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(54) Form panel and use of the same for the erection of roofs

(57) Form panel and use of the same for the erection of roofs, constituted in turn by panel members, an external panel of stucco, so that it is not necessary to plaster

the roof, and a panel of lightweight concrete which has embedded reinforcements of corrugated steel, so that the strength of the panel is improved.

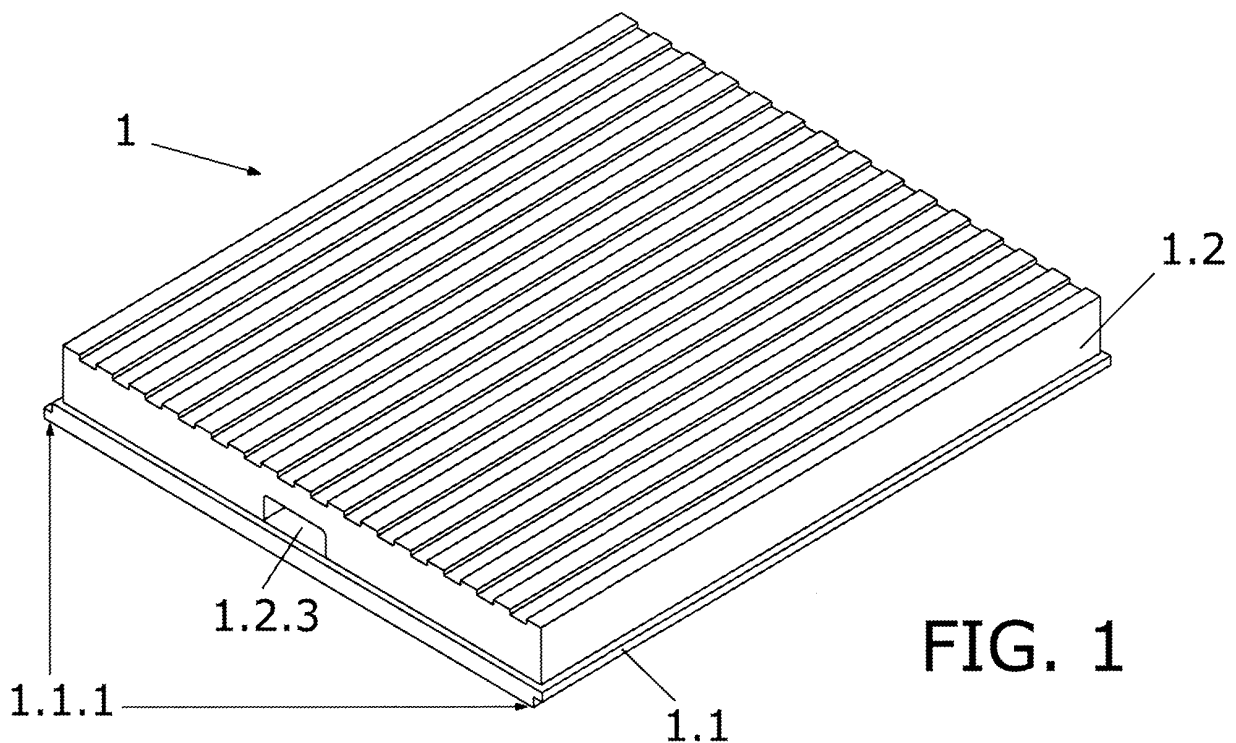


FIG. 1

Description

OBJECT OF THE INVENTION

[0001] The present invention relates to a form panel and the use of the same for the erection of roofs.

[0002] The panel, constituted in turn by panel members, is characterized in an external sheet of stucco, so that it is not necessary to plaster the roof.

[0003] The panel is characterized in corrugated steel reinforcements which are mounted embedded, so that the strength of the panel is improved.

BACKGROUND OF THE INVENTION

[0004] In general the conventional structures of roof formwork are constituted based on props, between which wooden planks are inserted on which the concrete is poured.

[0005] Usually wood is chosen as the material of the form panels because the characteristic roughness of the material facilitates the ensuing plastering of the roofs.

[0006] In all the systems known up to now after stripping the formwork plasters are applied on the exposed faces with the object of forming the plaster finish.

[0007] The present invention discloses a panel and a use of the same which allows the roof to be constituted at the time of erecting the formwork, with no need for later plastering of the same.

DESCRIPTION OF THE INVENTION

[0008] The present invention consists of a form panel and of the use of the same for the erection of roofs which eliminates the plastering stage signifying a saving of means.

