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PROCESS FOR MAKING BUILDING BLOCKS.

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1,162,172. **Patented Nov. 30, 1915.**

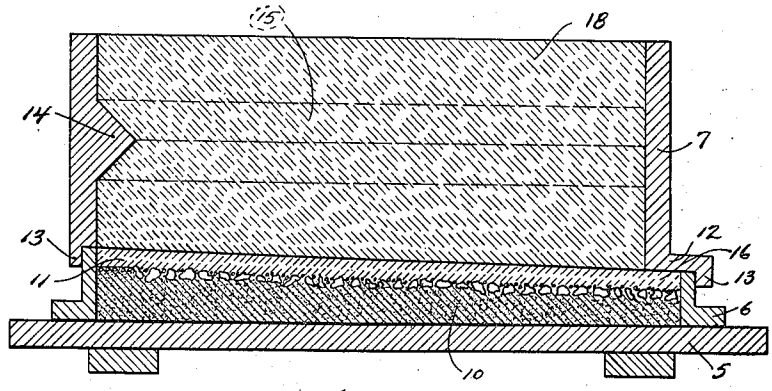


Fig. 1.

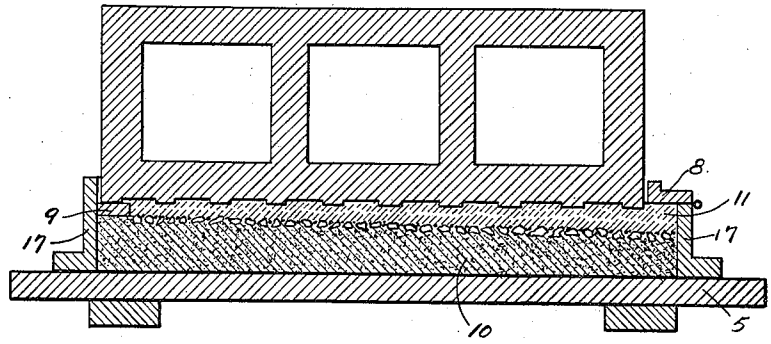


Fig. 2.

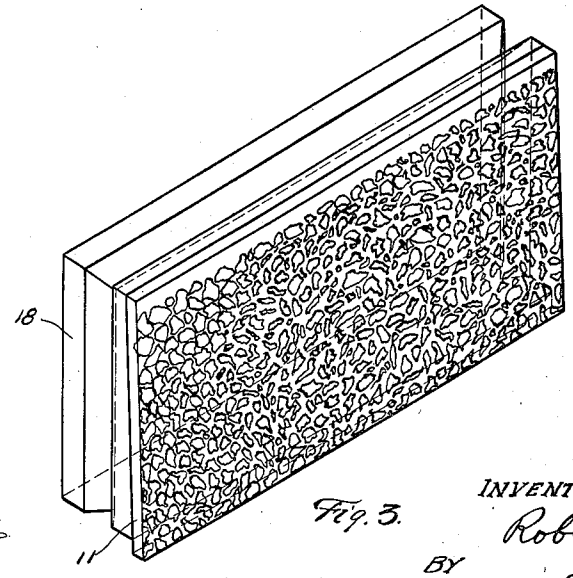


Fig. 3.

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PROCESS FOR MAKING BUILDING-BLOCKS.

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To all whom it may concern:

Be it known that I, ROBERT M. JONES, a citizen of the United States of America, residing in the city of Niagara Falls, county of Niagara, and State of New York, have invented certain new and useful Improvements in Processes for Making Building-Blocks, of which the following is a full, clear, and exact description.

My process relates generally to processes for making building blocks, and more particularly to the making of building blocks having stucco or overlaid faces.

In the prior building art, when a stucco faced wall has been made, the wall has been first constructed of tile, building blocks or bricks in the usual manner and the stucco material afterward placed upon the finished wall. This has made it an expensive job and the progress of work has depended a good deal upon weather conditions.

The general object of my invention has been to provide a process whereby building blocks may be formed, each with a stucco face, so that when placed in the wall it will have the desired stucco finish without an additional expenditure of time and labor.

Furthermore, I have sought to provide a process wherein blocks formed of concrete, tile, terra-cotta or any other well known material, may be provided with a stucco face. Moreover, by my process, each block is so formed that when placed in the wall, the same is made water-proof and frost-proof.

In the accompanying drawings, forming part of this application, I have shown one manner of carrying out my process, it being obvious that other devices may be employed in carrying out the same.

In the drawings, Figure 1 shows a longitudinal section through a cement building block as it is being formed and before it is removed from the mold. Fig. 2 is a similar section of a building block having a hollow tile body. Fig. 3 is a perspective view of a finished block.

