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(54) **Precast reinforced concrete panel with the visible side made of natural stone or the like**

(57) It is especially applicable for coverings and flooring.

It is formed by a reinforced concrete base with the

desired dimensions and the pieces (4) of natural stone or the like are fastened to said base after setting. The natural stone is arranged with the desired distribution on the entire surface of the mold.

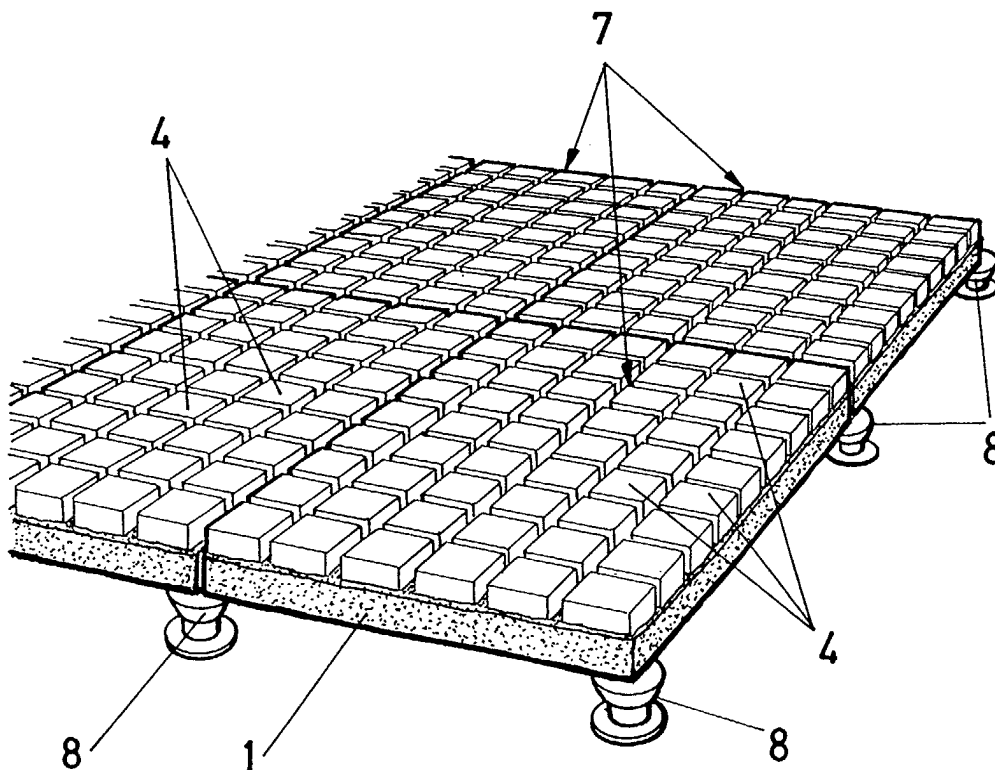


FIG. 5

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Description

[0001] As expressed in the title of this specification, the present invention refers to a precast reinforced concrete panel with the visible side made of natural stone or the like, which has outstanding relevant and advantageous characteristics in the construction of coverings and flooring in contrast to the construction method currently used.

[0002] This type of precast panels is easily transported stacked in pallets and this permits the installation of floating flooring upon assembling same on truncated-cone shaped supports used in the installation of conventional floating flooring.

[0003] Currently floating paving made of paving blocks or other natural and/or artificial stones, ceramics or other materials is not known, since the traditional way of placing paving is on a sand bed, subsequently taped with dry mortar.

DESCRIPTION OF THE INVENTION

[0004] In general, the precast reinforced concrete panel with the visible side made of natural stone or the like, which the invention proposes, is comprised of a reinforced concrete base of the desired dimensions, poured into the mold. The pieces of natural stone or the like that are arranged with the desired distribution, occupying the entire surface of the mold are fastened to the base of the mold after setting.

[0005] In order to manufacture these panels, once the characteristics of the visible side have been established: the type of stone, dimensions of the pieces, distribution thereof, etc., and also knowing the characteristics that the reinforced concrete base is to have: type of concrete, necessary reinforcement, height of the base, etc., the metal molds are prepared with the total dimensions of the panel (length, width, height). Likewise, the reinforcements are precast and the selected stone is cut into the required measurements.

