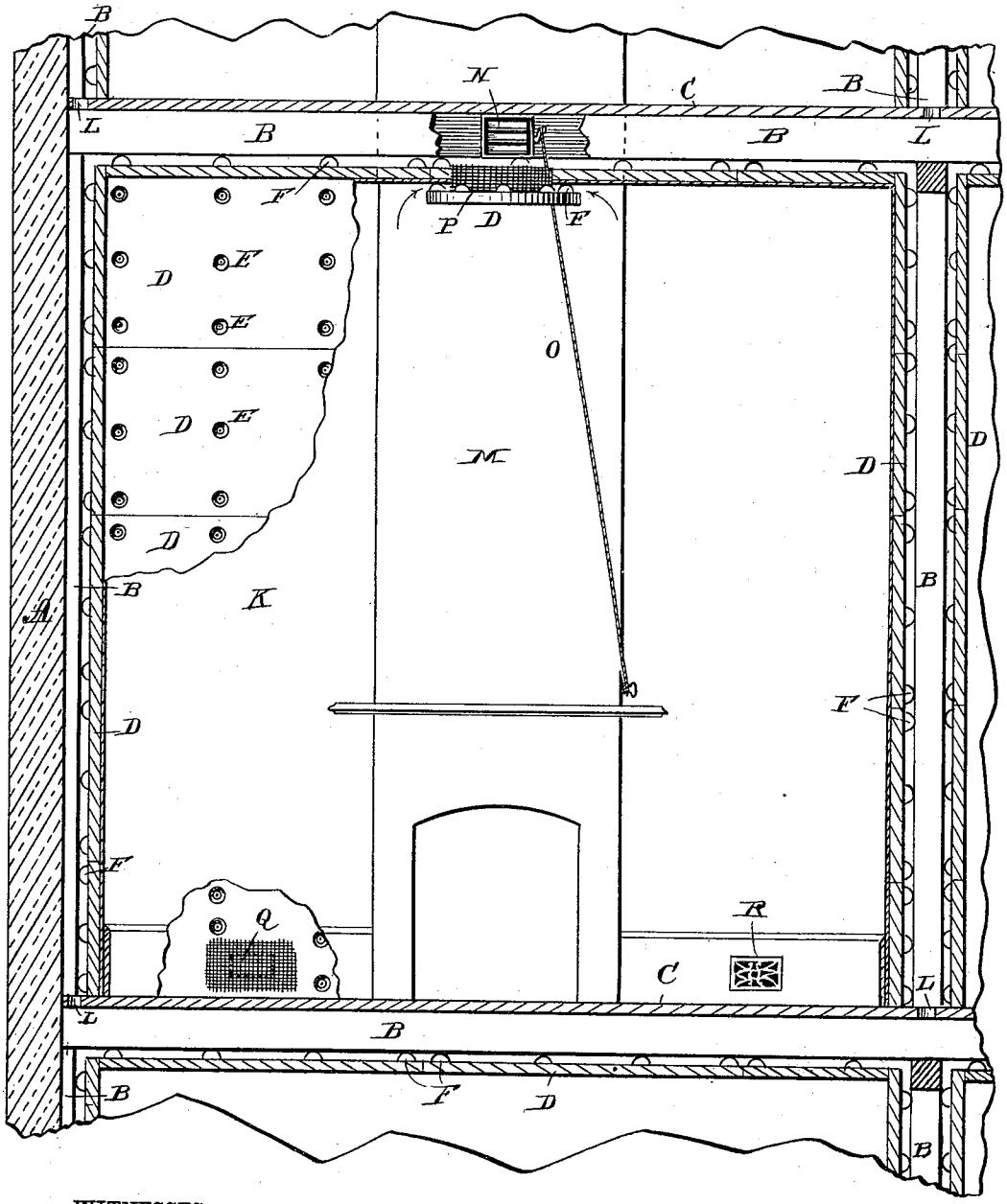
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W. DRYDEN.

CONSTRUCTION OF BUILDINGS.

No. 372,461. Patented Nov. 1, 1887.

Fig. 1.



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Fig. 2.

