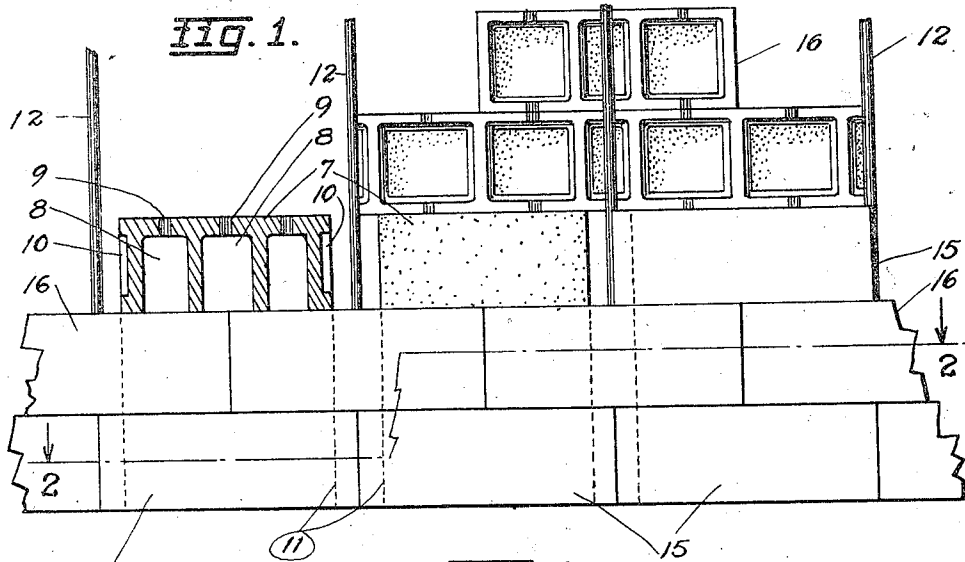
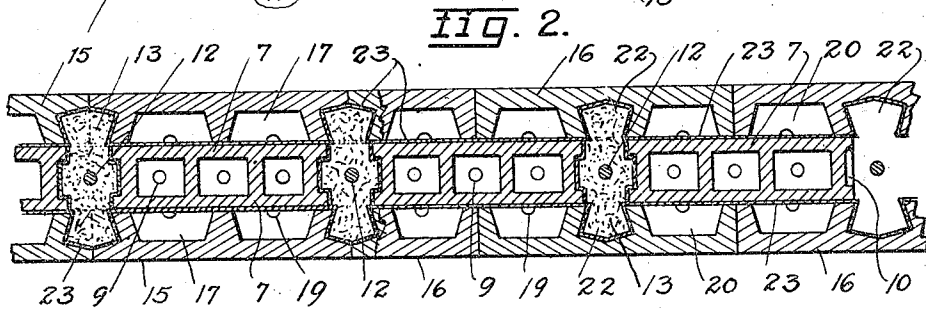
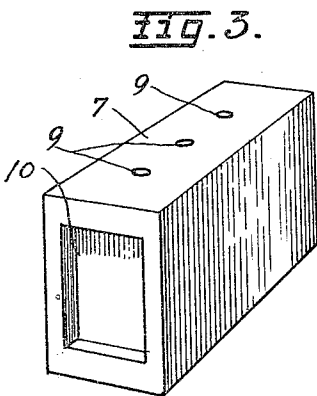
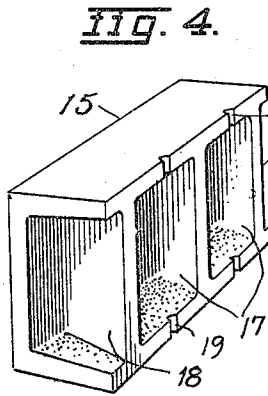
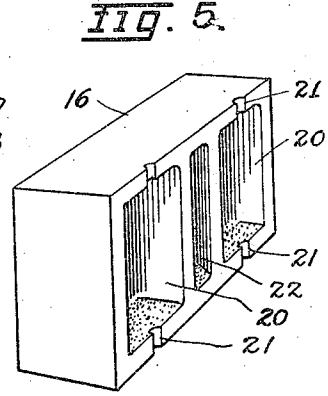


S. J. ANDERSON.
WALL FOR BUILDINGS AND THE LIKE.
APPLICATION FILED JUNE 29, 1914.

1,132,995.