[0009] These panels are constituted essentially of a stratified structure, composed in turn by two panel members, a first lower panel of stucco and an upper panel of lightweight concrete.

[0010] In the upper panel of lightweight concrete, in the part proximate to the panel of stucco, longitudinal reinforcements of corrugated steel are embedded thereby increasing the strength of the panel.

[0011] In the upper face the lightweight concrete panel has longitudinal grooves which facilitate the grip between the panel and the framework concrete.

[0012] The concrete panel has in two of its sides on the face proximate to the stucco panel, lateral rebates which facilitate transport and storage of the panels.

[0013] The worker can insert his hands in these rebates to carry and position the panels without damaging the stucco area.

[0014] The panel of lightweight concrete is set back with respect to the stucco panel allowing the concrete to reach the surface of the stucco panel.

[0015] The different panels are joined means of a perimetral tongue and groove arrangement.

[0016] The lightweight concrete allows the emplacement of halogen lamps and the opening of recesses.

[0017] With the panel of the invention a roof is constituted by being able to place the panels directly on a structure of struts. Members are placed on the panels which reinforce and lighten the compression layer.

[0018] These members can be hollow blocks, continuous slab, or pans among others.

DESCRIPTION OF THE DRAWINGS

[0019] The present descriptive specification is completed with a set of drawings, which illustrate the preferred embodiment of the invention without restricting the same.

[0020] Figure 1 shows a view in perspective of the panel of the invention.

[0021] Figure 2 shows a view in perspective of the panel of the invention with the concrete panel cut to show the longitudinal reinforcements.

[0022] Figure 3 shows an example for use in the erection of roofs with the panel of the invention.

PREFERRED EMBODIMENT OF THE INVENTION

[0023] In the light of the foregoing, the present invention consists of a form panel (1) which is constituted in turn by a stucco panel (1.1) on which a panel (1.2) is located of concrete lightened with expanded clay.

[0024] The panel (1.2) of lightweight concrete has longitudinal reinforcements (1.2.1) of corrugated steel embedded therein, some grooves (1.2.2) in the upper face which facilitate the grip between the panel (1) and the framework concrete, and some gripping rebates (1.2.3) for better handling of the panel (1).

[0025] When making use of these panels (1) for the erection of roofs, the same (1) are placed directly on the prop system (2) with the plaster face corresponding to the stucco panel (1.1) facing downwards, with no need to use support plates.

[0026] When the panels (1) of the invention are in place, which are coupled by tongue and groove joint (1.1.1), supports (4) are located on which the hollow blocks (3) are placed, the supports are spacers of the hollow blocks (3) and the panels (1), which blocks (3) are shown raised.

[0027] Between the hollow blocks (3) the space is left which the ironwork (5) requires to constitute the supporting beams and the concrete covers the entirety of the assembly until there is a compression layer (6) in the upper part.

[0028] The essential nature of this invention is not altered by variations in materials, form, size and arrangement of the component elements, described in a non-restrictive manner, sufficient for an expert to proceed to its reproduction.

Claims

1. Form panel (1) **characterized in that** it is constituted essentially by a stratified structure comprising in turn two panel members, a lower first panel (1.1) of stucco to which is joined by its upper face an upper panel (1.2) of lightweight concrete, the panel (1.2) of lightweight concrete reveals embedded reinforcements (1.2.1), longitudinal grooves (1.2.2) in the upper face, and rebates (1.2.3) for gripping; in the configuration of the edge, the width of the concrete panel (1.2) is set back with respect to the stucco panel (1.1), the latter (1.1) has a perimetral tongue and groove structure (1.1.1).

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2. Form panel (1) according to claim 1 **characterized in that** the upper concrete panel (1.2) is lightened with expanded clay.
3. Form panel (1) according to claim 1 **characterized in that** the reinforcements (1.2.1) embedded in the upper panel (1.2) of lightweight concrete are made of corrugated steel.

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4. Use of the panel (1) for the erection of roofs according to claim 1 **characterized in that** the roof is constituted by locating the panels (1) directly on a system (2) of props with the plastered face corresponding to the stucco panel (1.1) facing downwards, wherein reinforcement and lightening structures are placed on the panels (1), between these structures the space is left which the ironwork (5) requires to constitute the support beams, the concrete covers the entirety of the assembly until a compression layer (6) is made on the upper part.

