

A. H. MERRILL.  
BUILDING BLOCK.  
APPLICATION FILED OCT. 6, 1904.

Fig. 1.

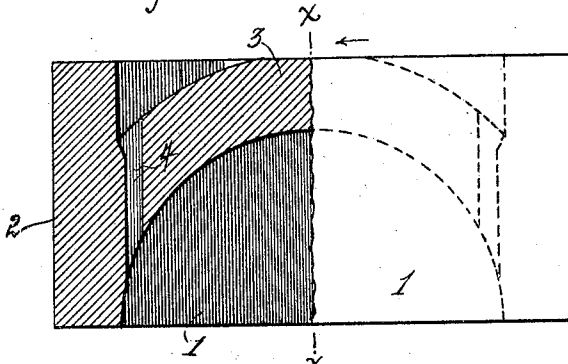


Fig. 2.

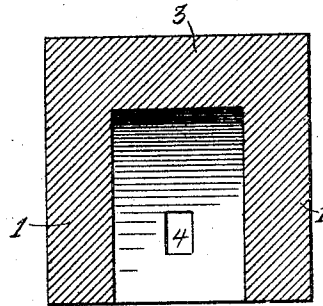


Fig. 3.

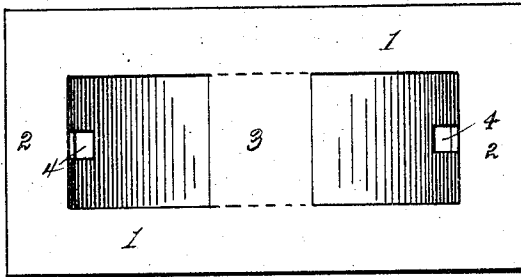
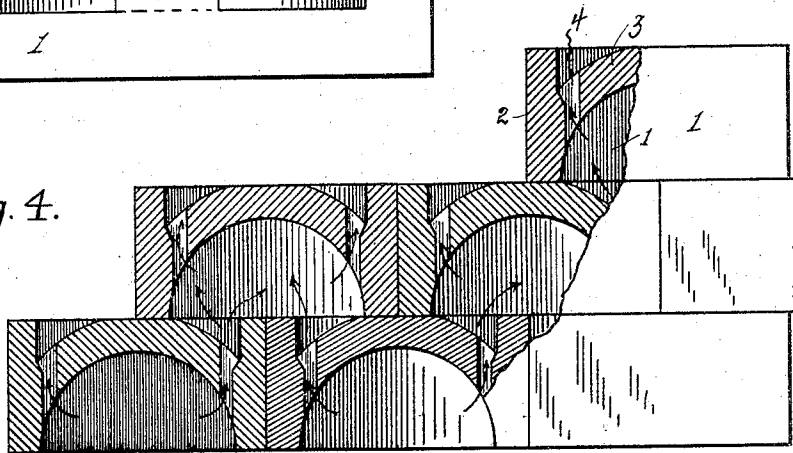


Fig. 4.



WITNESSES:

David C. Walter  
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INVENTOR:

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# UNITED STATES PATENT OFFICE.

ALFRED H. MERRILL, OF TOLEDO, OHIO.

## BUILDING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 783,448, dated February 28, 1905.

Application filed October 6, 1904. Serial No. 227,340.

*To all whom it may concern:*

Be it known that I, ALFRED H. MERRILL, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Building-Blocks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to building-blocks of concrete or other substance; and its object is to provide a block which shall be exceedingly light, strong, and easily kept ventilated and dry and which shall also be convenient to manufacture and economical. I attain these objects by means of the construction and arrangement of parts hereinafter described and shown, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my block with half of one of its side walls broken away to show the interior construction; Fig. 2, a sectional end elevation taken on line *xx*, Fig. 1; Fig. 3, a top plan view of my block; and Fig. 4, a side elevation of a fragment of a wall composed of my blocks with portions of the side of the blocks broken away.

Like numerals of reference indicate like parts throughout the drawings.

In the drawings, 1 1 are the sides, and 2 2 are the ends, of my block, which is elongated and rectangular, as shown. The sides and ends of the block inclose a hollow, the block having neither top nor bottom. The rectangular hollow would extend through the block from top to bottom were it not for an arch 3, which is of about the thickness of the side walls and end walls of the block. This arch springs from near the bottom of the inner side of the end walls, the top of the arch being flush with the middle of the upper edges of the side walls of the block. The arch is of

the full width of the opening between the two side walls and forms a curved partition between the top and bottom of the cavity of the block. Through each end of the arch 3, where it joins the end walls of the block, is a vertical opening 4. This opening at each end of the block permits moisture of condensation to flow downwardly and facilitates the circulation of air through the blocks when in place in a wall.

In assembling these blocks in a wall a course of the blocks is placed end to end. The next succeeding course is placed end to end with the meeting ends resting exactly upon the middle of the arches of the next lower course of blocks. Each succeeding course is in like manner laid with the meeting ends of the blocks resting upon the middle of the arches of the next lower course. Thus it will be seen that each block is supported upon its sides and ends by an internal arch and that each vertical joint in the wall above the lowermost course rests upon and is supported by the top and center of an arch.

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

1. A building-block comprising side walls, end walls and an arched member integral with said walls, said arch springing from near the bottom of the inner sides of two opposing walls, the top of the arch being flush with the plane of the top of the block.

2. A building-block having side walls and end walls and an arch springing from near the bottom of the inner side of one of the walls and extending to near the bottom of the inner side of the opposite wall, said arch having at its ends openings therethrough.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED H. MERRILL.

Witnesses:

JOHN L. DUNCAN,  
M. L. MARKS.