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J. G. STIDDER.

METHOD OF AND MEANS FOR CONSTRUCTING WALLS, PARTITIONS,
AND THE LIKE.

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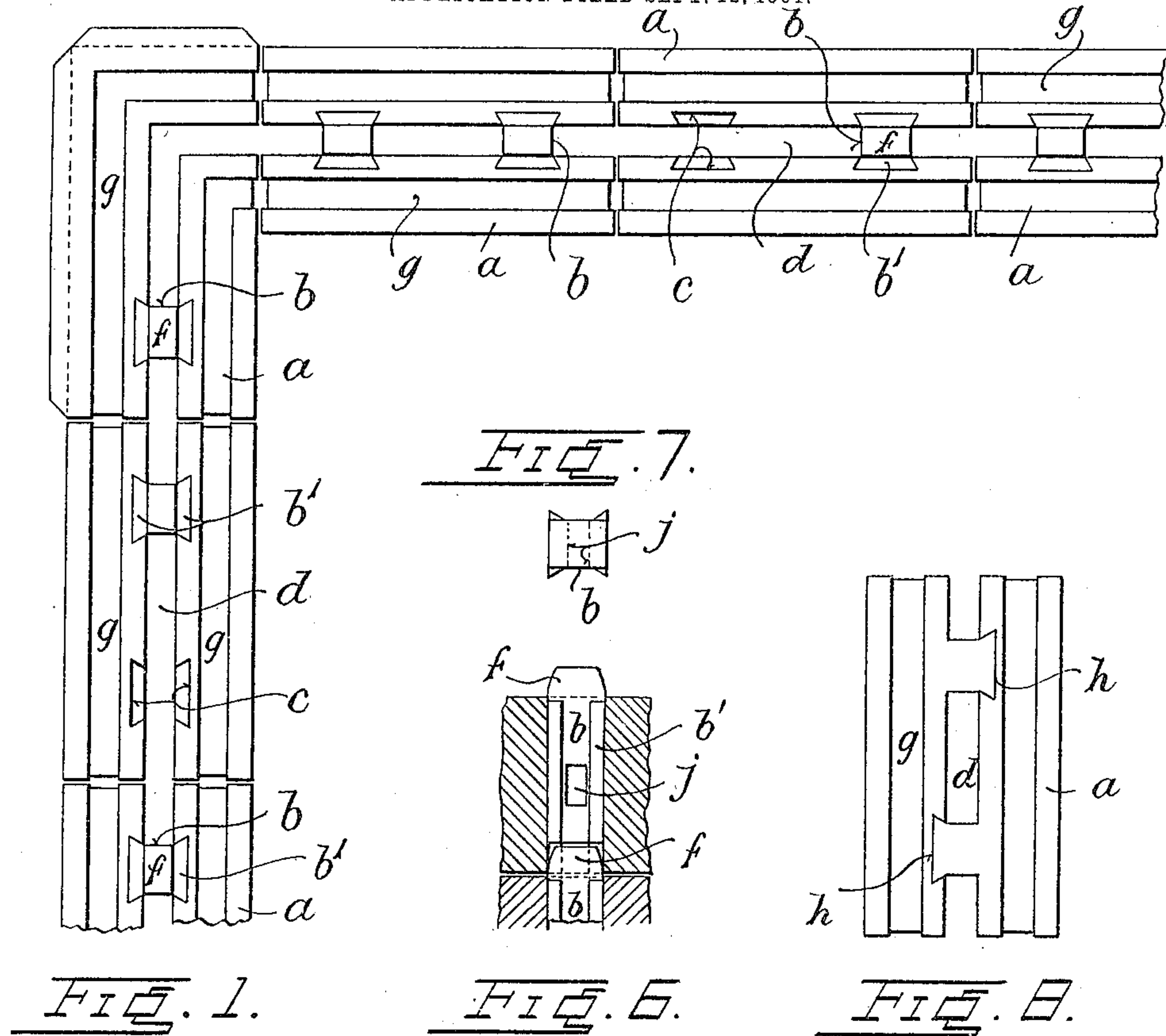


FIG. 1.