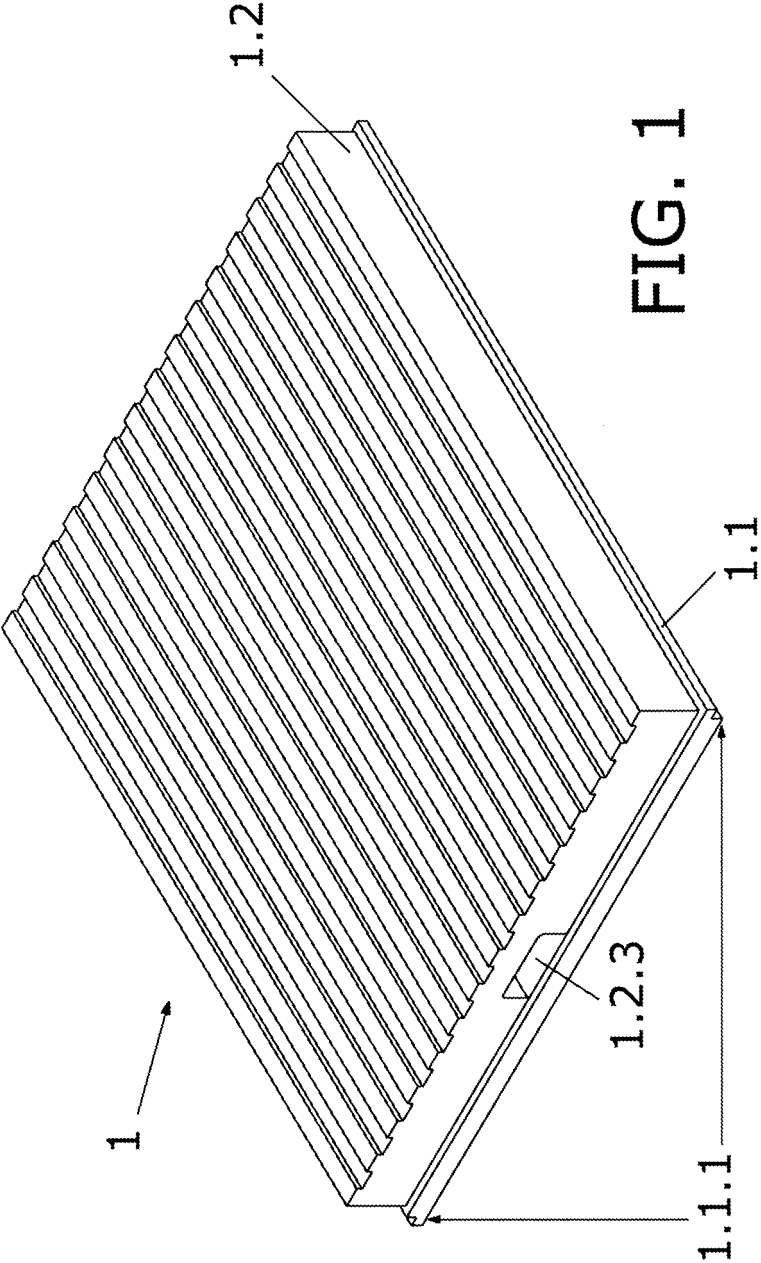
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5. Use of the panel according to claim 4 **characterized in that** the reinforcement and lightening structures are hollow blocks (3).