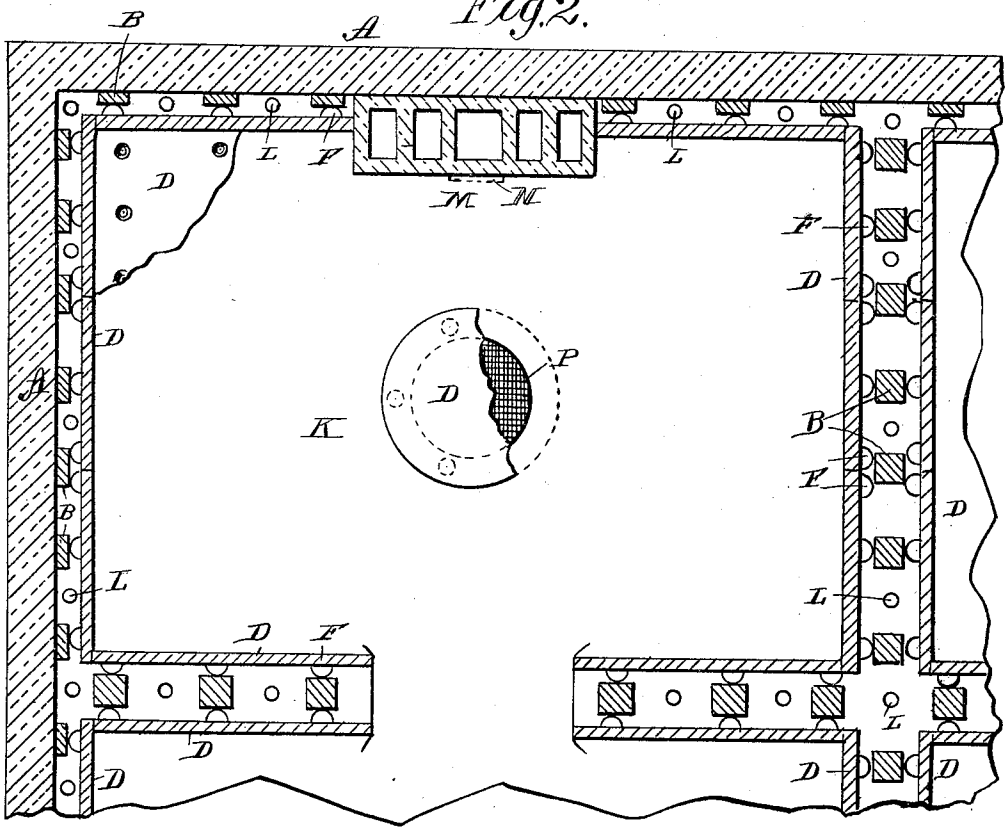
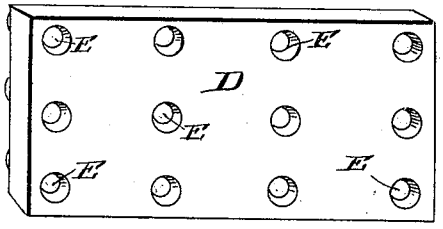


Fig. 3.



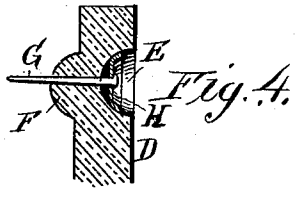


Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIAM DRYDEN, OF BROOKLYN, NEW YORK.

CONSTRUCTION OF BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 372,461, dated November 1, 1887.

Application filed May 10, 1887. Serial No. 237,753. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DRYDEN, of Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in the Construction of Buildings, of which the following is a full, clear, and exact description.

My invention has for its object to provide new and useful improvements in the construction of buildings, whereby a thorough ventilation and an increased security against fire are obtained, together with great durability and economy.

The invention consists, first, in a novel form of building-block adapted to be used in direct contact with the studding, in lieu of the ordinary laths and brown coat; secondly, in a novel mode of applying the blocks; and, finally, in certain novel features adapted to be employed in the construction of the building in connection with the use of the improved building-block, all as hereinafter fully described, and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken sectional elevation of a room and adjacent parts of a building, illustrating the application of my improvements. Fig 2 is an inverted sectional plan of the same. Fig. 3 is a perspective view of my improved building-block. Fig. 4 is a section through a part of the same, showing the mode of fastening the blocks in place.

