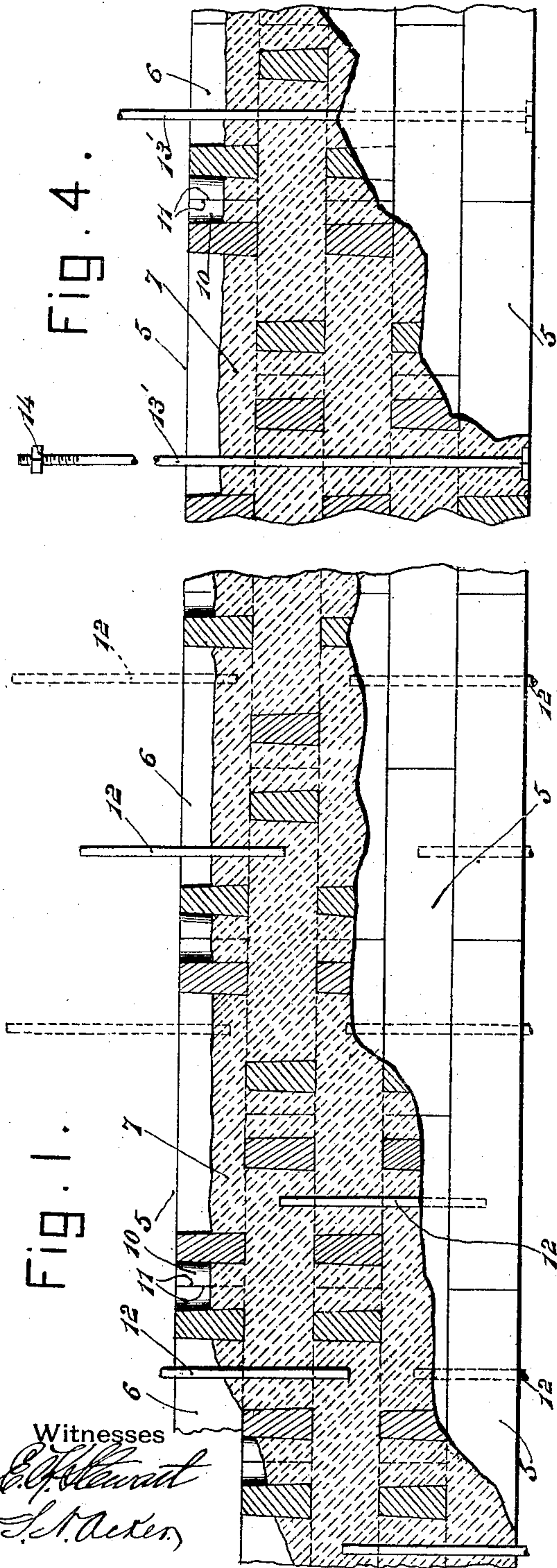


