J. O. NYE

METHOD OF MANUFACTURING HOLLOW BLOCKS OF ARTIFICIAL STONE.

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INVENTOR

JOHN ORVILLE NYE

ATTORNEY
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JOHN ORVILLE NYE, OF SYRACUSE, NEW YORK.

METHOD OF MANUFACTURING HOLLOW BLOCKS OF ARTIFICIAL STONE.


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To all whom it may concern:

Be it known that I, John Orville Nye, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Methods of Manufacturing Hollow Blocks of Artificial Stone, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description:

This invention relates to improvements in the method of manufacturing hollow blocks of artificial stone to be used for decoration, interior and exterior finish, and particularly for insulating purposes, such as a substitute for porcelain and other more expensive insulator-blocks.

The object is to form a hollow block of artificial stone with a smooth polished surface or surfaces and with grooves in its sides all in the same operation and at a minimum cost.

Other objects and uses will appear in the following description.

In the drawings, Figure 1 is a perspective view of an apparatus for carrying out the objects stated. Fig. 2 is a sectional view of the same, taken on line 2 2, Fig. 1. Fig. 3 is a perspective view of the hollow artificial-stone block formed under my improved method, which is as follows:

First, a bed 1, of sand or equivalent absorbent, is made into a solid self-supporting mass and formed with one or more projections or cores 2 of the same material to form the openings or openings in the block to be molded. A thin coating or sheet, as, 3, of paraffin or a sheet of paper or its equivalent is then applied to the upper surface of the bed 1, so as to surround the base of the core 2 and still leave the upper part of the core exposed. I next surround the core with ribbed strips 4, which rest upon the edges of the sheet 3, with their ribs facing the core 2, to form a chamber or mold, of which the paraffin sheet 3 is the bottom and the strips 4 the sides.

The material, composed of water, cement, and pulverized stone or equivalent ingredients, is now thoroughly mixed to a semifluid or plastic condition and then poured or mechanic-ally filled into the mold upon the paraffin sheet 3, so as to fill the chamber between the core 2 and sides 4, which forms a hollow block 5 of artificial stone, having an opening 6, made by the core 2, and also grooves 7, produced by the ribs 4.

The bed of sand is usually confined in a 55 suitable flask 8, and it is now apparent that the moist stone mixture is in contact with the core 2. The moisture of the mixture therefore percolates into the core and thence into the bed beneath the sheet 3. As the sand 60 core and bed continue to absorb the moisture from stone mixture, the latter soon becomes sufficiently hard to remove, which is done by removing the strips 4 laterally, as shown by dotted lines, Fig. 2, and then lifting the hardened block from the sheet 3 and core 2.

It will be found that the surface of the block 65 which was in contact with the paraffined sheet is smooth and polished and that the surfaces which were in contact with the wood strips 4 are also smooth and free from sand marks by reason of the fact that neither of these surfaces was in contact with the sand.

Although these artificial-stone blocks are specially formed and adapted for wall-insulators to receive electrical fixtures—such as switches, lamp-sockets, and similar devices—it is evident that they may be made by the same method in different forms and for other purposes, as may be desired. When used in walls, the smooth or polished surface is exposed to view and presents a neat and ornamental appearance, while at the same time it becomes a part of the wall by working the plaster into the grooves in the edges of the 85 block, which firmly holds the block in place, although it may be additionally secured by screws or bolts, if desired.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is:

1. The method of manufacturing hollow artificial-stone blocks consisting: first, in preparing a bed of sand or equivalent absorbent with one or more projections or cores; second, applying a paraffin surface to the upper sur-
2. The herein-described method of making hollow blocks of artificial stone consisting: first, in preparing a bed of sand with an upwardly-projecting core of the same material and then applying a sheet of paper with the paraffin coating against the upper surface of the sand bed, then applying wood strips with inwardly-projecting ribs to the edges of the paraffin sheet so that the ribs face the core and then preparing a mixture of cement, water and pulverized stone so as to form a semiliquid mass and then pouring this onto the paraffin sheet and between the rib-walls of the mold and the core.

3. The herein-described method of making hollow blocks of artificial stone consisting in: first, preparing a bed of sand with an upwardly-projecting core, surrounding the base of the core with a paraffin sheet so that it rests upon the bed, and then preparing and pouring the mixture upon the paraffin surface and confining the stone mixture upon said surface whereby the moisture from the mixture percolates through the core and onto the bed under the paraffin sheet.

4. The herein-described method of making hollow blocks of artificial stone consisting in preparing a bed of porous material, as sand, with a projecting core of similar porous material, then covering the surface of the bed around the core with an impervious material, as paraffin, then building a wall around the core so as to rise from the impervious surface to form the outline of the block, then applying the artificial-stone mixture while in a plastic or liquid state to the impervious surface so as to fill the space between the core and surrounding walls and allowing such mixture to stand until hardened, and finally removing the hardened stone from the impervious surface and core.

In witness whereof I have hereunto set my hand this 29th day of December, 1903.

JOHN ORVILLE NYE.

Witnesses:

HOWARD P. DENISON,
MILDRED M. NOTT.