H. L. EMERY.

BUILDING BLOCK.

APPLICATION FILED JAN. 10, 1921.

1,422,258.

Patented July 11, 1922.

FIG. 1

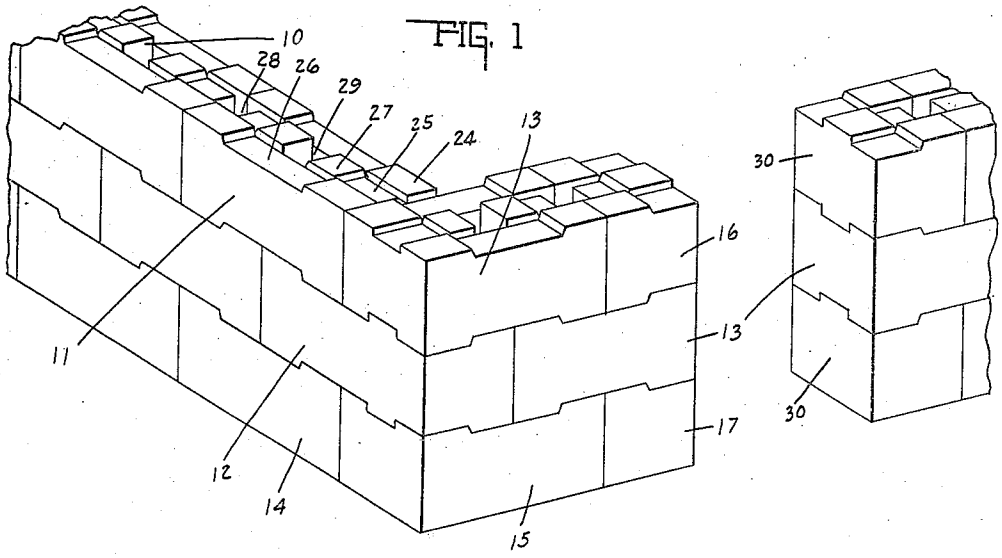


FIG. 2

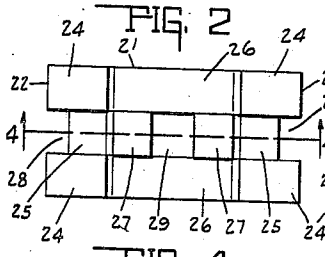


FIG. 3

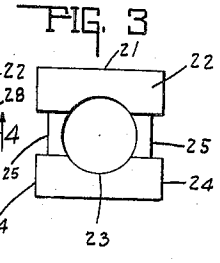


FIG. 5

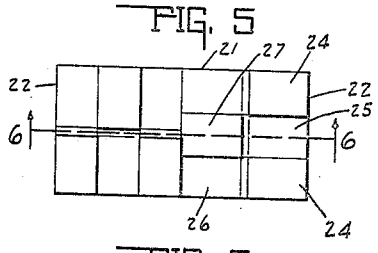


FIG. 4

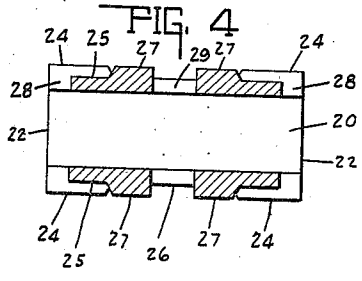
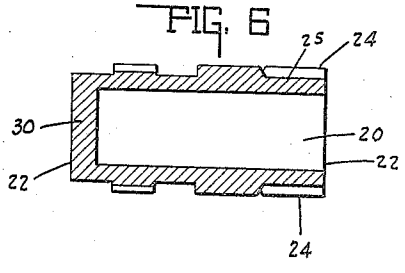


FIG. 6



INVENTOR.

HARVEY L. EMERY.

BY

Lockwood & Lockwood

ATTORNEYS.

UNITED STATES PATENT OFFICE.

HARVEY L. EMERY, OF WORTHINGTON, INDIANA, ASSIGNOR TO SELF LAY BLOCK & MACHINE COMPANY, OF VINCENNES, INDIANA.

BUILDING BLOCK.

1,422,258. Specification of Letters Patent. Patented July 11, 1922.

Application filed January 10, 1921. Serial No. 436,244.

To all whom it may concern:

Be it known that I, HARVEY L. EMERY, a citizen of the United States, and a resident of Worthington, county of Green, and State of Indiana, have invented a certain new and useful Building Block; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like numerals refer to like parts.