[0006] Once the formwork has been prepared, the concrete molds are filled and afterwards the stone is put in place. In most cases a metal templet is used to achieve a perfect distribution, when joints are to be formed, naturally doing without a templet in the event that the pieces of natural stone or the like are in contact or have a fanciful distribution.

[0007] In the event that the stone used is not as uniform as would be desired, in order to achieve a perfect flat visible side, this side is leveled.

[0008] On occasions and when the stone is more non-uniform, it is preferable to first of all place the stone in the bottom of the mold in the correct position, of course with a layer of sand or the like. Hence, the stone has the desired distribution and afterwards the concrete is poured and reinforced. After the period of time required for the concrete to set, the panel is removed from the mold and cleaned.

[0009] It has even been provided for that the pieces of natural stone and the like, or else, the pieces of artificial stone, ceramics or other materials, may be cut at the factory and also transported in pallets, arranged on a polyethylene base or the like that keeps these pieces in the desired distribution, preserving this bottom seat layer when it is placed in the mold. Afterwards the concrete is poured and the reinforcement rods or distribution mesh are put in place.

[0010] For the purpose of providing a better understanding of the characteristics of the invention and forming an integral part of this specification, a set of drawings in whose figures, the following has been represented in an illustrative and non-restrictive manner, is attached hereto:

BRIEF DESCRIPTION OF THE DRAWINGS

[0011]

Figure 1 is a partial schematic perspective view of a mold for making precast reinforced concrete panels with the visible side made out of natural stone or the like, in accordance with the invention, on which the reinforced concrete base of the precast panel has already been formed.

Figure 2 is a view similar to the one of figure 1, including a metal templete for the correct placement of the stone.

Figure 3 is a view similar to the one of figure 2, in an intermediate stage of placement of the stone with the templet.

Figure 4 is a view similar to the one of the preceding figures, in a final stage of construction of the panel, making the visible side thereof level.

Figure 5 is a partial perspective view of the installation of a floating floor with the precast panels object of the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0012] Making reference to the numbering used in the figures, we can see how the precast reinforced concrete panel with the visible side made of natural stone or the like, that the invention proposes, has in this embodiment shown, a reinforced concrete base (1), that is formed in a mold (2) with the desired dimensions, into which the concrete is poured once the reinforcement (3) has been put in place.

[0013] Before the concrete sets, the pieces (4) of natural stone or the like that have been chosen are put in place in this case with the help of a templete (5) in order to optimize placement.

[0014] Figure 4 shows the manufacturing step when the workman proceeds to level the visible side of the panel by means of a leveler (6).

[0015] Once the templets have been disassembled (5) and the setting time of the concrete has passed, the

panel is removed from the templates and cleaned, if necessary.

[0016] In figure 5 we can see a series of panels with the characteristics of the invention, generally referred to as number (7) and which due to the special resistant structure thereof with a reinforced concrete base (1) and paving blocks (4) on the visible side permit the installation of floating flooring upon resting on conventional truncated-cone shaped supports (8).

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Claims

1. Precast reinforced concrete panel with the visible side made of natural stone or the like, especially applicable for coverings and flooring, **characterized in that** it is comprised of a reinforced concrete base (1), with the desired dimensions and to which the pieces (4) of natural stone or the like, arranged with the chosen distribution on the entire surface of the mold (2) are fastened.

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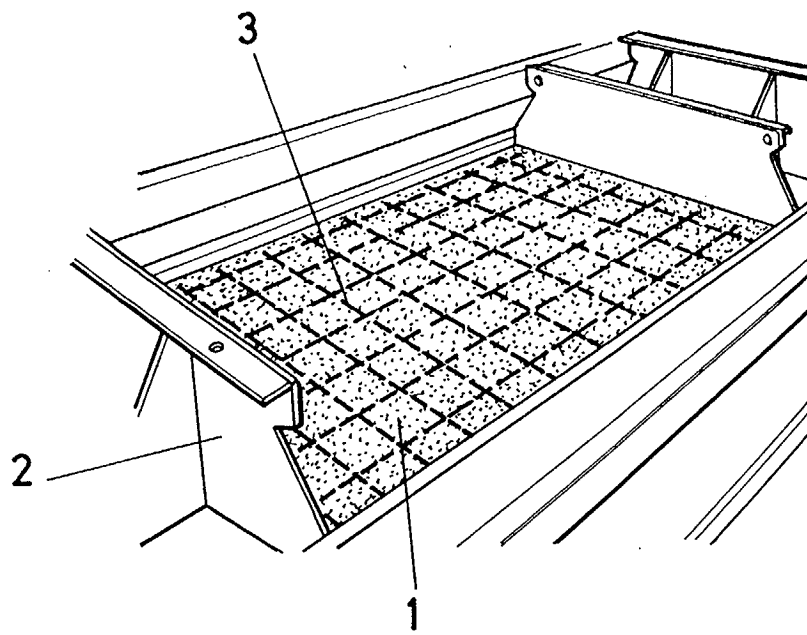


