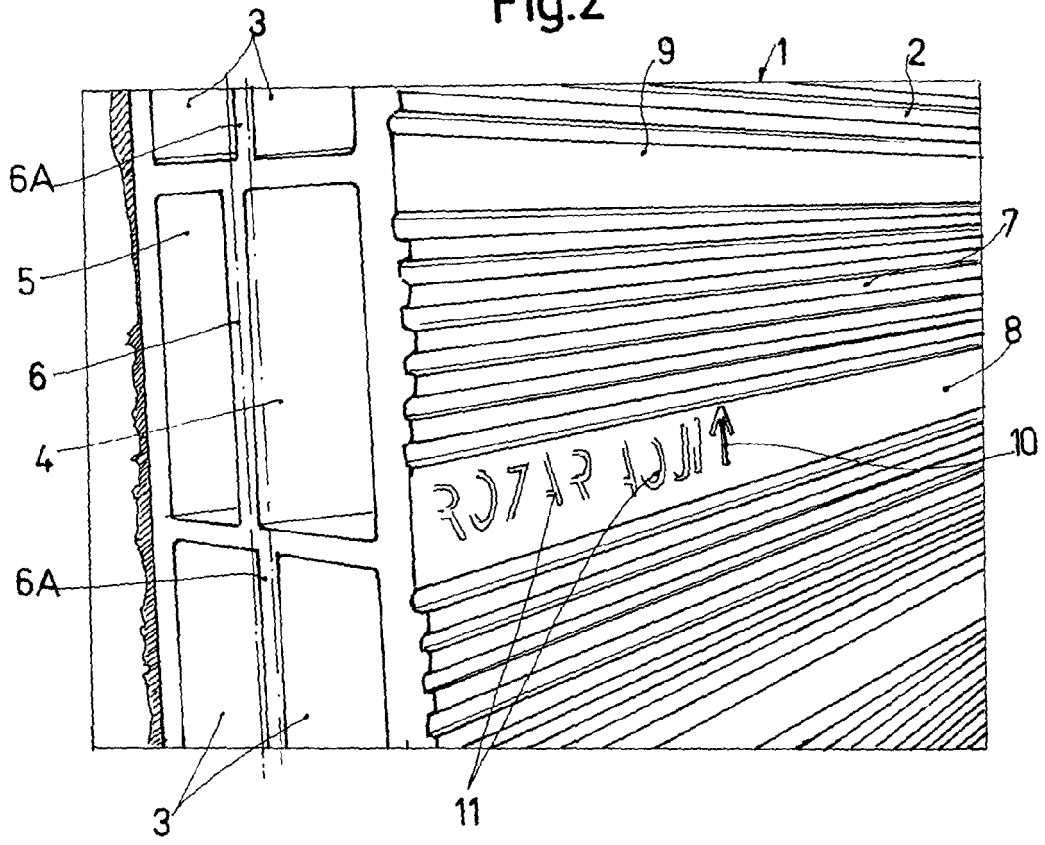


Fig.4

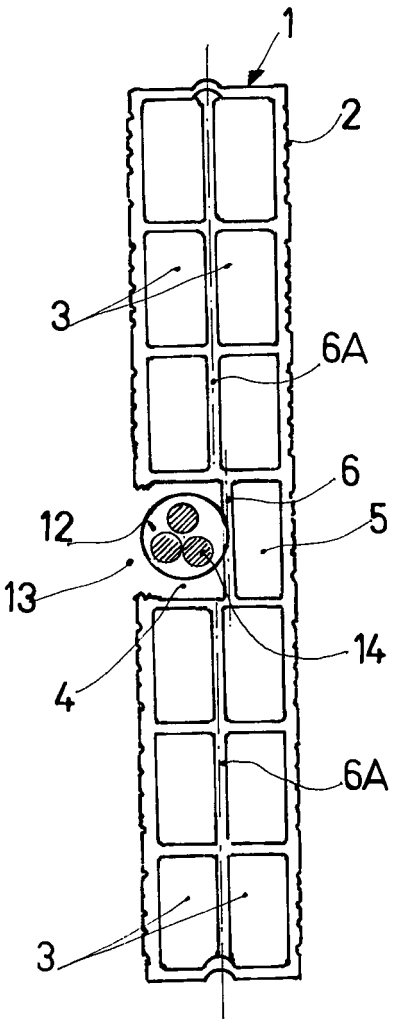


Fig.5

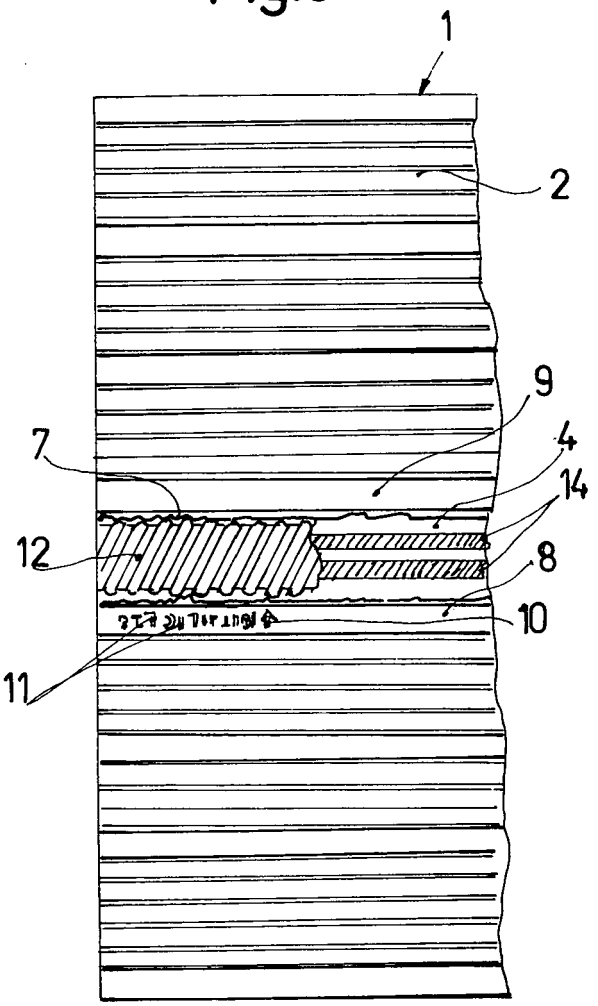


Fig.3

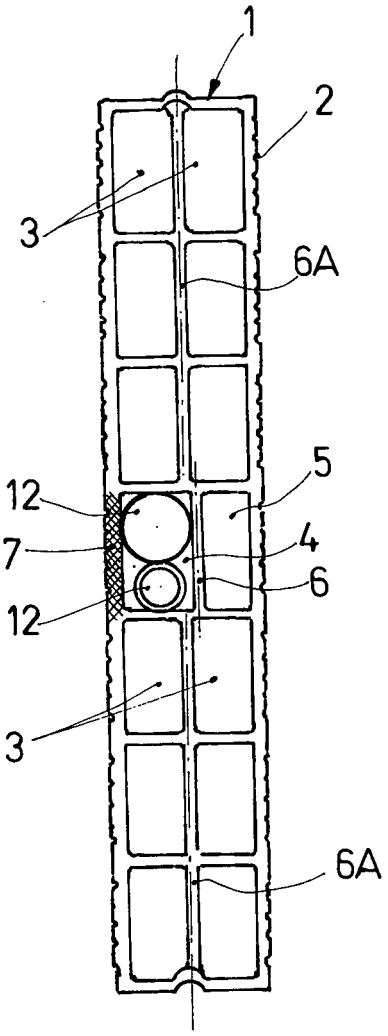
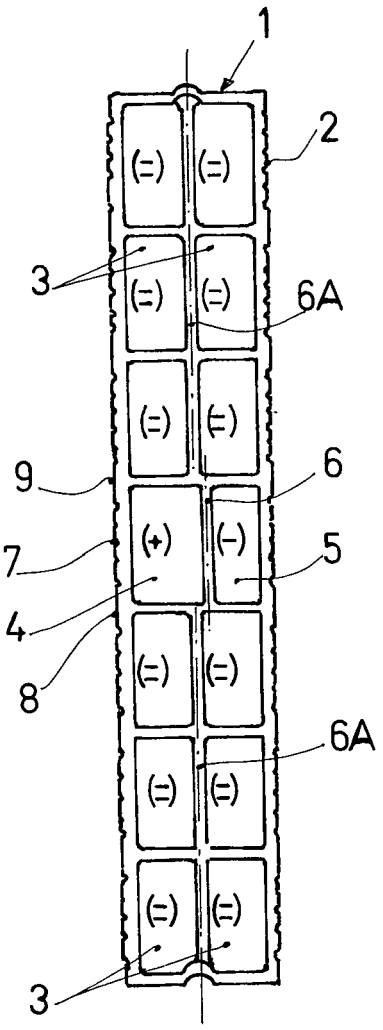


Fig.6



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EUROPEAN SEARCH REPORT

Application Number
EP 06 38 0009

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 201 05 370 U1 (THEODOR KLEINER GMBH & CO. KG KALKSTEINWERKE) 21 June 2001 (2001-06-21) * figures 9-12 * * page 6, paragraph 5 - page 7, paragraph 1 * * page 7, paragraph 5 - page 8, paragraph 1 * * page 12, paragraphs 2,3 *	1,2	INV. E04C1/39
A	GB 669 750 A (EECON CONSTRUCTION COMPANY LIMITED; ARTHUR GEORGE SHARPLES) 9 April 1952 (1952-04-09) * page 1, lines 57-83; figure 1 *	1,2	
A	ES 2 081 737 A2 (PATINO DOVAL OLGA) 1 March 1996 (1996-03-01) * figure 2 *	1	
A	AT 379 187 B (STOISER U. WOLSCHNER, BETONWERK U. BAUSTOFFE, KLAGENFURT) 25 November 1985 (1985-11-25) * page 3, lines 31-34; figure 6 *	2	TECHNICAL FIELDS SEARCHED (IPC) E04C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	19 June 2006	Vratsanou, V

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 06 38 0009

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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19-06-2006

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82