

No. 824,511.

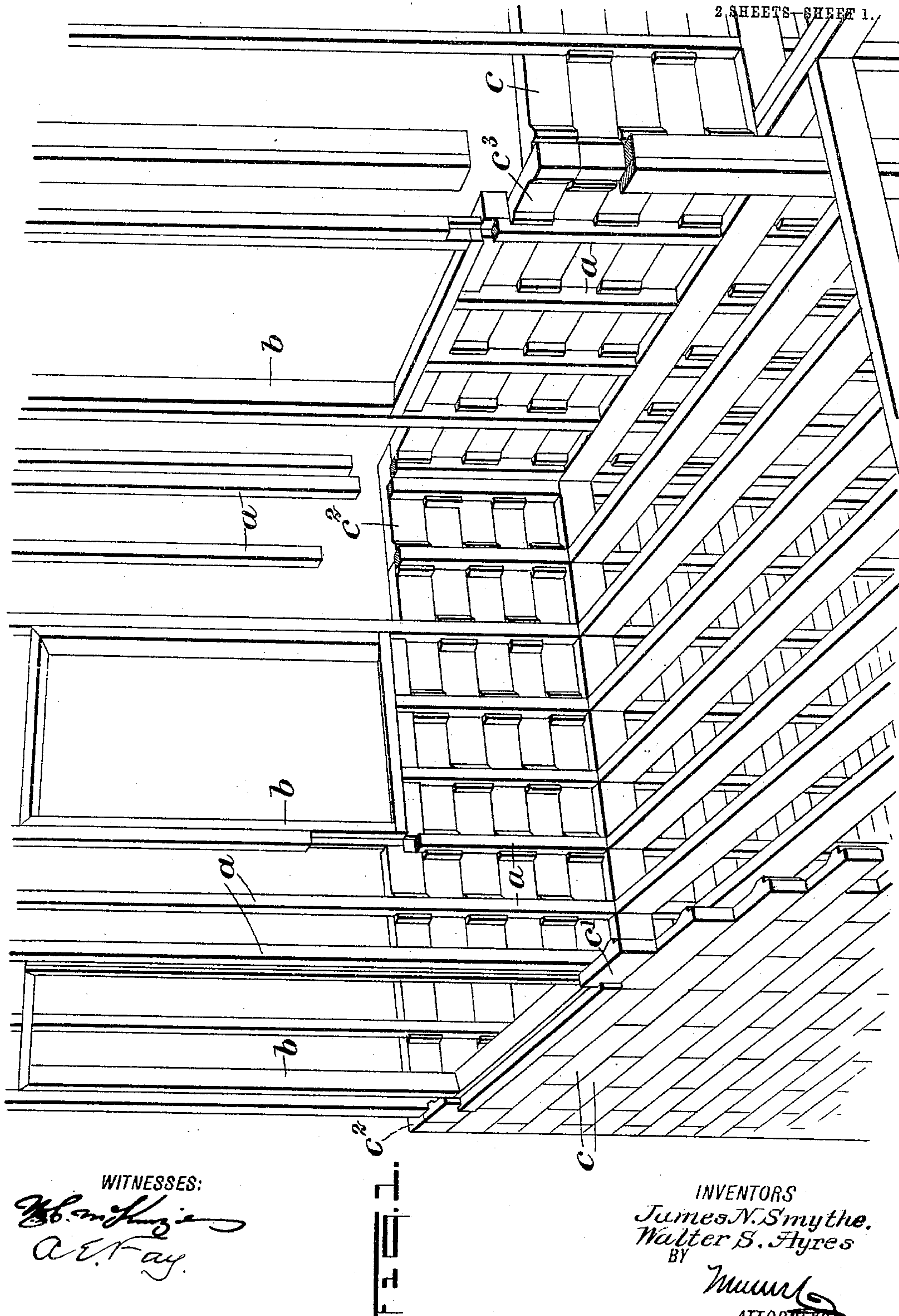
PATENTED JUNE 26, 1906.

J. N. SMYTHE & W. S. AYRES.

WALL CONSTRUCTION.

APPLICATION FILED MAR. 10, 1905.