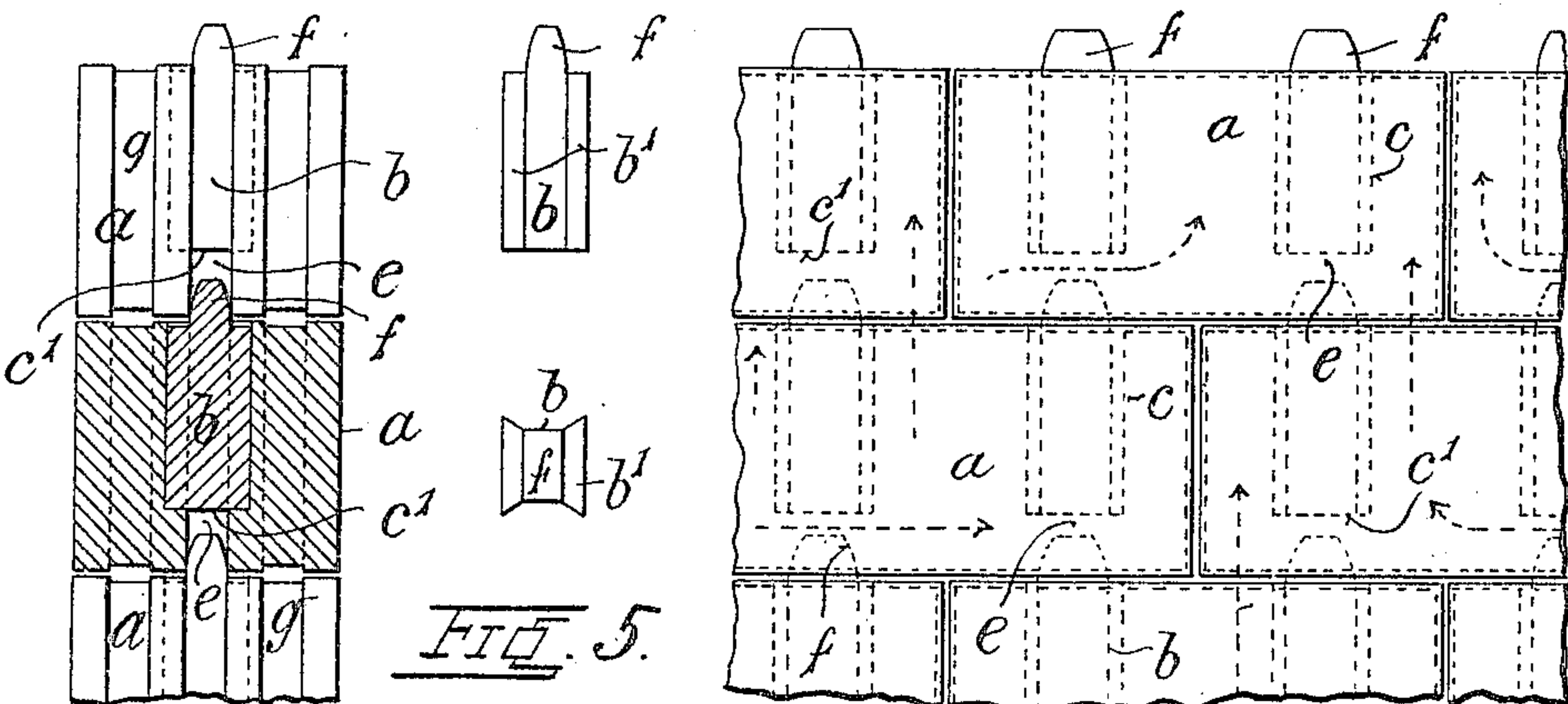
FIG. 6.

FIG. 7.

FIG. 3.

FIG. 4.

FIG. 2.



WITNESSES:
Fred White
Rene Quirine

INVENTOR
James George Stidder,
By his Attorneys
Arthur C. Fraser & Co.

UNITED STATES PATENT OFFICE.

JAMES GEORGE STIDDER, OF BROCKLEY, LONDON, ENGLAND.

METHOD OF AND MEANS FOR CONSTRUCTING WALLS, PARTITIONS, AND THE LIKE.

No. 822,559.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed September 12, 1904. Serial No. 224,170.

To all whom it may concern

Be it known that I, JAMES GEORGE STIDDER, engineer, of 51 St. Margaret's road, Brockley, London, England, have invented a certain new and useful Improved Method of and Means for Constructing Walls, Partitions, and the Like, of which the following is a specification.

This invention relates to the construction of walls, partitions, and the like and to means for use therein.

According to this invention I employ molded blocks so connected by keyed plugs or dowels as to leave vertical and horizontal spaces between the blocks when assembled, which spaces will provide for both vertical and horizontal ventilation throughout the wall or structure. If, however, a solid wall is required, the said spaces may be filled in with grouting or other suitable material. Two or more of the sections or blocks, which are united by the dowels, may be assembled and joined to form a complete block before being placed in position, or the separate sections or blocks may be assembled and connected by the keyed plugs or dowels *in situ*.

The keyways for the plugs are preferably only continued part way down the face of the sections, so that when the plug is in position a horizontal space will be left between the adjacent faces of the blocks, or, if required, the plugs may be formed with a through horizontal aperture or perforation, and in this case the plugs may extend the full depth of the block; but the dovetailed edges or those parts of the plugs which extend into the blocks are not of greater length than the depth of the grooves or keyways in the blocks, so that when assembled no parts project which will interfere with the free longitudinal adjustment of the blocks which are to come next above, as this longitudinal adjustment is essential in practice to a proper laying of the blocks. The plugs may also be made so as to project above the upper faces of the sections or blocks they join into the space between the blocks next above; but such projection must not be of greater width than the space between the blocks, whereby said projection will not interfere with the free longitudinal adjustment of the block which is to come next above and into the space between the section of which the said projection will come.