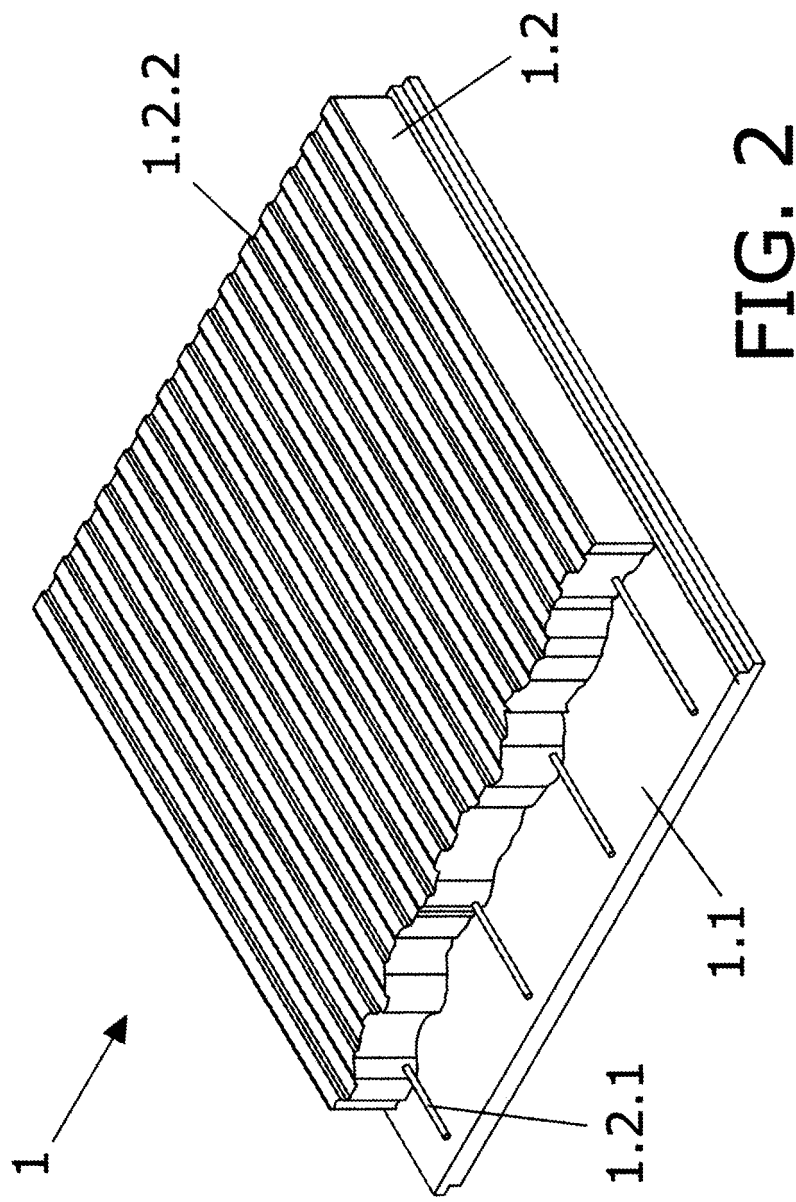
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6. Use of the panel according to claim 4 **characterized in that** the reinforcement and lightening structures are continuous slabs.
7. Use of the panel according to claim 4 **characterized in that** the reinforcement and lightening structures are pans.

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8. Use of the panel according to claim 5 **characterized in that** the hollow blocks (3) are mounted on supports (4) which separate the hollow blocks (3) and the form panels (1).

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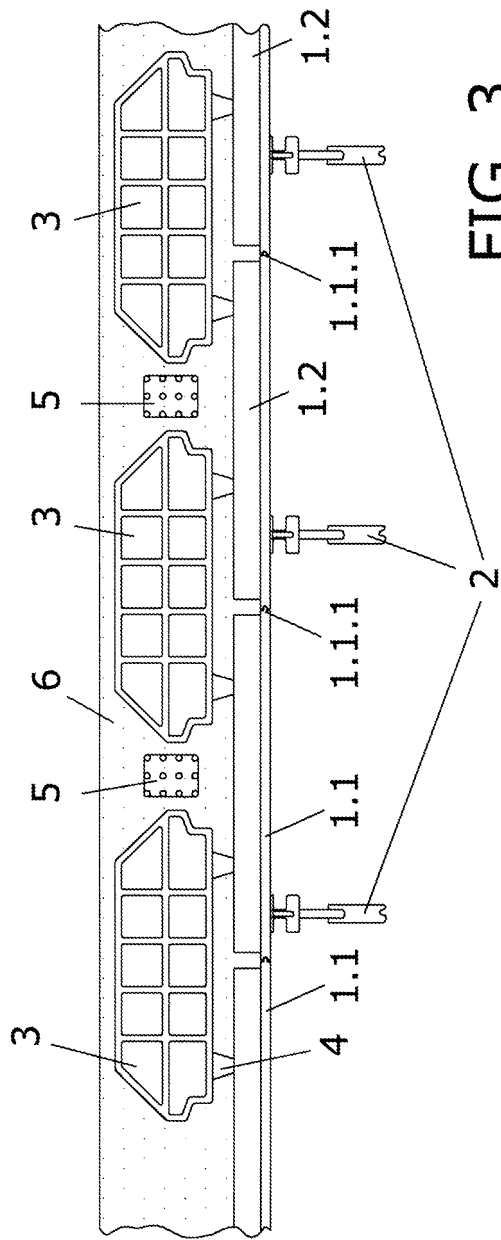


FIG. 3