2 SHEETS SHEET 1.



WITNESSES:

*W. B. Smith*  
*A. E. Fay*

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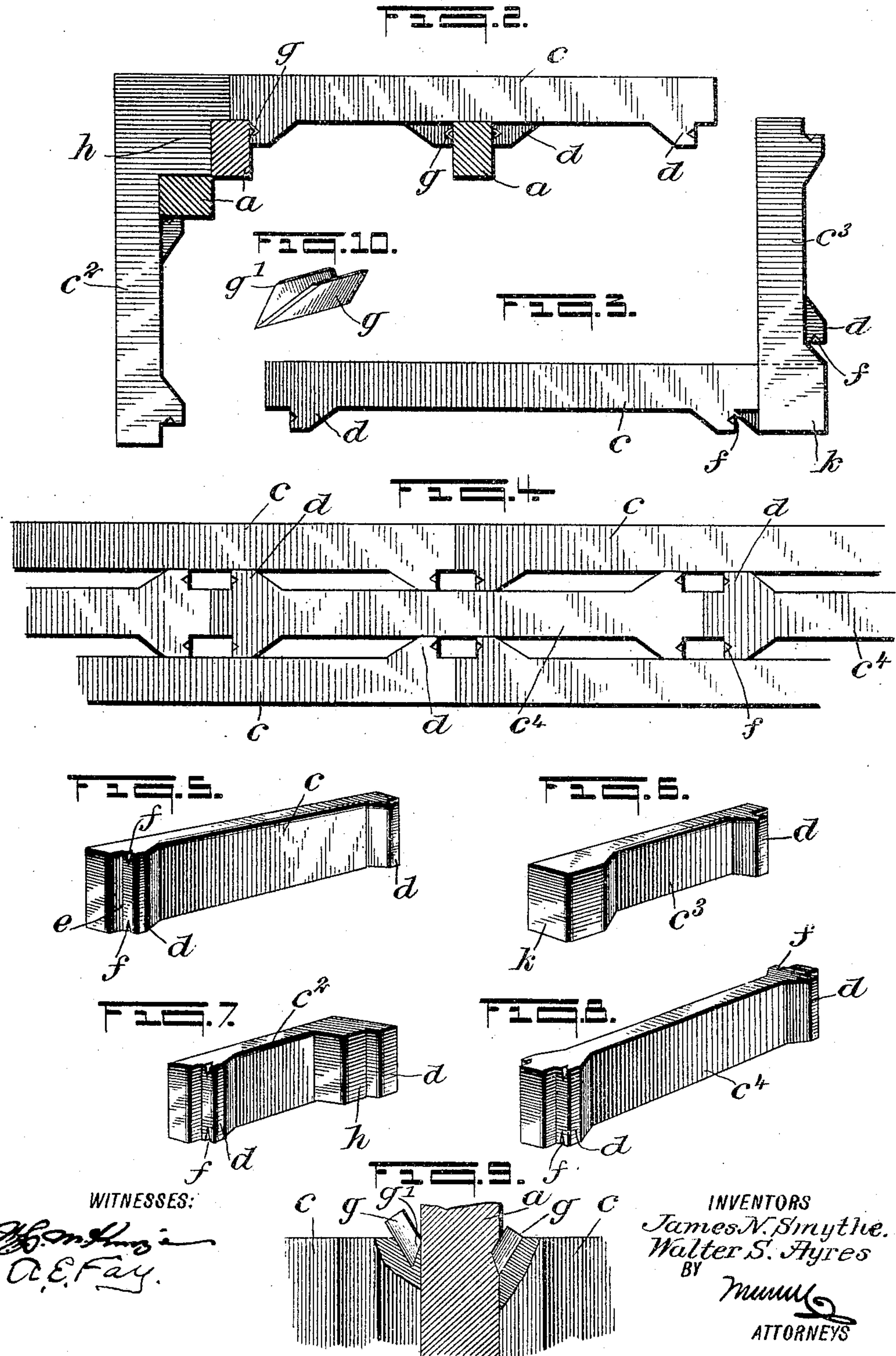
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# UNITED STATES PATENT OFFICE.

JAMES NORTHROP SMYTHE AND WALTER SMITH AYRES, OF NEWARK,  
OHIO.

## WALL CONSTRUCTION.

No. 824,511.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed March 10, 1905. Serial No. 249,387.

*To all whom it may concern:*

Be it known that we, JAMES NORTHROP SMYTHE and WALTER SMITH AYRES, citizens of the United States, and residents of Newark, in the county of Licking and State of Ohio, have invented a new and Improved Wall Construction, of which the following is a full, clear, and exact description.

Our invention relates to a wall construction and veneering-block by means of which walls in the course of construction or after being completed can be covered with a veneering of blocks of artificial stone or other plastic material.

The principal objects of the invention are to provide means for readily securing the blocks to the studding of a building, to provide for the construction of doors, windows, and all other features which may be present in the walls of buildings, to break joints in the blocks, as is usually done, and at the same time to leave the interior of the veneering in such form that a symmetrical inside surface is provided which is adapted to the use of woodwork.