FIG. 1

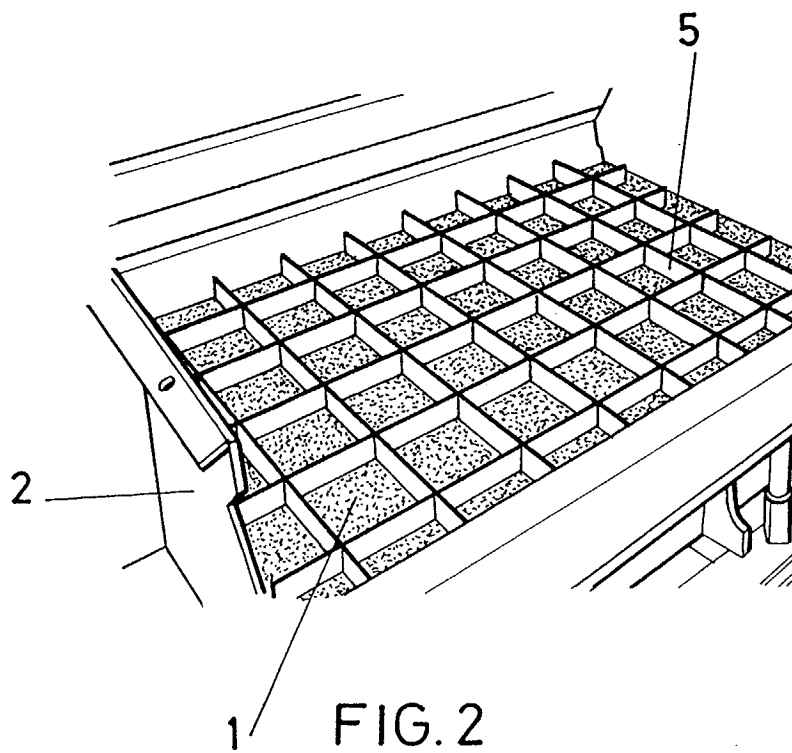
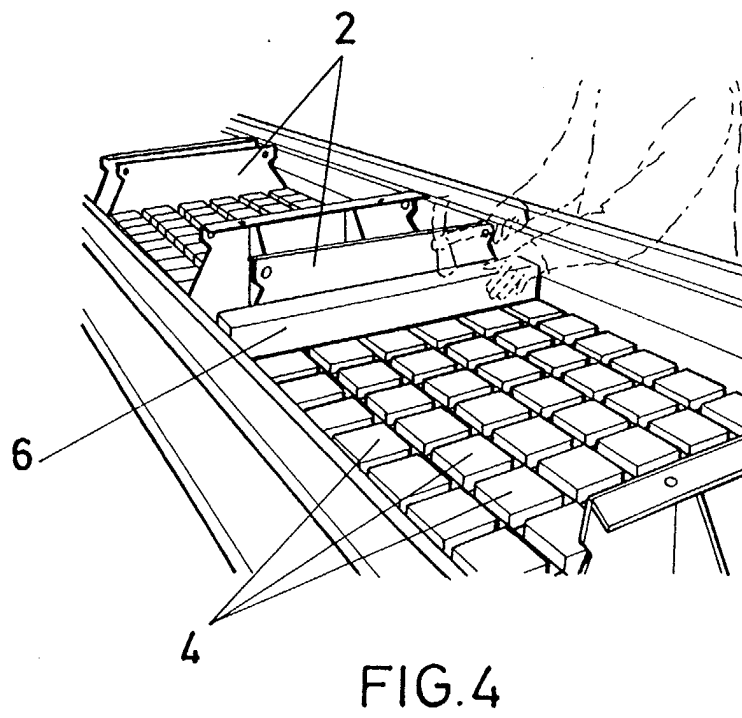
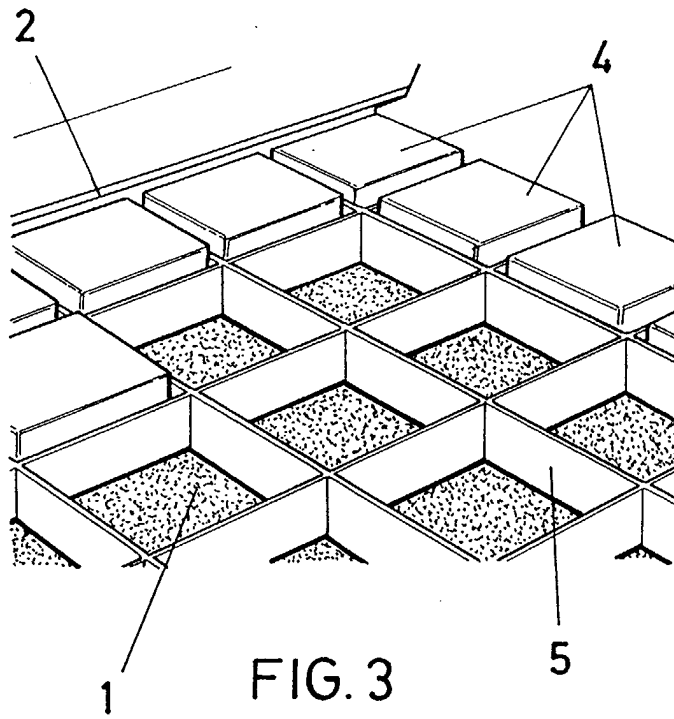