This invention relates to building blocks which are adapted to be layed or assembled together to form a wall. The chief object of this invention is to provide an improved building block which will interlock with others of the same kind to form a rigid wall.

Another object of the invention is to construct a block such that the same will be light in weight and also when assembled will form a ventilated wall construction.

The chief feature of the invention consists in providing a hollow block with suitable openings communicating therewith and with suitable projections upon the surface thereof.

The full nature of this invention will be understood from the accompanying drawings and the following description and claims.

In the drawings Fig. 1 is a perspective view of a corner of a wall, the same having an opening therein and illustrates the blocks in assembled relation. Fig. 2 is a top plan view of the usual wall block. Fig. 3 is an end view thereof. Fig. 4 is a central cross sectional view taken on the line 4—4 of Fig. 2. Fig. 5 is a top plan view of the corner block. Fig. 6 is a central cross sectional view taken on the line 6—6 of Fig. 5.

In the drawings Fig. 1 illustrates seven different modifications of the block embodying the invention. 10 indicates the wall generally, 11 indicates the usual or ordinary wall block, 12 indicates the usual corner block. 13 indicates the usual end block. 14 indicates the usual base block, 15 the usual corner and base block. 16 indicates the usual half block and 17 indicates the usual half base block. It will be readily understood from Fig. 1 that the base blocks 14, 15 and 17 differ but little from the blocks 11, 13 and 16, and it will be further noted that the block 16 differs but little from the usual wall block 11. Therefore, there is illustrated in Figs. 2 to 6 inclusive the usual wall block and the corner block so that a complete understanding of the invention may be had.

One of the chief features of the invention is that opposite sides of each block are substantially identical, so that the various end blocks or half blocks may be closed at one end instead of being open at both ends.

In Figs. 2, 3 and 4 is illustrated the usual wall block which is provided with a hollow core or center 20 which in the present instance is substantially cylindrical in form, it being found that the block can be moulded very easily in this form. However, the particular form of the central opening or hollow center 20 is not restricted thereto. Two opposite faces 21 of the block are preferably plane and may be flat, roughened, corrugated or otherwise finished in any suitable manner. Each of the ends 22 is provided with an opening 23 which communicates with the central hollow portion 20, as shown.

The other two opposite faces are substantially similar and preferably identical and, therefore, a description of one will suffice for an understanding of the other. The block in its present form is provided with four projecting portions or lugs 24, one at each corner of the block and suitably separated by a space 25. The two spaces 25 may be of any suitable width, but preferably are substantially the same width as the width of each of the projections 24. The corner projections 24 are also separated by an elongated space 26 which space, of course, is of the same width as the projections 24 and preferably is twice as long as the length of said projections. The central portion of the surface hereinbefore described is provided with a central projection of substantially twice the length of the corner projection and substantially the width of said projections, but not necessarily so. The width of the central projection 27 is substantially that of the spaces 25. The spaces 25 and projection 27 are provided to prevent movement of the blocks in planes transversely of the sides 21. Also, each space 26 is adapted to accommodate two adjacent corners 24 of two adjacent blocks 11 while each elongated central projection 27 is adapted to be seatable in two adjacent spaces 25 of the two adjacent blocks. Thus, the

projections 24 and spaces 26 prevent movement of the blocks in planes parallel to the sides 21, while the projections 27 and spaces 25 prevent transverse movement as hereinbefore described.

In order to provide that the block will form a ventilated wall or hollow wall construction, the insulating and other advantages of which are well known in the art, each of the spaces 25 is provided with a suitable opening or slot 28 which communicates with the central hollow portion 20. In order that there may be complete communication a median aperture or opening 29 is provided in the central projection 27 and said opening or aperture communicates with the hollow portion or chamber 20 of the block. While said openings 28 and 29 may be of any desired shape and any desired size, said openings are preferably square and rectangular, as shown in the present instance, and the opening 29 completely separates the central portion 27 into two portions. While the width of the slots 28 and 29 are substantially equal, the lengths of said slots are different, the slot 29 preferably being twice as long as the slots 28 so that two slots 28 may register with a single slot 29 on the same block. Other spacing and openings may be substituted for those herein described, if desired, without departing from the broader features of the invention.

