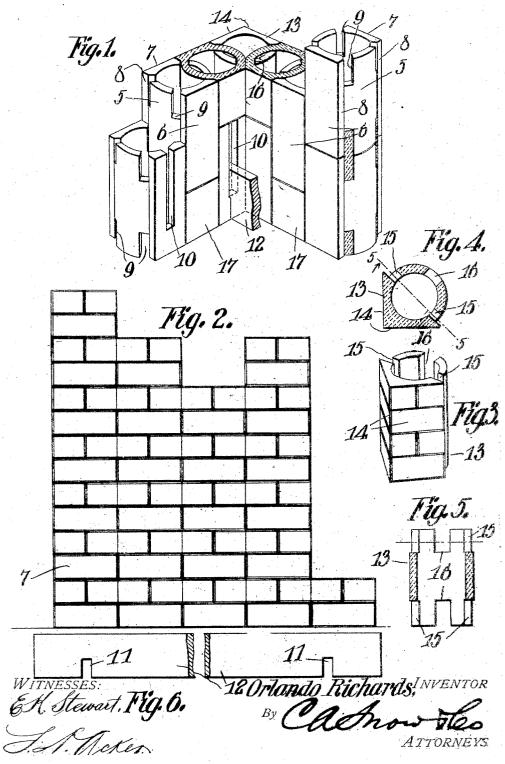
O. RICHARDS.

WALL AND BLOCK FOR MAKING THE SAME.

APPLICATION FILED AUG. 3, 1906.

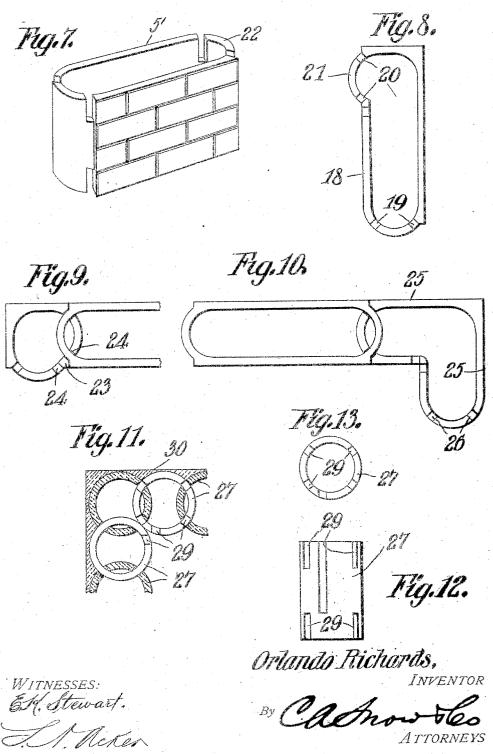
3 SHEETS-SHEET 1.



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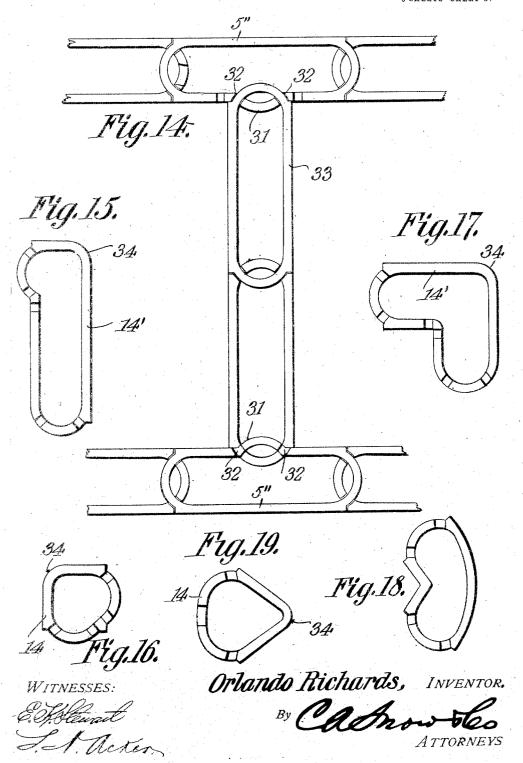
3 SHEETS-SHEET 2.



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3 SHEETS-SHEET 3.



UNITED STATES PATENT OFFICE.

ORLANDO RICHARDS, OF BRISTOL, WISCONSIN.

WALL AND BLOCK FOR MAKING THE SAME.

No. 864,801.

Specification of Letters Patent:

Patented Sept. 3, 1907.

Application filed August 3, 1906. Serial No. 329,109.

To all whom it may concern:

Be it known that I, ORLANDO RICHARDS, a citizen of the United States, residing at Bristol, in the county of Kenosha and State of Wisconsin, have invented a new 5 and useful Wall and Block for Making the Same, of which the following is a specification.

This invention relates to masonry and more particularly to the construction of the walls, partitions and similar structures from artificial stone building blocks.