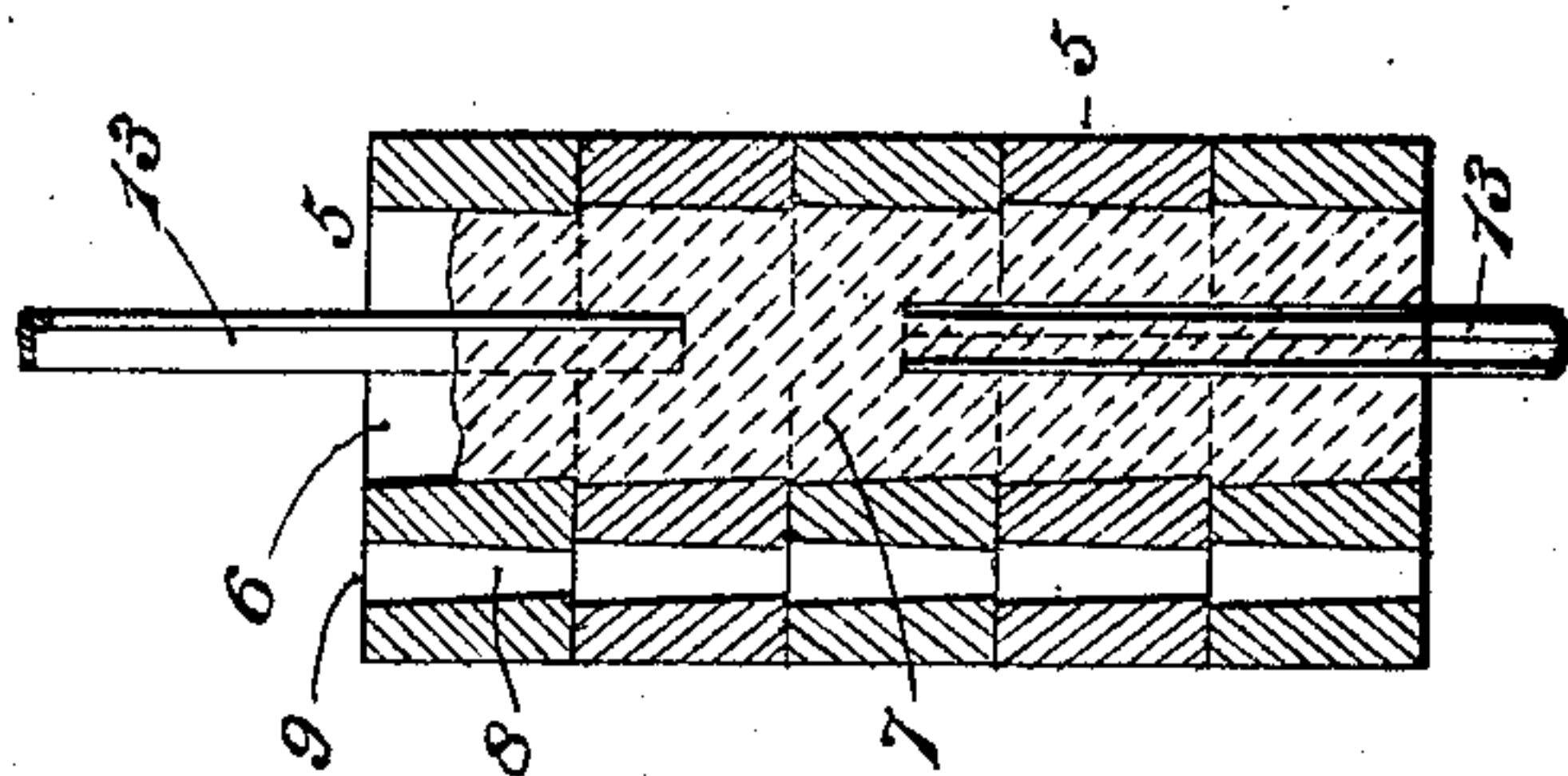