A further object of the invention is to provide for easily and correctly placing the blocks in position by the use of inexperienced and unskilled labor.

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

Figure 1 is a perspective view of a portion of a building in the process of construction, showing veneering-blocks constructed in accordance with the principle of our invention. Fig. 2 is a horizontal sectional view of an outside corner constructed in accordance with the same principle. Fig. 3 shows an inside corner. Fig. 4 shows a portion of a foundation-wall for veneered houses provided with a filler to increase the thickness. Figs. 5, 6, 7, and 8 are perspective views of different forms of blocks all coming within the scope of our invention. Fig. 9 is a vertical sectional view of an upright of a building, showing a preferred means of fastening the blocks thereto; and Fig. 10 is a perspective view of the fastening device shown in Fig. 9.

Fig. 1 shows studding or supporting members *a* in the form of a building, with the usual construction of casings *b* or the like for doors and windows. The supporting members are

designed to be placed equal distances apart, so that the veneering-blocks can be applied thereto in a regular manner. For example, it will be convenient if the uprights are placed sixteen inches apart. The veneering-blocks *c* are designed to be substantially twice as long as this, so that they may extend across the space between three adjacent uprights. These blocks are provided with projections *d* near their opposite ends and located on the same side of the block. A depression *e* is located between each of the projections and the adjacent end of the block. These depressions are designed for receiving the corners of the studding or supporting members, as indicated at the upper part of Fig. 2. The outer faces of the projections *d* are also provided with triangular grooves *f*, designed to receive fastening devices *g*. These fastening devices are preferably made of sheet metal of heavy gage and formed in the shape of a *V* with sharpened edges *g'*. These fastening devices or keys are placed in the grooves *f* with their smooth sides toward the body of the block, and their sharpened edges are then driven into the wood of the studding, as indicated in Fig. 9, so as to securely hold the blocks in position.

It will be readily understood that with the use of blocks occupying twice the space between the center lines of two adjacent uprights it will be desirable in order to break joints to have a series of blocks *c'*, each occupying a space equal to the distance between two adjacent uprights. In order to provide for the filling of outside corners, blocks *c<sup>2</sup>* are provided, having a construction at one end substantially the same as that of a block *c* and at the other end having a projection *h*, adapted to fill the space between the corner-uprights and the end of the adjacent block *c* on the other side of the wall. For an inside corner another kind of block *c<sup>3</sup>* is provided, and this block is constructed at one end in a manner similar to that of the block *c*, but at the other end, *k*, it is made square, so as to afford a resting-place for the next block above and to provide for holding it in position.

Fig. 4 represents a hollow-wall construction to which our improved blocks are adapted. By the use of a filler-block *c<sup>4</sup>*, having projections of the same character as those on the block *c* and designated by the same char-



acters, a hollow wall of any thickness may be made, while an inside construction adapted to woodwork may still be retained or a smooth concrete inside wall, as indicated, 5 may be constructed with equal efficiency.

It will be seen that by the use of our improved blocks a very convenient and efficient manner of veneering walls is produced. The depression near the projection of each block 10 being right-angled and of such dimensions as to fit over the edge of the studding, the blocks are put up and secured to the studding by the keys *g*, as has been stated. The projections on the blocks afford a lodging-place for a sufficient quantity of green mortar to com- 15 pletely cover that portion of the key which projects from the studding and to adhere to the inner face of the block next above. The blocks are made expressly for veneering new 20 or old buildings constructed in the usual way, and no new method of building the framework has to be resorted to in order to use them.

Having thus described our invention, we 25 claim as new and desire to secure by Letters Patent—

1. In a wall construction, the combination of a plurality of parallel supporting members, a series of blocks engaging therewith, each

block being provided with a depression for 30 receiving a portion of a supporting member, and with a groove adjacent to said depression, and a fastening member comprising a triangular piece of sheet metal adapted to be mounted in said groove. 35

2. In a wall construction, the combination of a series of supporting members, a plurality of blocks each having grooves, and fastening devices each consisting of a sheet of metal bent into a **V** shape and provided with a 40 sharpened point; said fastening devices being located with their apexes in said grooves and engaging the supporting members.

3. A building-block having two projec- 45 tions near each end on opposite sides, each projection having a groove.

4. A wall comprising blocks and fastening device for each block, each, consisting of a sheet of metal bent into **V** shape, and pro- 50 vided with a sharpened point.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JAMES NORTHROP SMYTHE.

WALTER SMITH AYRES.

Witnesses:

H. B. STRETTON,

J. N. O'CONNOR.