The object of the invention is to provide a strong, durable wall the blocks of which are provided with interfitting parts and laid in break-joint order to produce spaced vertically disposed air-chambers or flues thereby to prevent frost and moisture from penetrating the 15 inner face of the wall and wetting or otherwise injuring the plaster.

A further object is to provide a wall formed of a plurality of interlocking telescopic blocks some of which are provided with joist-receiving recesses.

20 A further object is to provide a hollow substantially cylindrical block having oppositely disposed flat faces of less area than the intermediate portion of the block and adapted to register with the corresponding flat faces of adjacent blocks when said blocks are laid into 25 a wall.

A still further object of the invention is to form the several blocks with oppositely disposed spaced locking recesses adapted to receive the recessed ends of the blocks in an adjacent course whereby the several blocks 30 may be firmly bound together without the employment of cement, mortar or other binding material.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and 35 illustrated in the accompanying drawings, 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 40 specification: Figure 1 is a perspective view of a portion of a wall formed of building blocks constructed in accordance with my invention. Fig. 2 is a side elevation of the exterior of the wall. Fig. 3 is a perspective view of one of the corner blocks. Fig. 4 is a transverse 45 sectional view of the same. Fig. 5 is a longitudinal sectional view taken on the line 5-5 of Fig. 4. Fig. 6 is a side elevation of one of the floor supporting joists. Fig. 7 is a perspective view of a modified form of block. Fig. 8 is a top plan view of a corner block used in con-50 nection with the block shown in Fig. 7. Fig. 9 is a top plan view showing a slightly different form of corner block. Fig. 10 is a plan view of a portion of a wall showing another form of corner block. Fig. 11 is a sectional view of a wall formed of the blocks shown in Fig.

55 12. Fig. 12 is a side elevation of one of the blocks shown in Fig. 11. Fig. 13 is a top plan view of Fig. 12.

Fig. 14 is a top plan view of a portion of a wall showing the manner of forming partitions. Figs. 15 to 19 inclusive are top plan views illustrating modified forms of corner blocks.

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

The preferred form of wall shown in Fig. 1 of the drawings consists of a plurality of hollow blocks, each consisting of a substantially cylindrical body portion 65 5 having oppositely disposed flat faces 6 and 7 preferably off-set from the curved walls of the body portion to form parallel longitudinally disposed flanges 8 adapted to bear against the flanges of adjacent blocks when said blocks are laid into a wall. The blocks 5 are preferably 70 formed of cement, concrete or other plastic material and the exposed faces 6 and 7 of said blocks are preferably of less area than that of the intermediate or cylindrical body portion thereby to produce curved or semi-cylindrical end walls, as shown.

The opposite ends of the intermediate blocks are provided with vertically disposed recesses 9 preferably four in number and extending longitudinally of the curved end walls of the block, the blocks in some of the courses of the wall being provided with elongated 80 slots or joist-receiving openings 10 adapted to receive

the slotted ends 11 of the joists 12.

The locking recesses 8 and 9 of the intermediate blocks receive the recessed ends of adjacent blocks, the recessed ends of said blocks interfitting with the curved 85 walls of one block and disposed within or telescoping the hollow body portion of the adjacent block, as shown in Fig. 1 of the drawing thereby firmly binding the several blocks together without the employment of cement, mortar or other binding material.

The corner blocks 13 are provided with angularly disposed faces 14 and are also provided at their opposite ends with a plurality of locking recesses 15 preferably three in number and extending longitudinally of the curved walls of the blocks to coincide with the re- 95 cesses in the intermediate blocks.

The intermediate recesses 16 of the corner blocks are preferably twice as wide as the recesses 15 thereby to accommodate the walls of the intermediate blocks which interlock with said corner blocks. The flat sur- 100 faces of the intermediate and corner blocks at the outer face of the wall may be cut, molded or otherwise formed in imitation of wood or chipped rock, as shown, so as to give the wall a neat ornamental appearance.

In constructing the wall the foundation course is 105 formed of alternate whole and half blocks after which the remaining courses are formed of whole blocks disposed in staggered relation and arranged to break joint. as shown, with the locking recesses of adjacent blocks interengaging thereby to firmly bind the several blocks 110 together and thus form a strong durable wall having a plurality of vertically disposed air-chambers or fluesextending through-out its height. As the succeeding courses are erected the joists 12 may be placed in position with the ends thereof disposed within the vertical flue of the blocks and with the recesses 11 bearing against the interior and exterior walls of said blocks thus supporting the joists at the proper height without the necessity of cutting or otherwise mutilating the blocks. When the wall has reached the desired height the half blocks 17 are placed on alternate whole blocks 10 thus forming a flat surface at the top of the wall.

In Fig. 7 of the drawings there is illustrated a modified form of the invention in which the block 5' is elongated in shape, said block being otherwise the same as those shown in Fig. 1 of the drawings.

