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H. N. PETTIGREW.

HOLLOW CONCRETE BLOCK.

APPLICATION FILED MAY 15, 1907.

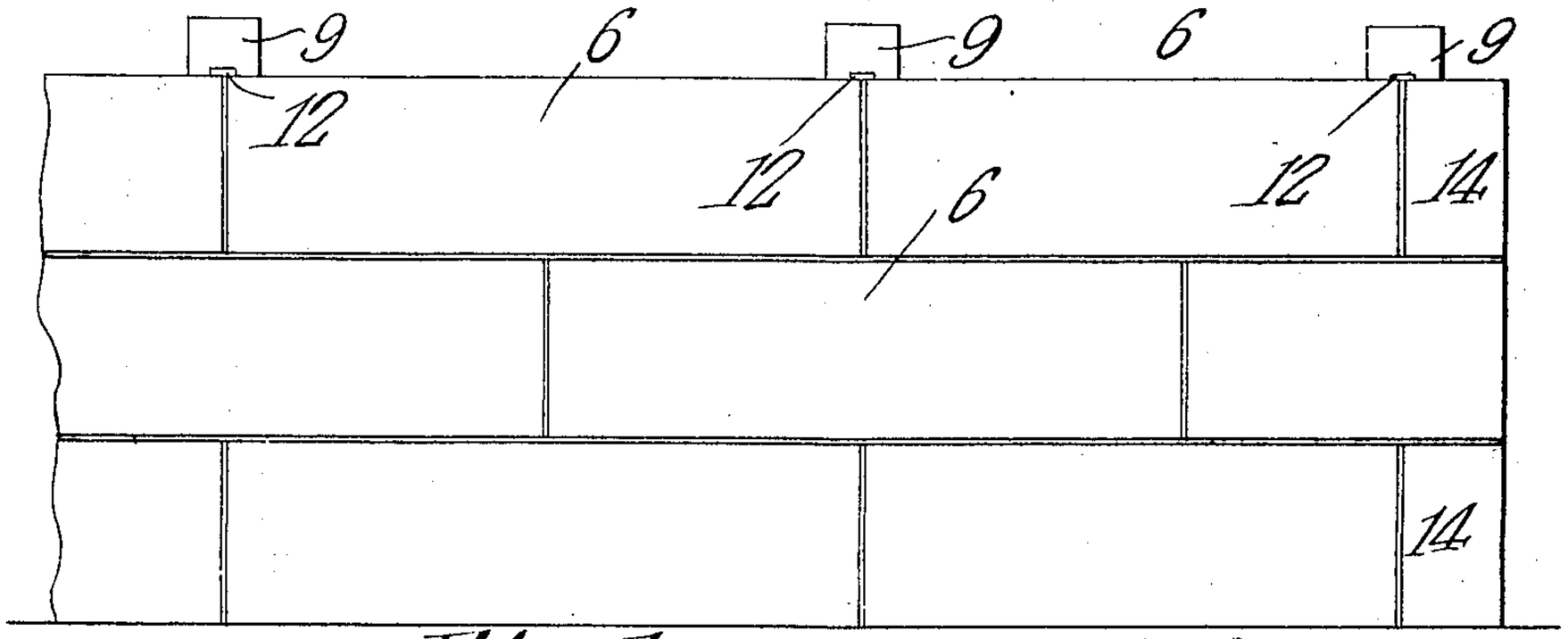

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

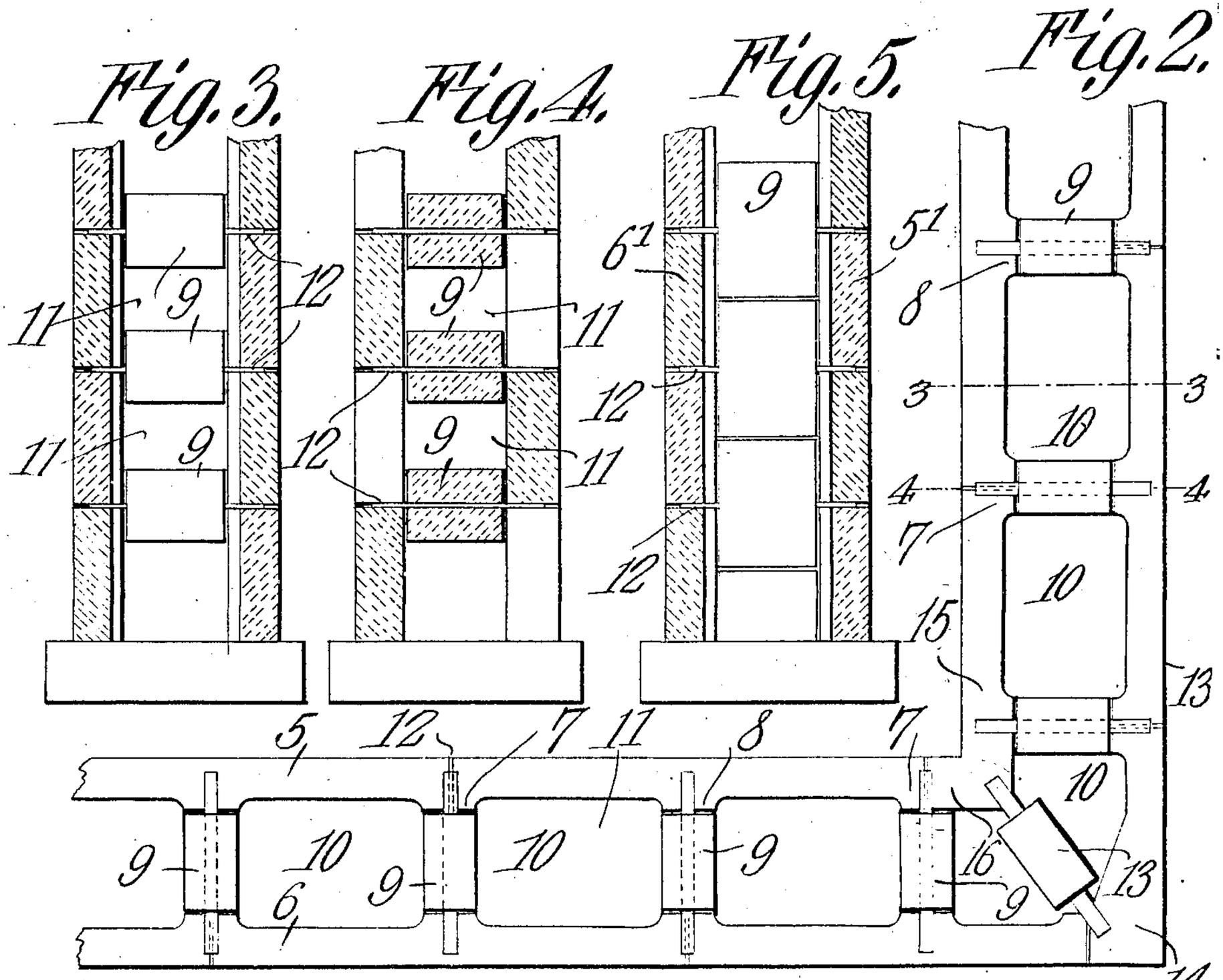

Fig. 6.

WITNESSES:

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HOLLOW CONCRETE BLOCK.

No. 882,414. Specification of Letters Patent. Patented March 17, 1908.

Application filed May 15, 1907. Serial No. 373,791.

To all whom it may concern:

Be it known that I, HERBERT N. PETTIGREW, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Hollow Concrete Block, of which the following is a specification.

This invention relates to walls and blocks used in constructing the same.

The object of the invention is to provide a wall having intersecting vertically and horizontally disposed chambers or flues thereby to permit the free circulation of air through the wall and thus prevent dampness or moisture from penetrating the outer face of the wall and wetting or otherwise injuring the plaster.

A further object is to provide an artificial stone building block formed in a plurality of sections so as to permit the same to be conveniently manipulated.

