No. 744,185. PATENTED NOV. 17, 1903.

M. GARVEY.

BUILDING WALL CONSTRUCTION.

APPLICATION FILED FEB. 14, 1903.

NO MODEL.

Fig. 1.

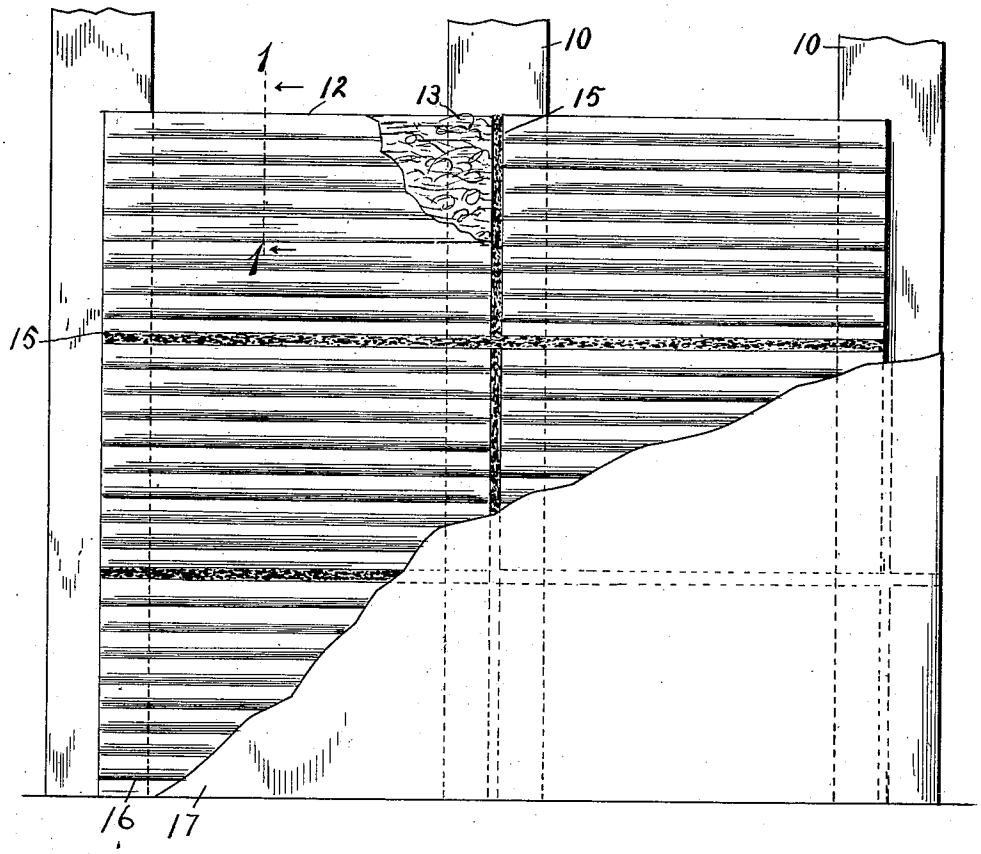


Fig. 2.

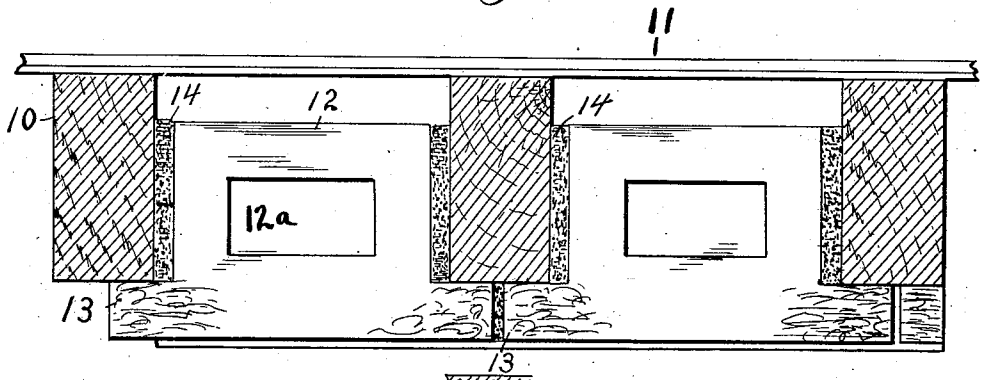
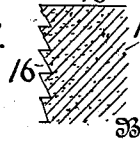


Fig. 3.



Witnesses
Edward C. Rowland.
Wm H. Canfield.

Michael Garvey Inventor
By his Attorney
W. B. Hutchinson.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 744,185. Patented November 17, 1903.

