March 1, 1927. 1,619,435

M. R. RETTIG

METHOD OF PRODUCING MODELS OF BUILDINGS AND THE LIKE

Filed Jan. 21, 1926

Fig.1.



Fig.2.

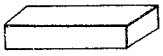


Fig.3.



Fig.4.



Fig.5.



Fig.6.

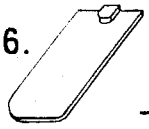


Fig.7.

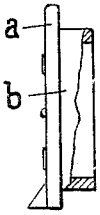


Fig.8.

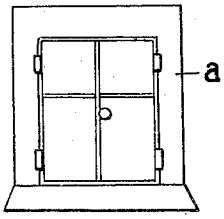


Fig.9.

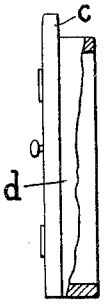


Fig.10.

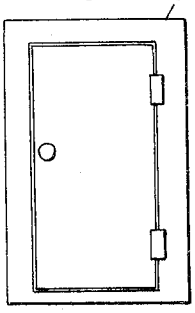


Fig.11.

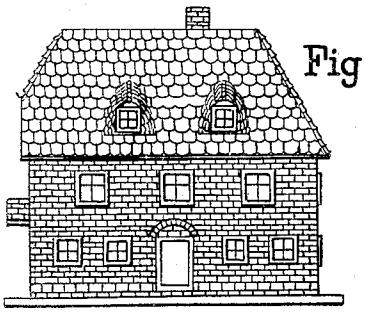


Fig.12.

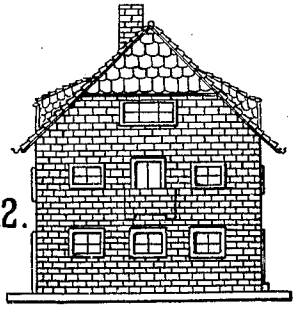


Fig.13.

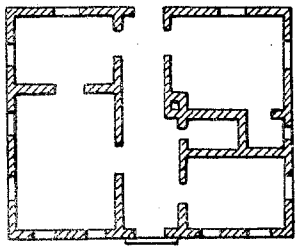
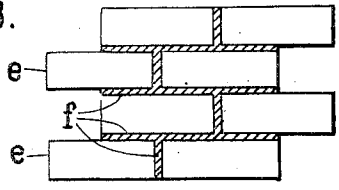


Fig.14.



Inventor:

Max Richard Rettig.

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UNITED STATES PATENT OFFICE.

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METHOD OF PRODUCING MODELS OF BUILDINGS AND THE LIKE.

Application filed January 21, 1926, Serial No. 82,744, and in Germany January 25, 1924.

The object of the present invention is to produce true models of buildings and the like by the assembling of building blocks or bricks and other requisites in a rigid and yet detachable manner, and the invention consists in connecting the elements and plastering them where required by means of a plastic mortar adapted to dry quickly and to be easily dissolved after drying for disassembling the elements whenever required.

A suitable mortar for this purpose is composed of sea-sand, whiting, dextrine and water.

Figs. 1 to 5 of the accompanying drawings represent perspective views of different forms of blocks or bricks for use in connection with the models, and

Fig. 6, a view of a roofing tile.

Fig. 7 is a side view, partly in section, of a window structure,

Fig. 8, a front view of the same, and

Figs. 9 and 10, are similar views of a door structure.

Fig. 11 is a front view of a model built up in accordance with the improved method,

Fig. 12, an end view of the same, and

Fig. 13, a sectional plan.

Fig. 14 is a view on a larger scale showing the bonding of the bricks and the joints.

The building elements shown in Figs. 1 to 6 may be made of stone, wood or other suitable material and given any desired shape other than those shown. A suitable material for this purpose is hard wood dyed red or any other desired brick colour.

The blocks or bricks are laid as in the case of ordinary bricks, a mortar being used which dries quickly and hard and which can readily be re-dissolved when the bricks and other elements are required for the building of a fresh model.

A suitable mortar is composed of 4 parts sea-sand, 4 parts whiting, and 2 parts dextrine. The mixture is supplied together with the blocks and other requisites and in the form of a powder which has only to be mixed with water to be converted into mortar.

The models are erected on a base plate according to a regular building plan and in true proportion. Window and door frames are fitted by means of the mortar into the brick work. Each window frame *b* has an external facing *a* and the door frame *d* a similar facing *c* arranged parallel with the wall.

This arrangement enables the frames to be rigidly fixed to the brick work and allows the window and doors to be moved on their hinges without risk of detaching the frames from the walls.

After the erection of the walls and partitions, the roof truss is built up and placed in position, the roof being finished with battens and tiles or other suitable roofing material, so as to produce a true model of the building. The mortar may be omitted along one course of bricks, for instance under the eaves, so as to leave the upper part of the model free to be lifted off to give access to the interior.

Fig. 14 shows the bonding of the bricks *e* and the mortar joints *f*.

The models produced in this manner will be firm enough to withstand considerable handling without collapsing. They can be used not only as toys but also for experimental and exhibition purposes as well as for photographic and kinematographic exposures.

The mortar may be coloured and can also be used for plastering purposes. It is applied by means of the usual tools such as trowel, straight-edge and the like. It dissolves readily in water so that the bricks and other elements can be disassembled and used repeatedly for other models.

I claim:

1. Building models composed of building blocks and a binding and plastering medium adapted to set quickly and hard, and to be readily dissolved in water after the hardening.

2. Building models composed of building blocks and a binding and plastering medium consisting of a mixture of sea sand, whiting, dextrine and water.

3. Building models composed of blocks, window and door frames of L-shaped cross-section, and a mortar for connecting said elements, said mortar being adapted to set quickly and hard, and to be readily dissolved after hardening.

MAX RICHARD RETTIG.