A further object is to provide a block including parallel side walls spaced apart by intermediate web blocks, the latter being provided with bonding members adapted to bear against the upper longitudinal edges of the side members when the blocks are laid into a wall.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a side elevation of a portion of a wall constructed in accordance with my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2. Fig. 4 is a similar view taken on the line 4—4 of Fig. 2. Fig. 5 is a transverse sectional view illustrating a modified form of the invention. Fig. 6 is a vertical sectional view illustrating a modified form of building block.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved block forming the subject matter of the present invention is preferably rectangular in shape, as shown, and formed of cement, concrete or other plastic material, said block being preferably formed in sections so as to facilitate handling the same when laying the blocks into a wall.

The side sections 5 and 6 are provided with terminal and intermediate inwardly extending lugs or projections 7 and 8 preferably extending the entire height of the block and disposed in horizontal alinement, as shown.

The side members 5 and 6 are spaced apart by intermediate web blocks 9 which latter are approximately one-half the height of the side members 5 and 6 and bear against the terminal and intermediate projections of the side members thereby to form a plurality of vertically disposed air chambers or flues 10.

By making the web blocks approximately one-half the height of the side sections 5 and 6 the adjacent edges of the web blocks are spaced apart so as to form a plurality of horizontally disposed air flues 11 which intersect the vertical air flues 10 and thereby permit the free circulation of air both vertically and horizontally of the wall.

Molded or otherwise embedded in the web blocks 9 are metal strips or bonding members 12, the opposite ends of which project laterally beyond the adjacent vertical edges of the web blocks and are adapted to bear against the upper longitudinal edges of the side members 5 and 6 thereby to support the web blocks in position and assist in reinforcing and strengthening the wall.

In erecting the wall the blocks are laid in superposed courses and arranged to break joint with the vertical edges of the side members or blocks in one course bearing against the vertical edges of adjacent blocks in the same course and with the web blocks 9 interposed between the side members at the projections 7 and 8 of the latter.

Attention is here called to the fact that the upper ends of the web blocks in one course project vertically above the upper longitudinal edges of the side members in the same course so as to form stops for the side members of the blocks in a succeeding course and thus permit the same to be horizontally alined in the wall.

The outer sections of the corner blocks 13 are preferably reinforced at 14 while the inner members 15 of the corner blocks are provided with angular extensions 16 which bear against the inner sections of the adjacent side blocks, as shown.

The corner blocks 13 are also preferably reinforced and strengthened by the provision of web blocks 13′ similar in construction to the web blocks 9, said corner webs being provided with metal strips or bonding members the opposite ends of which extend diagonally across the corners of the wall, as shown in Fig. 2 of the drawings.

In Fig. 5 of the drawings there is illustrated a modified form of the invention in which the web blocks 9′ are approximately the same height as the side members 5′ and 6′ so that when the blocks are laid into a wall the adjacent ends of said blocks will abut and thus form a continuous air flue throughout the entire height of the wall.

A further modification is illustrated in Fig. 6 of the drawings in which the upper longitudinal edges of the side members of the blocks are extended laterally to form projecting flanges 17 for engagement with the corresponding flanges of an adjacent block, said flanges forming an extending bearing surface for engagement with the mortar or other binding material used in constructing the wall.

The blocks may be made in different sizes and shapes and the exterior walls of said blocks may be molded or otherwise formed in imitation of cut, chipped or natural face rock.

It will also be understood that the inner faces of the side sections of the blocks may be made of relatively coarse material while the outer or exposed faces of the blocks may be made of finer material, thus materially reducing the cost of manufacture.

Having thus described the invention what is claimed is:

A wall formed of a plurality of side and corner blocks laid in superposed courses and arranged to break joint, said side blocks each consisting of separable parallel side members having their inner faces provided with terminal intermediate projections of equal width and extending the entire height of the blocks, transverse web blocks interposed between the side members and having their longitudinal edges bearing against the adjacent projections of the side members and their upper ends projected above said side members, bonding members embedded in the web blocks and having their opposite ends extended laterally beyond the adjacent ends of the web blocks for engagement with the longitudinal edges of the adjacent side members at the projections thereof, angular extensions formed on the corner blocks, and diagonally disposed web blocks having similar bonding members adapted to bear against the angular extensions of the corner blocks, said web blocks being independent of the side members and corner blocks.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

HERBERT N. PETTIGREW.

Witnesses:
C. V. Edwards,
W. F. Weishaupt, Jr.