UNITED STATES PATENT OFFICE.

MICHAEL GARVEY, OF NEW YORK, N. Y.

BUILDING-WALL CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 744,185, dated November 17, 1903.

Application filed February 14, 1903. Serial No. 143,363. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL GARVEY, of the city, county, and State of New York, have invented certain new and useful Improvements in Building-Wall Construction, of which the following is a full, clear, and exact description.

My invention relates to improvements in the construction of building-walls, and especially the outer walls of buildings.

In the construction of buildings, and more especially light frame buildings, it is desirable to have the outer walls filled with brick, and in many places local ordinances prescribe that such walls be so filled. The object of this arrangement is to make a very solid structure and provide a fire retardant.

My invention relates to structures of this class; and the object of my invention is to produce a wall and details thereof of such a nature that a more perfect fire retardant will be provided than by the ordinary brick filling, to provide means for cheapening the wall, and especially in economizing in labor in its construction, to obviate the necessity of using lath in the wall, and in general to produce a better wall of this kind than usual and to make it in a cheaper manner.

With these ends in view my invention consists of a building-wall the construction and arrangement of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar figures of reference refer to similar parts through the several views.

Figure 1 is a broken front elevation of a wall-section, showing my improvements. Fig. 2 is a plan view thereof, and Fig. 3 is a detail section on the line 1 1 of Fig. 1.

My improvements are intended to be carried out in connection with the usual forms of studding 10, which are shown in connection with the outer wall of sheathing 11 or other material; but obviously the filling material may be used in connection with any wall wherever located, as will presently appear.

In filling and erecting the wall I use bricks 12, the body portion of which is nearly as long as the space between two pieces of studding 10, and it is evident that the bricks can be made in various lengths and sizes to fit varying conditions. Each brick 12 has an elongated face, protruding flanges 13 at the front end portions, which flanges are adapted to overlap the studding, as shown in Fig. 2, and form a continuous surface along the plaster side of the wall. These flanges may, of course, be made longer or shorter, as desired, and in some places a flange may be omitted, if neccessary, and to prevent the flanges from breaking off hair or fiber of some sort is placed in the material composing the brick, while such material is plastic at the junction of the flanges with the body portion of the brick, as shown clearly in the drawings, and thus at this naturally weak point the brick is strengthened. The brick is also provided with a vertical opening 12^a, and if the brick is comparatively long a plurality of such openings can be used, the prime object of which is to cause the bricks when placed in position for use to form a series of flues or air-chambers in which the air can circulate, so as to carry away any dampness. Besides this it makes the brick cheaper by using less material, and it does not materially affect its strength.

I do not claim any particular material for making the brick and do not limit myself to any material, so obviously any cheap cement or equivalent material answers the purpose.

In practice I prefer to make the bricks a little shorter than the space between the studding, so that they may be separated from the studding by mortar or cement 14, which holds them securely in place, and likewise I prefer to place a layer of cement 15 between the meeting parts of the several bricks.

It will be seen that by laying up the wall as described a continuous smooth front surface is presented, and in order that this may carry the plaster securely I roughen the front of each brick preferably by producing longitudinal corrugations, as at 16, though obviously it may be roughened in other ways. By making the corrugations as shown—that is, horizontal or essentially horizontal and with the back wall slanting upward and outward, as in Fig. 3, producing a sort of saw-tooth effect—the structure holds up the plaster better, and it is more easily applied.

The plaster 17 is simply spread over the surface of the wall as usual, and by construct-

ing the wall as shown and described lath are dispensed with and less plaster is used, and, in fact, the only thing necessary is the white finish, which is spread on as shown at 17.

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

1. In a building-wall, the combination with the studding of the wall, of filler-bricks fitting between the studding, attached thereto by cement and having their front portions elongated so as to overlap the studding.

2. The combination with a building-wall having studding, of filler-brick fitting between the studding attached thereto by cement and provided with end flanges to overlap the studding.

3. A building-wall, comprising the studding, and filler-bricks fitting between the studding and projecting beyond its outer part, said filler-bricks being attached to the studding by means of cement and having roughened faces to engage the plaster.

4. In a building-wall, the combination with the studding and the outside sheathing, of a filling material consisting in part of bricks adapted to partially surround the said studding, and in part of cement; the said bricks being attached to the said studding by means of the cement.

5. The herein-described filler-brick having end flanges with fibrous material held at the junction of the flanges and body part of the brick.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MICHAEL GARVEY.

In presence of—
CHAS. H. BAECHLER,
WILLIAM M. GOLDEN, Jr.