

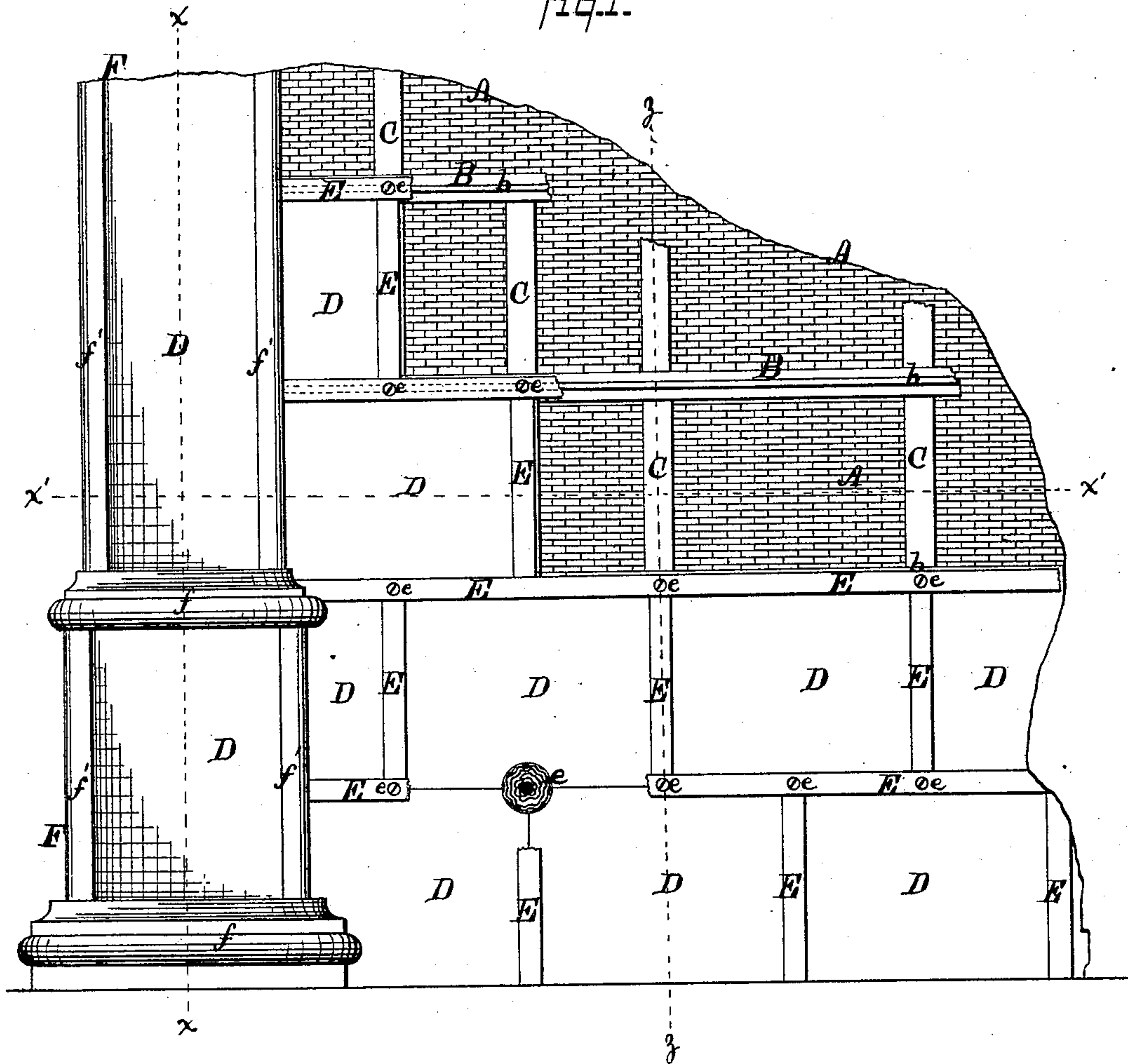
P. J. HARDY.

Application of Stone to Walls of Buildings.

No. 163,989.

Patented June 1, 1875.

Fig. 1.



WITNESSES:

Jas. Hutchinson
 John R. Young

INVENTOR.