FIG. 2



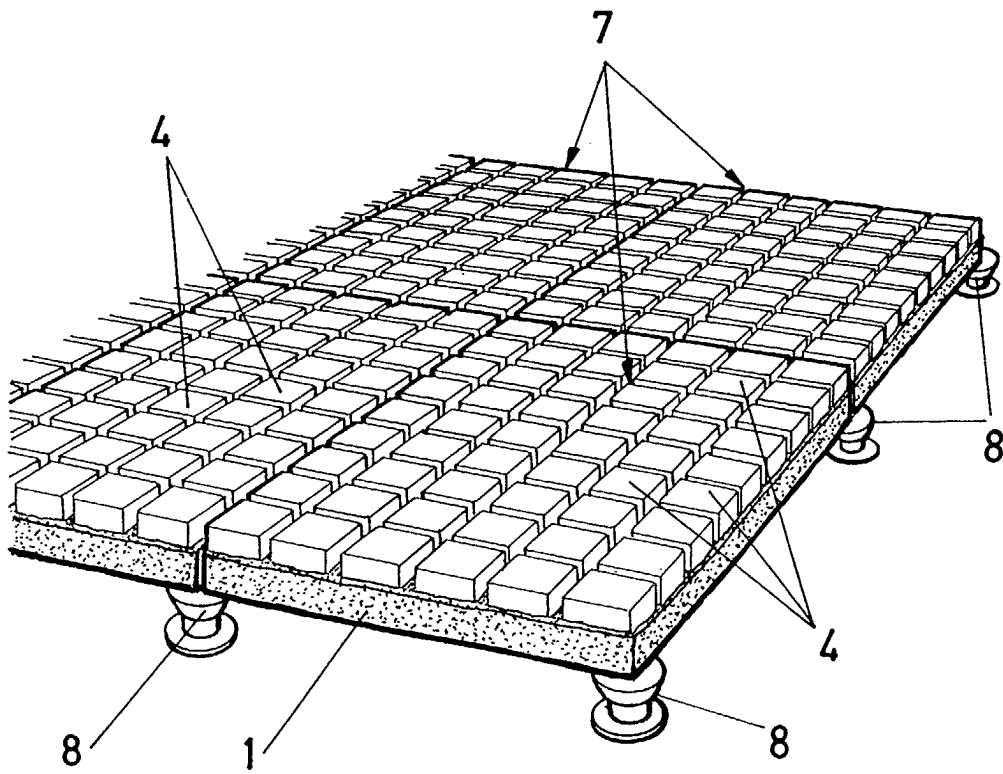


FIG. 5