A designates the outer brick or stone wall of a building; B, the usual studding, and C the flooring laid in the ordinary manner upon the floor-joists.

To the sides of the wall-studding, and to the under side of the floor-studding, are directly fastened my improved building-blocks D, which thus take the place of the usual laths and brown coat of plaster for the walls and ceiling.

The blocks D (shown in detail in Fig. 3) may be formed, by molding, of any of the usual plastering compounds suitable for the purpose; but I find most adaptable to the present use a composition of the following ingredients in or about the proportions specified: Whiting, three parts; plaster, one part; glue, one part; straw pulp, six parts; alum, one-eighth part; and I hereby reserve the right to make future application for Letters Patent of the United States for this improved plastering composition or its equivalents. The block is formed on one side with, in the present case, four vertical rows of spherical depressions, E, and on the opposite side with corresponding spherical projections F, the vertical series being spaced in accordance with the studding-joists, so that when the blocks are applied thereto the projections F will rest against the joists, and thus leave an air-space between the blocks and joists, as shown clearly in Figs. 1 and 2. The blocks D are secured in place by nails G, driven centrally into the depressions E and through the projections F into the joists, metallic washers H being placed in the depressions to serve as bearings for the nail heads, as illustrated in Fig. 4. The blocks are arranged to break joints, and over them is laid the ordinary white coat, K, of the same composition as the blocks or of the ordinary plaster. The air-space thus left by the projections F extends continuously around and between the walls of adjoining rooms on the same floor, and between the ceiling and flooring of two superposed rooms, and apertures L are formed in the flooring C, between the blocks and studding, to establish communication between the air-spaces of vertically adjoining rooms.

The usual chimney-flue, M, extends upward at the sides of the rooms, and is connected with the ceiling-space of each room by means of a registered opening, N, in the wall of the flue, adjustable by means of a cord, O, as shown in Fig. 1.

An opening is formed centrally in the ceiling of the room, and beneath it is arranged a circular block, D, fastened in place, as before, with its projections F in contact with the ceiling, so as to leave an annular passage for the air and gases from the room into the ceiling space thereabove, as indicated by the arrows in Fig. 1. This opening is covered by wire-gauze P, to prevent, in case of fire, the flame passing therethrough.

Openings Q are formed in the blocks D around the base of the wall, are protected by

wire-gauze, and are provided with suitable registers, R. An entrance is thus formed for the cold air in the wall space into the room.

By this construction a perfect and thorough ventilation of all the rooms in the building may be obtained, the cold air from the surrounding air-space entering the rooms through the wall-openings Q, becoming heated and passing through the ceiling ventilating-openings and the ceiling air-spaces into the flue M, through the registered openings N therein. By properly adjusting this register the circulating current of air may be regulated at will. This circulation of air between the walls and the floor and ceiling of adjoining rooms serves to equalize the temperatures of the several rooms, and in case of fire would effectually prevent the same from communicating from one room to the other. The depressions formed in the face of the blocks D serve to hold the plaster coats firmly thereto.

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

1. A plastering-block for building construction, formed with series of projections F on one side and series of corresponding depressions, E, on the other side, substantially as shown and described.

2. The combination, with the studding B, of the plastering-blocks D, having series of projections F on one side, and fastened to the studding with said projections in contact therewith, substantially as shown and described.

3. The combination, with the ceiling-studding, plastering-blocks D, and interposed projections F, of a lower plastering-block, D, fastened beneath an opening in the upper blocks with its projections F in contact therewith, and gauze protecting the passage thus formed from the interior of the room to the air-space above the ceiling, substantially as shown and described.

4. The combination of the air-space surrounding the wall of a room, an interiorly-leading opening in the lower part of said wall, a ventilating-opening in and an inclosed air-space above the ceiling of the room, a flue leading upward at the side of the room, and an opening in the flue communicating with the said inclosed ceiling air-space, substantially as shown and described.

WILLIAM DRYDEN.

Witnesses:
JONAS G. HEBB,
JOHN GREGORY.