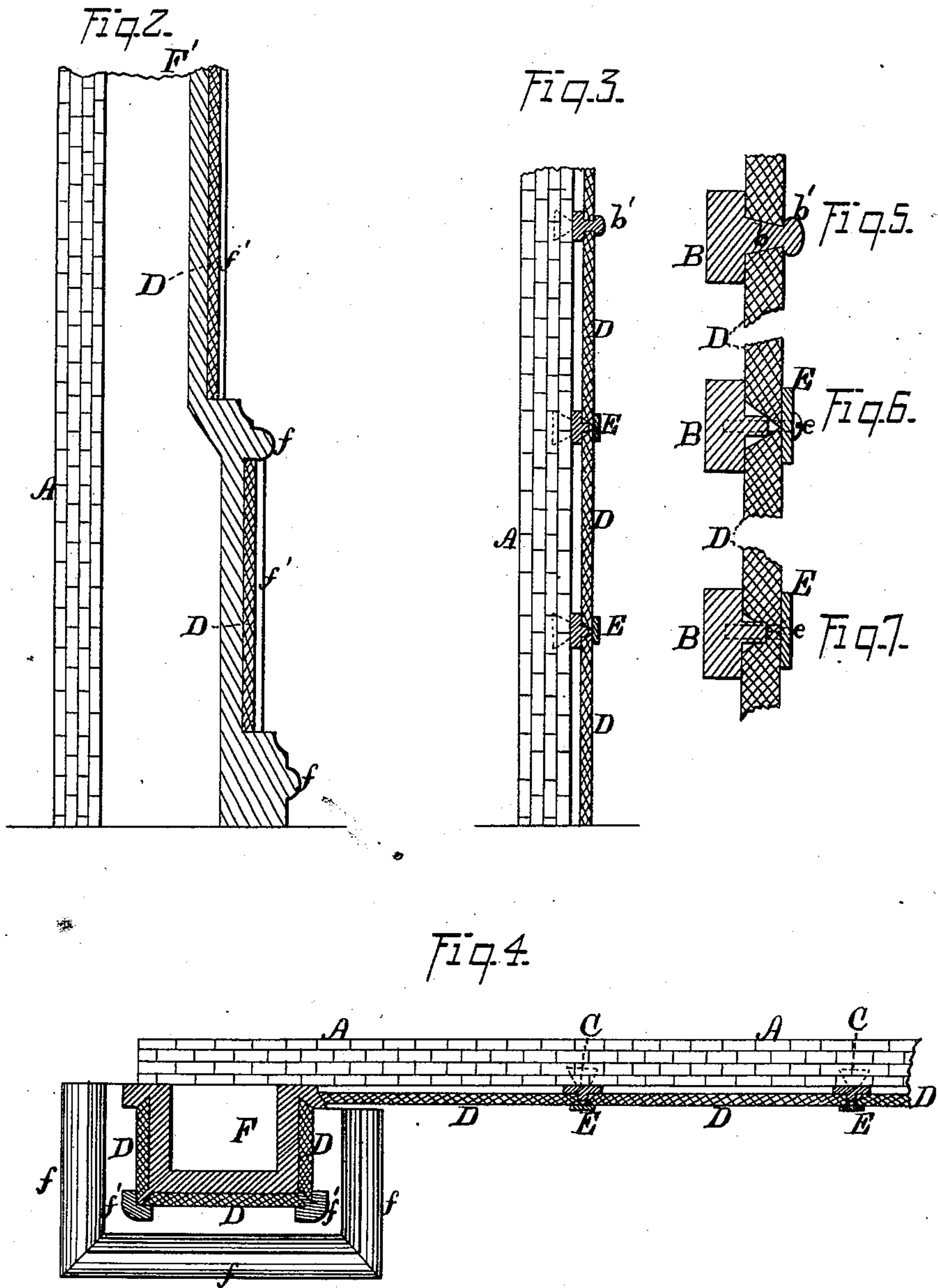
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UNITED STATES PATENT OFFICE.

PIERRE J. HARDY, OF NEW YORK, N. Y.

IMPROVEMENT IN THE APPLICATION OF STONES TO WALLS OF BUILDINGS.

Specification forming part of Letters Patent No. **163,989**, dated June 1, 1875; application filed February 11, 1875.