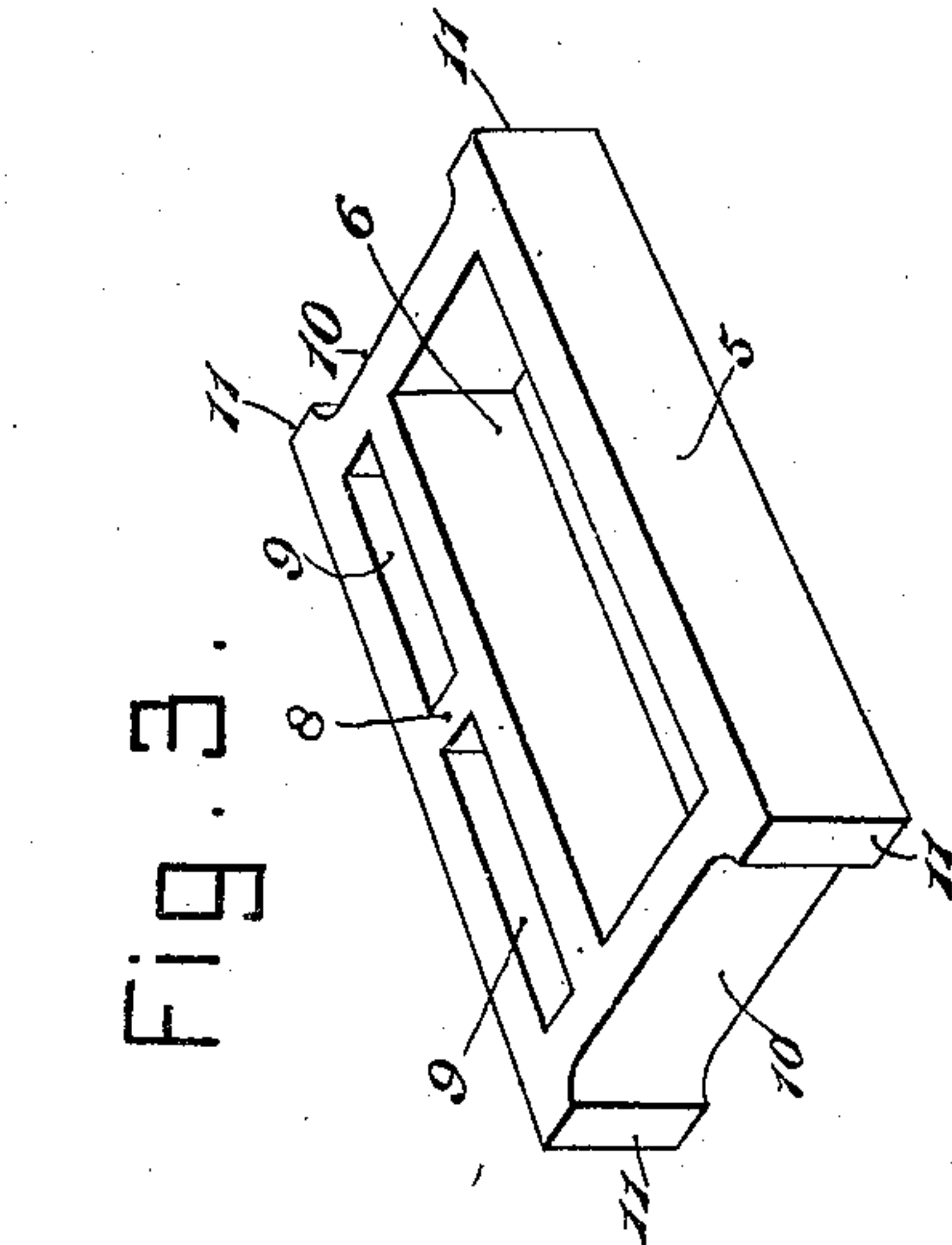
No. 836,908.

