R. L. UNDERWOOD.
VENTILATING BUILDING BLOCK.
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No. 756,300.

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NO MODEL.

Fig. 4.

Fig. 5.

Fig. 6.

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VENTILATING BUILDING-BLOCK.

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To all whom it may concern:

Be it known that I, ROBERT L. UNDERWOOD, a citizen of the United States of America, and a resident of Fostoria, in the county of Sandusky, State of Ohio, have invented certain new and useful Improvements in Ventilating Building-Blocks, of which the following is a specification.

This invention relates to certain new and useful improvements in cement or concrete building-blocks; and it has for its objects, among others, to provide an improved block of this character having provision for the circulation of air through every block in a wall, around the wall from one course to another, thus thoroughly ventilating a cellar or other space and also providing by such circulation of air through the wall against dampness and the resultant disadvantages thereof.

In one of its forms I provide for the interlocking of the adjacent blocks by corrugations or the like and in case of the corner-block for the crossing of the corrugations, so as to form a better bind or hold at the corner.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Fig. 1 is a perspective view showing a portion of a wall composed of my improved building-blocks. Fig. 2 is a perspective view of one of the blocks. Fig. 3 is a vertical longitudinal section through the same. Fig. 4 is a perspective view of one of the blocks designed for the bottom course. Fig. 5 is a perspective view of one of the corner-blocks. Fig. 6 is a perspective view showing two blocks in position, one on top of the other, the blocks having their adjacent faces provided with interlocking ribs or grooves. Fig. 7 is a perspective detail of a portion of one of the corner-blocks having corrugations at right angles to each other.

Like numerals of reference indicate like parts throughout the several views.

The blocks can be molded or otherwise formed and may be colored any desired color. They can also be molded with rock-face or any desired design. They may be made of any shape and size, and their production is not confined to any particular method of making.

Referring to the drawings, Fig. 4 shows a block 1, designed for the bottom course. It is formed with a longitudinal passage 2, substantially centrally disposed and open at both ends of the block. It is further provided with a flue-opening 3 in the center of its inside face and communicating with the vertical flue-opening 4. The air entering the flue-opening 3 passes into the longitudinal flue and the vertical flue to the top face of the block. Here it enters the other flues formed by the passages in the other blocks, now to be described. Fig. 2, shows one of the blocks designed for the other courses. It is formed with a substantially central longitudinal flue-opening 6, which communicates at the center with the vertical flue-opening 7, around the edge of which is preferably a bead 8 for a purpose soon to be described. Each end of this block 5 is formed with a half-flue 9, which when two blocks of this character are placed end to end forms a vertical flue, as will be readily understood from the dotted lines in Fig. 1.

In Fig. 5 is shown a block designed for use at the corner of a wall. This block 10 is provided with a longitudinal flue-opening 11, which is open at one end, as seen at 12, and has leading therefrom at the center the vertical flue-opening 13; but the other end of this longitudinal flue does not open through the end of the block, but takes a substantially right-angled turn, as seen at 14, opening out on the side of the block, as seen at 15, to connect with the longitudinal flue 2 in the block 1 as the latter is fitted up against the side face of the block 10, forming the corner of the wall.

In Fig. 6 is shown a block 16, having the longitudinal flue 17 and provided upon one face with a series of longitudinal ribs or the like 18, designed to engage in corresponding grooves or channels 19 in the adjacent face of the next block. It is to be understood that this block has its longitudinal groove or flue communicating with an upward central flue similar to that in the block 5 seen in Fig. 2.
but not seen in Fig. 6, for the reason that the block there shown is on a larger scale, and one-half thereof is not illustrated.

The blocks may be molded with a rock-face, as seen at 20 in Fig. 6, or otherwise, as may be found most expedient.

In Fig. 7 I have shown a block 21 designed for a corner-block, and this has the longitudinal corrugations 22 and the transverse corrugations 23 to receive the corrugations on the next adjacent block, which extends at right angles to the said corner-block as the wall is laid.

The bead around the flue 7 prevents the mortar from being pressed into the flue when the ends of the blocks in the next course above are placed together.

In Fig. 1 I have illustrated how when the blocks are put together a complete circulation of air is provided. The air entering the flue 3 passes into the longitudinal flues and up the vertical flues, connecting with the flues in the next course, and so on to the top course, where the air passes out through the flues 7 to the upper face of the uppermost blocks.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. A building-block provided with a longitudinal passage entirely encompassed by the material thereof, and a vertical passage communicating therewith and extending for a portion only of the height of said block, and a lateral passage.

2. A building-block having therein a longitudinal passage entirely therethrough and a vertical passage extending for a portion only of the height of the block, and a lateral passage communicating therewith, and extending for a portion only of the width of the block.

3. A building-block provided with a longitudinal passage entirely therethrough, a central vertical passage extending for a portion only of the height of the block, and a half passage at the ends.

4. A building-block provided with a longitudinal passage entirely therethrough, a vertical end passage extending therefrom through one face of the block and an independent passage extending vertically therefrom at the center to the opposite face of the block.

5. A building-block provided with a longitudinal passage entirely therethrough and a lateral passage communicating therewith at a distance from the end of the block and half-passage at the ends extending for a portion only of the height of the block.

6. A building-block provided with a longitudinal passage entirely encompassed by the material thereof, a vertical passage communicating therewith and extending for a portion only of the height of the block, and a lateral passage, one face of the said block being provided with corrugations extending at an angle to each other.

Signed by me at Fostoria, Ohio, this 7th day of November, 1903.

ROBERT L. UNDERWOOD.

Witnesses:
E. J. UNDERWOOD,
Geo. W. CUNNINGHAM.