The blocks or sections and dowels are made with cement, sand, gravel, or other

suitable material by what is known as the "dry-press" or "semiwet" piece-molding or other suitable way, preferably under pressure.

The mold is formed with flaps, slides, or other means for releasing the block which must be slid out, owing to its being formed with the recessed or dovetailed keyway for the dowel.

In the accompanying drawings, which illustrate my invention, Figure 1 is a plan of a portion of a wall. Fig. 2 is a portion of a wall in front elevation, showing the plugs dotted. Fig. 3 is a portion of a wall in end elevation, showing one block and its connecting-dowel in section. Figs. 4 and 5 are respectively elevation and plan of a dowel. Fig. 6 shows a modified form of dowel. Fig. 7 is a plan of said dowel. Fig. 8 shows a modified construction where the dowels are formed in one with the blocks or sections on one side.

a a are the respective sections forming when assembled, together with plugs or dowels *b b*, a complete block with a cavity or ventilating-space *d*.

c c are the dovetailed grooves formed in the adjacent walls of the sections and into which the correspondingly-shaped ends *b' b'* of the plugs are slid. These grooves only extend part way down the sections, so that they form a ledge on which the base of the plug rests, as at *c'*. By this means the parts can be readily and accurately assembled without trouble, so as to leave a horizontal ventilating-space *e*. The upper ends of the plugs are formed with a projecting part or tongue *f*, which fits into the cavity *d* at the under side of the block next above, so as to key the whole together and insure alinement. The tongue *f* is of a width less than the space between the blocks, and the ends *b' b'* of the plugs do not extend beyond the upper face of the sections *a* when the parts are assembled. The blocks or sections are formed on their edges with grooves *g g* for receiving the jointing material.

In a modification shown in Fig. 8 the plugs may be in one with the section on one side and engage the other section by means of a dovetail groove, as at *h*.

Figs. 6 and 7 show how the plugs *b* may be formed with a through aperture *j*, in which case they may, if required, extend downward and rest upon the upper end of the plug beneath, or if they are required to extend to the bottom of the block their ends may be jog-

gled or their situation may be so arranged as to avoid the upwardly-projecting tongue.

The wall is built either by assembling the sections or plugs and placing them as a whole block in position or the separate blocks or dowels may be assembled *in situ*, the grouting being effected by the grooves *g* in the usual manner. When the building is up, the whole structure, including the ceiling, may be ventilated by means of suitable apertures connecting with the cavities in the wall both horizontally and vertically, ventilating or air bricks being fitted where required. If a solid wall is required, the cavities are filled up with grouting or like material.

It will be obvious that any number of sections may be connected by the dowels one to the other to form one complete building-block of any desired dimensions or thickness of wall.

What I claim, and desire to secure by Letters Patent, is—

1. For constructing walls, partitions or the like, a block composed of two slabs, and a plug connecting such slabs, and having a portion extending above the latter, and adapted to engage an adjacent block such portion having less width than the space between such slabs, whereby it may enter between the slabs of an adjacent block.

2. For constructing walls, partitions or the like, a block composed of two slabs, and a plug connecting such slabs, and having a portion extending above the latter, and adapted to engage an adjacent block, said plug having its lower end above the lower face of the block, whereby there is left between such slabs a space extending longitudinally thereof, adapted to receive the projecting end of the plug of an adjoining block.

3. For constructing walls, partitions or the like, a block composed of two slabs, and a plug connecting said slabs and extending above the latter, and adapted to engage an adjacent block, said slabs being formed with oppositely-arranged grooves, and said plug

being adapted to fit within said grooves, the lower end of said plug extending above the lower face of said block a greater distance than the upper end of said plug extends above the upper face thereof, whereby when the blocks are laid up there exists between the adjoining courses a direct horizontal ventilating-passage.

4. For constructing walls, partitions or the like blocks molded with keyed grooves in combination with plugs having keyed edges, said edges being of a length not greater than the length of said recesses so as not to project above the faces of the blades thereof when assembled while the plug is further provided with apertures extending laterally there-through, which form connections between the spaces on either side of said plug.

5. For constructing walls, partitions or the like, a block composed of two slabs, and a plug connecting said slabs, said plug being formed with dovetailed edges, and said slabs having faces formed with opposite recesses adapted to receive said edges, said recesses extending from the tops of said slabs to a point materially above the bottoms thereof, and said plug extending from the lower part of said groove to a point above the top of the block, the portion of said plug extending above said block being reduced in width to less than the distance between said slabs.

6. A wall formed of a series of blocks, each composed of two independently-formed side members, and means for connecting said members having a part extending vertically beyond an edge of said block, said part having less width than the space between such members, whereby it may enter between the members of an adjacent block.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES GEORGE STIDDER.

Witnesses:

REGINALD EATON ELLIS,

WILLIAM MYRTLE VERNON BRAND.