Referring to Figs. 1 and 2, where I show one form of apparatus for carrying out my process, 5 represents a pallet board and 6 the lower portion of my mold placed on the upper surface of the same. The height of the longitudinal edge at one side of the lower portion of the mold 6 is greater than at the other side. The narrow side is at that part of the mold which forms the lower edge of the block.

7 represents the upper portion of my mold wherein is molded the cement body portion of the block. The inside width of this part of the mold is less than the inside width of the lower part of the mold 6, thus forming an overhanging lip 16, and the upper portion of the mold 7 is provided with an outwardly extending flange 12, which is arranged at that portion of the mold which forms the lower edge of the block. The upper portion 7 of the mold is provided with a downwardly projecting flange 13, which extends entirely around the outside of the lower portion 6 of the mold. The mold 7 is provided with an inwardly projecting V-shaped rib 14, extending across that portion of the mold which forms the upper surface of the block, and it is also provided with inwardly projecting, V-shaped ribs 15, extending across the surfaces, which form the end faces of the block. This portion of the mold is, of course, provided with suitable hinged means, (not shown) whereby it may be opened when the block is molded and set. In Fig. 2, the mold 17 is provided at one edge with a hinged member 8, which extends across the lower edge of the block. This last mentioned form is designed for blocks, which have a tile or terra-cotta body. 9 is a strip, which forms part of the mold, and which is placed therein so as to extend across the upper edge of the block.

When carrying out my process by the device herein shown and described, the lower portion of the mold 6 is first placed upon the pallet board 5 and sand 10 placed within the same. This sand is struck off so that its upper surface will be a short distance below the upper edge of the lower portion of the mold 6. Upon this sand is now placed fine particles of material, which are to form the stucco, and upon the fine particles are placed the coarse particles of stucco. After the coarse stucco material is in place, a board or other flat surface is placed thereupon, and pressure brought to bear upon the upper face of the same, whereby the coarse stucco material will be forced down in the fine stucco material and embedded into the sand 10. The board is then removed, and on top of the embedded stucco is placed the waterproof and cement mixture 11. This mixture preferably extends up to the upper edge of the lower portion of the mold 6 and is struck off at a level thereto. The upper portion of the mold 7 is now placed over the lower por-

tion 6 of the mold and suitably clamped in position. Into this mold is now poured the cement mixture, which is to form the body 18 of the block.

It will be seen that by first placing the fine stucco material and then the coarse stucco material that when the coarser stucco material is embedded into the sand bed 10, it is obliged to pass between the fine stucco material, and thus when the water-proof material is poured upon the upper surface of the embedded material, the finer material prevents the same from passing down between the coarser material and coming in contact with the face of the stucco and in anywise disfiguring or discoloring it. After the block has set sufficiently, the mold is removed and the sand brushed off from the faces of the projecting stucco, which are clean and free from any cement deposits, and are in substantially the same condition as when first embedded into the cement core.

When using the form of mold shown in Fig. 2, the mold 17 is placed upon the pallet board 5 and the sand bed 10 and stucco material placed therein in the same manner as above described, but before the water-proofing mixture is poured upon the stucco material, the strip 9 is placed in the mold. While the water-proofing mixture is yet plastic, the tile body is placed in position on top thereof and the ribs of the tile embedded into the mixture so that when the mixture is set it will be securely fastened to said tile. After the mixture is molded and set, the hinged member 8 of the mold may be raised so that the product can be easily withdrawn from the mold 17.

Obviously, some slight modification of the process and apparatus herein shown and described may be made without departing from the spirit of my invention or the scope of the appended claims, and I do not wish to be limited to the exact embodiment herein shown and described.

Having thus described my invention, what I claim is:

1. The process of making building blocks comprising the formation of a sand bed of suitable thickness, then the placing of relatively fine stucco material on the sand bed, then the formation of a layer of relatively coarse stucco material over the fine material, then forcing the coarse material through the fine material and into the sand bed, then covering the embedded stucco with a suitable water-proofing mixture, and then placing the body of the block in contact with said water-proofing mixture.

2. The process of making building blocks comprising the formation of a sand bed of suitable thickness, then the placing of relatively fine stucco material on the sand bed, then the formation of a layer of relatively coarse stucco material over the fine material, then forcing the coarse material through the fine material and into the sand bed, then covering the embedded stucco with a suitable water-proofing mixture, and then pouring, into a mold, a suitable cement mixture over said water-proofing mixture, to form the body of the block.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

ROBERT M. JONES.

Witnesses:
J. WM. ELLIS,
WALTER H. KELLEY.