Patented Mar. 23, 1915.



WITNESSES.

H. P. Palmer
A. S. Phillips

INVENTOR.

Stephen J. Anderson,
BY *Chas. C. Williams*
ATTY.

UNITED STATES PATENT OFFICE.

STEPHEN J. ANDERSON, OF HARVEY, ILLINOIS

WALL FOR BUILDINGS AND THE LIKE.

1,132,295.

Specification of Letters Patent.

Patented Mar. 23, 1915.

Application filed June 29, 1914. Serial No. 847,398.

To all whom it may concern:

Be it known that I, STEPHEN J. ANDERSON, a citizen of the United States, residing at the city of Harvey, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Walls for Buildings and the like, of which the following is a specification.

This invention relates to improvements in structure building, and has particular relation to walls and mainly to the outside walls of buildings, yet it is applicable to other kinds of walls, and it consists in certain peculiarities of the construction, novel arrangement and operation of the various parts thereof, as will be hereinafter more fully described and specifically claimed.

The principal object of the invention is to provide a wall which shall be simple and inexpensive in construction, strong and durable, and insulated or so made as to render it proof against moisture.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In the accompanying drawing, which serves to illustrate the invention—Figure 1 is a view in side elevation, partly in section, of a portion of a wall embodying the invention, showing it in the act of being built; Fig. 2 is a plan sectional view, taken on line 2—2 of Fig. 1; Fig. 3 is a perspective view of one of the blocks which compose the intermediate tier of the wall; and Figs. 4 and 5 are perspective views looking toward the inner surfaces thereof of the blocks used in the construction of the inner and outer tiers of the wall.

As will be understood by reference to Figs. 1 and 2 of the drawing, the wall consists of an inner, an outer and an intermediate tier of hollow blocks, which are preferably made of concrete and substantially rectangular in shape. The blocks of the intermediate tier are indicated by the reference numeral 7, and each of said blocks is provided with a plurality of air chambers 8, said chambers being open at their lower ends. The upper surface of each of the blocks 7 is provided with openings 9, which communicate with the air chambers 8 of the block in which said openings are formed, as well as with the air chambers of the block located directly thereabove, thus affording passageways for air from one of the blocks 7 to and through the other blocks

7 which compose the inner tier of the wall. Each of the blocks 7 is by preference provided in each of its ends with a recess or pocket 10, which recesses or pockets are preferably rectangular in shape, as shown in Fig. 3 of the drawing.

As shown in Fig. 1, the intermediate tier consists of a plurality of piers, each pier being formed of the blocks 7 placed one on the other in vertical alinement. The piers which are indicated by the reference numeral 11 in Fig. 1 are spaced apart, as shown, to provide room for the occupancy and reception of vertically disposed reinforcing rods or standards 12 and cement or concrete 13, respectively. The reinforcing members 12 may be suitably supported at their upper and lower ends, and, as shown in Figs. 1 and 2, are located about midway between the adjacent ends of the blocks 7, yet at a distance therefrom, so as to permit of the cement or concrete 13, which is poured into the spaces between the adjacent ends of the blocks 7 or piers 11, surrounding said reinforcing members, and embedding itself in the recesses or pockets 10 of said blocks. The inner and outer tiers of the walls may be and usually are of identical construction; that is, each tier is composed of a series of superimposed rows of the blocks 15 and 16, which are placed in such a manner that their cavities will face the intermediate tier of the wall. Each of the blocks 15 is provided with one or more air chambers 17, and at each of its ends with a dove-tailed recess or pocket 18, and has at the upper and lower ends of the chambers 17 openings 19 for the passage of air from the chambers 17 of one block 15 to those of the other blocks located above and below the same. Each of the blocks 16 is provided with a pair of air chambers 20, having outlets 21 at their upper and lower ends, and said chambers are separated by means of a dove-tailed recess or pocket 22, for the purpose to be presently explained.