It will be understood that the base block 14 is substantially similar to the block hereinbefore described except that one of the corrugated or formed faces may be made flat so that said block will rest securely upon a level surface, such as the ground, sub-foundation or foundation.

The end block 13 is also substantially identical with the ordinary wall block 11 except that one end 22 thereof is preferably closed, as indicated by the numeral 30 in Fig. 6. In this modification, however, the opening 28 adjacent the closed end 30 may be omitted if desired, and preferably is omitted, although the same is not necessary. The half blocks 16 and 17 are provided with one closed end 30 and in the present invention said blocks are not provided with the central opening 29, but are provided with an end opening 28. However, even the opening 28 may be omitted if desired, since the block communicates with the remaining blocks through one of the openings 23 therein. It will be understood that the half block is constructed substantially similar to the usual wall block, except that but half of the block is used. Therefore, the two corners of the block are provided with the corner projections 24 and the usual central projection is positioned medianly of the other edge and is but half the length of the usual central projection.

In Figs. 5 and 6 there is illustrated in detail a corner block 12 which differs somewhat from the blocks hereinbefore described. When the building blocks are approximately twice as long as they are wide, the corner block consists of substantially two square half blocks positioned at right angles to each other. Thus, one half of the corner block is provided with the usual corner projections 24, a central projection 27, separated by the median space 25 and the central space 26. The central projection 27 and central space 26 are of but one half the usual length. The other half of the block consists of a similar number of projections and spaces similarly positioned, but also positioned at right angles to the projections and spaces hereinbefore described. It will also be noted that the end of this block is closed as at 30. If desired, the end block may be provided with the openings 28.

While the invention has been described in great detail, various modifications thereof will readily suggest themselves to those skilled in the art to which this invention applies, but such modifications are considered to be within the broad purview of this invention.

The invention claimed is:

1. A hollow building block having two opposite faces provided with projections thereon, said projections upon each of said faces being arranged in at least three series of rows along two transverse axes and separated from each other to provide projection receiving spaces therebetween, whereby said blocks will be interlocked against longitudinal and transverse movement of each other, each block having openings therein communicating with a hollow portion of said block and adapted to register with the openings in the other blocks of a wall structure.

2. A building block having an interlocking surface, said surface including a projection at each corner thereof separated by spaces and a central projection of equal height with the other projections and positioned between said corner projection and at the intersection of the diagonals therebetween, said central projection being receivable by two adjacent end spaces of two adjacent blocks of an adjacent tier when in wall formation.

3. A hollow building block having an interlocking surface, said surface including a projection at each corner thereof separated by spaces, a central projection between said corner projections and at the intersection of the diagonals therebetween, said central projection being receivable by two adjacent end spaces of two adjacent blocks of an adjacent tier when in wall formation, said blocks having a plurality of openings in said face communicating with the hollow in said block

to form a ventilated block, said openings being registrable with the other openings of other blocks when in wall formation to form an interlocking and ventilated wall formation.

4. An elongated building block having a face including a rectangular projection upon said surface at each corner and a central projection, a space between said corner projections along the elongated axis being equal in width to the width of the central projection and in length equal to the corner projection, and the length of the central projection being equal to twice the length of the last mentioned spaces and the length of the spaces between said corner projection along the axis at right angles to the elongated axis being substantially twice the length of the corner projection and substantially as wide as the same.

5. A building block having two adjacent surfaces each provided with a projection at each corner thereof separated by spaces, and a central projection diagonally positioned between said corner projections, said spaces being adapted to receive the projections of other blocks, whereby said blocks will be interlocked against transverse and longitudinal movement of each other, said block having a plurality of openings in each face, and an opening in each end of the block, all of said openings communicating with each other within the block, whereby a ventilated and interlocking wall construction will be obtained when said blocks are in wall formation.

6. An elongated building block having a face including a rectangular projection upon said surface at each corner and a central projection, a space between said corner projections along the elongated axis being equal in width to the width of the central projection and in length equal to the corner projection, and the length of the central projection being equal to twice the length of the last mentioned spaces and the length of the spaces between said corner projections along the axis at right angles to the elongated axis being substantially twice the length of the corner projection and substantially as wide as the same, said blocks having a plurality of openings in each face and an opening in each end of the block, all of said openings communicating with each other within the block, whereby a ventilated and interlocking wall construction will be obtained when said blocks are in wall formation.

In witness whereof I have hereunto affixed my signature.

HARVEY L. EMERY.