PATENTED NOV. 27, 1906.

J. N. WOLFE.
CONSTRUCTION OF WALLS OF BUILDINGS.
APPLICATION FILED AUG. 22, 1905.



Witnesses
E. J. Stewart
L. A. Allen



John N. Wolfe Inventor
by *C. A. Snow & Co.* Attorneys

UNITED STATES PATENT OFFICE.

JOHN N. WOLFE, OF LANCASTER, OHIO.

CONSTRUCTION OF WALLS OF BUILDINGS.

No. 836,908.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed August 22, 1905. Serial No. 275,299.

To all whom it may concern:

Be it known that I, JOHN N. WOLFE, a citizen of the United States, residing at Lancaster, in the county of Fairfield and State of Ohio, have invented a new and useful Construction of Walls of Buildings, of which the following is a specification.

This invention relates to the construction of walls of buildings and similar structures, and has for its object to provide a strong, durable, and efficient wall of this character which is practically water and moisture proof and which will effectually resist the action of the elements for an indefinite period.

A further object of the invention is to form the several bricks or blocks comprising the wall with mortar-receiving pockets and to provide said bricks with vertically-disposed air flues or chambers, so as to permit the free circulation of air through the wall.

A still further object is to reinforce and strengthen the wall by a plurality of vertical brace rods or bars preferably embedded in the cement, mortar, or other binding material during the formation of the wall.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming a part of this specification, Figure 1 is a longitudinal sectional view of a portion of a wall constructed in accordance with my invention. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a perspective view of one of the building bricks or blocks, and Fig. 4 is a longitudinal sectional view showing a different manner of positioning the vertical brace rods or bars.

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

The improved wall is constructed of a plurality of bricks or blocks 5, preferably rectangular in shape, as shown, and molded or otherwise formed of cement, concrete, terracotta, or other suitable material. The bricks or blocks 5 are formed with longitudinally-

disposed mortar-receiving pockets or recesses 6, which pierce the upper and lower faces of the blocks and communicate with the pockets of adjacent blocks when said blocks are laid into a wall, so that after several courses of the wall have been constructed the pockets or recesses in the bricks of the lower courses may be filled with cement or other suitable material 7 by pouring the latter while in a liquid state into the recesses of the upper layer of bricks, as best shown in Fig. 1, thereby forming a practically solid wall in which the individual bricks are securely locked against both lateral and longitudinal movement. Formed in the body of each brick, near the rear wall thereof, is a second longitudinal recess, preferably arranged parallel with the recess 6 and divided by a transverse connecting rib or web 8 into two chambers or compartments 9, which form vertical flues and permit the free circulation of air through the inner face of the wall. The opposite ends of the bricks or blocks are provided with terminal mortar-receiving recesses 10, defining spaced longitudinal ribs or projections 11, which may be cut, ground, or otherwise partially or wholly severed from the body of the block in constructing the wall to permit said blocks to occupy their proper positions in each course.

The wall is reinforced and strengthened by means of vertically-disposed brace rods or bars 12, preferably embedded in the soft cement during the formation of the wall and arranged in spaced staggered relation with the upper end of one rod overlapping the lower end of the adjacent rod, as shown. If desired, however, angle-bars 13 may be employed for this purpose, and in some cases the brace rods or bars may be entirely dispensed with, the mortar within the pockets or recesses being deemed sufficient to strengthen the wall and prevent accidental displacement of the bricks.

In constructing the wall the bricks or blocks are laid in superposed courses, with the bricks of the several courses arranged to break joint, as shown. After several courses have been built the cement, concrete, or other suitable binding material is poured into the recesses or pockets of the bricks of the upper layer or course, and while the cement is still in a plaster condition the brace rods or bars are placed in said pockets, the cement filling the pockets of the several bricks

and forming a practically-solid waterproof-wall capable of supporting an enormous weight.

5 In Fig. 4 of the drawings there is illustrated a modified form of the invention, in which the brace rods or bars 13' extend the entire height of the wall and are provided with terminal threads for the reception of
10 nuts 14, whereby the rods may be attached to the roof or other portion of the building.

If desired, the several bricks or blocks may have their exposed faces molded or otherwise formed in imitation of cut or chipped rock or other ornamental designs in order to give an
15 attractive appearance to the wall, and said blocks instead of being rectangular in form may be curved or of any other desired configuration.

Having thus described the invention, what
20 is claimed is—

A building-block comprising a substantially-rectangular body portion having smooth uninterrupted front and rear walls of a height approximately equal to one-half the

width of the block and solid end walls provided with spaced longitudinal projections of the same width as the front and rear walls and extending laterally beyond the end walls and having their inner faces curved toward said end walls to form terminal transverse
25 recesses, said body portion being provided with a longitudinal mortar-receiving recess of approximately one-half the width of the block and having a plurality of spaced vertical air-flues formed therein and disposed adjacent one longitudinal edge of the block, the
30 walls of the recesses and air-flues being imperforate and inclined toward the bottom of the block to present smooth unobstructed surfaces extending throughout the entire
35 height of said block.

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

JOHN N. WOLFE.

Witnesses:

LOUISA C. DAVIDSON,
C. D. MARTIN.