In Fig. 8 there is illustrated a corner block designed for use in connection with the block shown in Fig. 6, said block being provided with an extension 18 the end of which is formed with locking recesses 19, there being similar recesses 20 formed in the curved portion
 21 of said block and adapted to receive the curved ends 22 of the block shown in Fig. 6.

The corner block shown in Fig. 9 is similar in construction to the corner block 14 with the exception that the central locking recess is provided with a verti25 cal partition or web 23 defining a pair of recesses 24 for the reception of the walls of the adjacent blocks while in Fig. 10 the corner block is formed with right angularly disposed extensions 25 of equal length and each provided with locking recesses 26.

30 A further modified form of block is illustrated in Figs. 11 to 13 inchesive. In this form of the device the block 27 is substantially cylindrical in shape and provided with the locking recesses 29 adapted to engage the locking recesses of adjacent blocks when said 35 blocks are laid into a wall, the exterior of the wall in this form of the device being preferably coated with gement 30 so as to present a smooth exterior surface, as best shown in Fig. 10 of the drawings.

Attention is called to the fact that the several blocks 40 herein shown and described are interchangeable so that any or all of the said blocks may be used in constructing a wall, it being found desirable in some cases to use alternate round and flat faces in constructing a wall in order to give the latter a neat ornational appearance, while in other cases the elongated blocks or cylindrical blocks having the oppositely disposed flat faces are used exclusively in constructing said wall.

In Fig. 14 of the drawings there is illustrated a modi50 fied form of block especially designed for connecting
the adjacent walls of a building thereby to form a
transverse partition. The blocks 5" in this case are
each provided with curved portions 31 extending
laterally from one face of the block and provided
with spaced recesses 32 adapted to receive the correspondingly recessed ends of the blocks forming the partition 33 thus locking the side walls together and dispensing with the employment of the usual wooden
partitions.

0 In Figs. 15 to 17 inclusive the corner blocks 14' are curved or rounded at the corners, as indicated at 34 while in Figs. 18 and 19 the side walls of the

corner blocks are arranged at different angles to permit the formation of bay windows, circular structures, silos and the like.

From the foregoing description it is thought that the construction and operation of the device will be readily understood by those skilled in the art and further description thereof is deemed unnecessary.

Having thus described the invention what is claimed 70 is:

1. A corner block comprising a body portion having angularly disposed faces connected by a convex wall and provided with vertical stop shoulders disposed at the juncture of said faces and convex wall, there being locking 75 recesses formed in the convex wall at the opposite ends thereof.

2. A corner block comprising a hollow body portion having angularly disposed faces connected by a convex wall and provided with vertical stop shoulders disposed at the juncture of said faces and convex wall, there being locking recesses formed in the opposite ends of the convex wall, one of said recesses being of greater width than the adjacent recesses.

3. A corner block comprising a hollow body portion having angularly disposed faces connected by a convex wall and provided with vertical stop shoulders disposed at the juncture of said faces and convex wall, there being terminal and intermediate locking recesses formed in the opposite ends of the convex wall, the intermediate recess being of greater width than the terminal recesses.

4. A wall fermed of a plurality of substantially cylindrical side blocks having oppositely disposed parallel side walls connected by convex end walls, there being locking recesses formed in the opposite ends of the convex end walls and interfitting with the walls of the recesses in an adjacent side block, and corner blocks each having angularly disposed faces connected by a convex wall, the opposite ends of the convex walls of the corner blocks being provided with locking recesses adapted to receive the convex end walls of the adjacent side blocks.

5. A wall formed of a plurality of hollow substantially cylindrical side blocks having oppositely disposed parallel side walls connected by convex end walls, there being locking recesses formed in the opposite ends of the convex end walls and interfitting with the walls of the recesses in the adjacent side blocks, and corner blocks each having angularly disposed faces connected by a convex wall, the opposite ends of which are provided with terminal and intermediate locking recesses, the terminal recesses of the corner blocks being adapted to receive the convex walls of the adjacent side blocks and the intermediate recesses being wider than the terminal recesses for the reception of the convex walls of two of said side blocks.

6. A wall formed of a plurality of substantially cylindrical side blocks having oppositely disposed parallel side walls connected by convex end walls and provided with vertical stop shoulders disposed at the juncture of the side and end walls, there being locking recesses formed in the opposite ends of the convex end walls and interfitting with the walls of the recesses in an adjacent side block, and corner blocks each having angularly disposed faces connected by a convex wall, the convex walls of the corner blocks being provided with oppositely disposed recesses adapted to receive the convex walls of the adjacent side blocks, there being vertical stop shoulders formed on the corner blocks at the juncture of the convex walls and angular faces for engagement with the stop shoulders of the adjacent side blocks.

In testimony that I claim the foregoing as my own, I 130 have hereto affixed my signature in the presence of two witnesses.

ORLANDO RICHARDS.

Witnesses:

CHARLES A. TARBELL, MARTHA SCHUMACHER.