To all whom it may concern:

Be it known that I, PIERRE J. HARDY, of New York city, in the county of New York and in the State of New York, have invented certain new and useful Improvements in the Application of Marble or other Stone to the Walls of a Building; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an elevation of a portion of the front of a building covered by my improved method. Fig. 2 is a vertical section of the same on the line $x x$ of Fig. 1. Fig. 3 is a like view upon line $z z$ of said Fig. 1. Fig. 4 is a horizontal section upon line $x' x'$ of Fig. 1; and Figs. 5, 6, and 7 are vertical sections of the slabs, showing different methods of securing the same in place.

Letters of like name and kind refer to like parts in each of the figures.

In the construction of buildings it has heretofore been customary to face or veneer the outer walls with thin slabs of marble or stone, which were placed with their edges in contact, and were cemented at their back sides to or upon the face of said wall. This method has proved objectionable, however, from the fact that water was liable to get between the slabs and wall, and, by the action of frost, said slabs would become displaced or detached, so as to cause the building to present an unsightly appearance.

The design of my invention is to remedy these defects, and render a veneering or facing of marble, slab, &c., for the outer walls of buildings durable, comparatively inexpensive, and a perfect protection against dampness and sudden changes of temperature; to which end it consists in a facing for the wall of a building, composed of slabs of marble, slate, or other like material secured in place thereon by means of a metal frame, and having an air-space between its inner face and the outer face of said wall, substantially as and for the purpose hereinafter specified.

In the annexed drawings, A represents the front wall of a building, constructed of brick, stone, or other like material, upon the face of which are secured, by anchors built into said

wall, two series of metal bars, B and C, which are respectively placed horizontally and vertically, so as to divide the front into a number of rectangular spaces that correspond in size and shape to the like features of the stone slabs D and D, which are to be employed for facing purposes. The horizontal bars B and B are each provided with a projecting ledge, b , that extends forward a distance equal to about one-half the thickness of a slab, D, and operates to sustain the weight of the same. The edges of the slabs D and D may either be formed upon oblique lines, as seen in Fig. 6, so as to meet at the outside and bear upon the corners of the ledges b , or they may be each provided with a rabbet, d , as seen in Fig. 7, and embrace the sides and front of said ledges. The slabs D and D when in place are secured by means of metal bars E and E, which are placed over the joints and receive each a number of screws, $e e$, &c., that pass inward, and have their threaded ends contained within correspondingly-threaded openings, which are provided within the bars B and C.

If desired, the bars E and E may be omitted, and screws with large ornamental heads placed at the intersecting corners of the slabs, as seen in Fig. 1, or the screws may be entirely omitted, and the ledge b of each horizontal bar B may be made with a T-shaped head, b' , which will embrace the edges and front of each slab.

When the last-named method of fastening is employed it will be necessary to insert the slabs as the horizontal bars are placed in position upon and secured to the wall, as otherwise said slabs could not be inserted.

It will be seen that an air-space, a , is left between each slab D and the wall A, within which any moisture that may penetrate the joints of the facing, will collect without coming into contact with said wall, by which means the latter is insured against dampness, and also is protected from the effects of sudden changes of temperature of the external air.

For covering pilasters F, one single slab is to be used for each face or panel, which slab will extend vertically between the horizontal moldings f and f , and will be secured in position by means of corner moldings f' that em-

brace the abutting edges of said slabs, and are held in place by screws passing inward through the same into said pilaster.

The method described enables a wall to be covered with a strong and durable facing, which can be made as attractive as may be desired by employing the necessary quality and kind of stone, and giving to the exposed metal such finish as will afford the best contrast with said stone. Said covering is easily placed in or removed from position, it is not expensive, and can be made so close as to cause it to afford complete protection from the elements.

For inside work, my method affords opportunity for any desired amount of ornamentation, and is far less expensive than the usual marble covering employed.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

In combination with the wall of a building, a facing or covering composed of slabs of marble, slate, or other like material, secured in place thereon by means of a metal frame, and having an air-space between its inner face and the outer face of said wall, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of February, 1875.

PIERRE J. HARDY.

Witnesses:

GEO. S. PRINDLE,
E. F. M. FAEHTZ.