In constructing the inner and outer tiers, which, as before stated, may be identical in the arrangement of the blocks 15 and 16, a number of the blocks 15 are located horizontally in alinement with one another with their air chambers 17 facing the blocks of the intermediate tier. When thus placed, it is obvious that the dove-tailed recesses or pockets 18 at the adjacent ends of the blocks 15 will form dove-tailed chambers communi-

cating with the spaces between the adjacent ends of the blocks 7, which compose the piers 11, and that said dove-tailed chambers will be located on each side of the intermediate tier, so that by pouring cement or concrete 13 into the spaces between the blocks 7, it will flow into the recesses or pockets 18, and on account of the dove-tail shape thereof will firmly lock the blocks of the inner and outer tiers together and against the intermediate tier. When a row of the inner and outer tiers have been constructed as above described, another row consisting of the blocks 16 is laid on top of the blocks 15 with the air chambers 20 presented toward the intermediate tier. The blocks 16 are laid so as to break the joints of the blocks 15, and in so doing it is obvious that the dove-tailed pockets or recesses 22 of the blocks 16 will be presented so as to communicate with the spaces between the adjacent ends of the blocks 7 which compose the piers 11 of the intermediate tier, and that cement or concrete 13 can be poured into said spaces, from which it will flow into the dove-tailed pockets or recesses 22 of the blocks 16 and lock or tie them together on opposite sides of the intermediate tier.

It will be clearly seen by reference to the drawing, and readily understood, that, as the recesses 10 in the ends of the blocks 7 constituting the inner tier of blocks, are made in the form of pockets, that is, said recesses have marginal walls entirely around them, and that as the recesses 18 and 22 in the blocks 15 and 16 respectively, are also made in the form of pockets, as well as being dove-tailed in shape, the concrete or plastic material placed in the spaces between the ends of the blocks 7 and around the rods 12 (when the same are used), will flow into said pocket-like recesses and become set, and thereby not only tie or bind the walls together against any lateral displacement, but will so unite the blocks of the walls and the columns of concrete occupying the spaces between the piers of the intermediate wall, as to practically make them a unit or integral, so that in settling all of them will settle together, thus preventing cracks in the wall caused by uneven or individual settling. The rods 12 and concrete columns 13 will afford at their upper ends strong and efficient means for

connecting and supporting joists as is apparent. As before stated, the blocks 16 are laid on the blocks 15 so as to break the joints of the latter, and so that the pockets or recesses 22 of the blocks 16 will align vertically with the recesses or pockets 18 of the blocks 15, thus greatly augmenting the strength of the structure.

To prevent the passage of moisture through the wall or to insulate the same against moisture or dampness, the exterior surfaces of the blocks 7 may be coated with asphalt 23 or coal-tar, or any suitable moisture resisting material, and for the same purpose the inner surfaces of the recesses 18 and 22, as well as the ends of the blocks 7, may be treated or provided with similar material before said blocks are placed in position. By this arrangement the concrete columns 13 and the mortar between the blocks are insulated in such a manner that said material cannot act as moisture conductors and an absolutely moisture proof structure will be produced.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is—

In a wall, the combination with a plurality of tiers of blocks, one of said tiers consisting of superimposed blocks arranged in spaced apart piers, said blocks having pockets in their ends adjacent to said spaces, another of said tiers consisting of superimposed blocks arranged in horizontal rows one above another and located along side the first named tier, each block of one of the horizontal rows of the last named tier having in each of its ends a dove-tailed pocket adapted to register with a similar pocket in the adjacent end of the next block thereto and with the space between the spaced apart piers, and each of the blocks composing the row next above said first named row having centrally a dove-tailed pocket, the last named blocks being arranged so as to break the joints of the blocks of the first named row and so as to locate their dove-tailed pockets directly above the dove-tailed pockets of the blocks of the first named row.

STEPHEN J. ANDERSON.

Witnesses:

CHAS. C. TILLMAN,
A. S. PHILLIPS.