My invention relates to improvements in building blocks which are used in interfitting relationship to build up a wall.

An object of the invention is to provide self-aligning and self-locking building blocks which may be easily cast of concrete, pumice, volcanic ash and other like materials.

Another object of my invention is to provide building blocks with an outer exposed wall facing of a decorative and harder material than used for the rest of the block.

A further object of my invention is to provide in such building blocks a decorative longitudinal groove in the outer exposed face of the block.

A still further object of my invention is to provide a building block with two end and two side vertically extending walls and a transverse vertical wall therein between the two side walls which provides a pair of vertically extending hollow passageways and with one end wall upper portion having a male projection extending outward from the block and with the opposite end wall having a recess therethrough of like size and in alignment with the projection so as to lockingly receive a like projection on an adjacent placed block.

A further object of my invention is to provide in a building block as just above described, a recess in each side wall with the recesses of like size and shape to the end wall recess described and with the recesses extending entirely through the walls, oppositely disposed and wherein these side recesses and their common axes lie in their respective side walls intermediate the transverse wall and the end wall having the recess.

A further object of my invention is to provide in the bottom surfaces of the end and transverse walls of such a block as referred to above, an aligning groove and in the upper surfaces of the walls, aligning projections of like size and shape and positioned directly above the grooves in the bottom surfaces.

Another object of my invention is to provide a building block with two end and two side walls and a transverse wall between the side walls with a male projection on the outer face of one end wall and a recess extending entirely through the other end wall from outer face to inner face and adapted to receive a similar male projection on a similar block joined therewith and with the two side walls having recesses therethrough in like manner to said end wall recess with each recess also being adapted to receive a filler block or a juncture block which is adapted to tie two such blocks together when their recessed walls are brought into abutting relationship.

Still further objects and the entire scope of applicability of the present invention will become apparent from the detailed description given hereinafter; it should be understood, however, that the detailed description and specific examples are given by way of illustration only and, while indicating preferred embodiments of the invention, are not given by way of limitation, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

For a more complete understanding of the nature and scope of my invention, reference can be had to the following detailed description taken in connection with the accompanying drawings wherein like characters refer to similar parts and in which:

Figure 1 is a perspective view of a corner block according to my invention with side wall juncture recesses;

Figure 2 is a perspective view of a regular or intermediate block depicting one side wall faced with a different material and having a decorative groove in the face thereof;

Figure 3 is a half block which may be used to make up or fill up an odd length of wall space and to position a partition block;

Figure 4 is a partition block having sides with recesses for receiving partitions joined normal thereto;

Figure 5 is a plug block to plug off or fill a recess in a block where the recess is not necessary and;

Figure 6 is a juncture plug which is used in the abutting recesses of two blocks placed with their recesses abutting.

The blocks shown in Figures 1, 2 and 4 are each cast in metal or other types of molds of concrete, pumice, volcanic ash, or any other suitable material and will now be described as respects their common features. Each block is cast with two oppositely disposed vertically extending end walls 10 and 11 and two oppositely disposed vertically extending side walls 12 and 13, integrally joined with the end walls 10 and 11. Each of the blocks in Figures 1, 2 and 3 is provided with a vertically disposed transverse wall 14 extending between and integral with the side walls 12 and 13, whereby two vertically extending hollow passageways are formed in each block. All of the blocks have the top and the bottoms of their walls horizontally disposed and lying in a horizontal plane common top and a horizontal plane common bottom.

The block in Figure 1 is a corner block, its end
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If has formed integral therewith, as does the other blocks, a male projection 5. This projection 5 has its top 16 lying in the common horizontal plane containing the tops of the walls; it has vertically disposed sides 17 which diverge outwardly from the outer face of the wall 11 so as to form a dove-tailed shaped projection; and its bottom 18 lies a broad projection thereto, as shown in Figure 4, extends through the block approximately midway between the top and bottom of the walls of this corner. This corner block may have joined therewith a wall extending normally to the wall onto which it is joined. There is in Figure 4, extends through the block approximately midway between the top and bottom of the walls of this corner. This corner block may have joined therewith a wall extending normally to the wall onto which it is joined. There is

In the positions shown these grooves 28 and projections 27 lie along the center line of the block intermediate the planes of the side walls 12 and 13.

In Figure 2 there is shown as a feature of my blocks, a facing 25 on the outer surface of side wall 13. This facing may be of decorative material other than the horizontal plane "X" which lies along the side wall, join in the bottom of the block and the spacer, or else, it can be of other useful shapes so long as they will interfit on adjacent blocks placed above or below so as to line up the blocks forming the wall. In the positions shown these grooves 28 and projections 27 lie along the center line of the block intermediate the planes of the side walls 12 and 13.

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Also in the block in Figure 2 there is a recess 20 in the facing 25 formed in the facing 25 a decorative groove 26 which extends lengthwise of the face and parallel to the top and bottom surfaces of the block. This can be done by slipping into the mold, thru slits, an article of a desired shape and size and then forming the side walls of the block. One groove 26 and a projection 27 are formed in the wall 11, as in wall 11, of the block in Figure 2 which is described above. This half block in Figure 3 may be used to vary the length of a course of blocks so as to make up an odd length to receive in the course of blocks of the partition block shown in Figure 4 which will presently be described.

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Referring to Figure 4 there is shown a partition receiving block accounting to my invention. This block is similar to the end block in Figure 1 as to its general construction. The groove 26 and a projection 27 are formed in the wall 11, as in wall 11, of the block in Figure 2 which is described above. This half block in Figure 3 may be used to vary the length of a course of blocks so as to make up an odd length to receive in the course of blocks of the partition block shown in Figure 4 which will presently be described.

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provide for tightly interlocking the blocks and centering grooves and projections for lining up the blocks to make a plumb wall.

In the claim:

A building block comprising a pair of oppositely disposed vertically extending side walls and a pair of oppositely disposed vertically extending end walls integral with the adjacent ends of said side walls, each of said walls so terminating in horizontal top and bottom surfaces, a transverse vertical wall extending between and integral with said side walls whereby a pair of vertically extending passageways are provided in said block, one of said end walls having an integral projection on the outer face thereof bounded by a top, a bottom, an end vertical face and two vertically extending sides with its top in horizontal alignment with the horizontal top surface of said end wall and its bottom surface disposed in a horizontal plane extending through said block and lying approximately midway the distance between the horizontal top and bottom surfaces of the end and side walls, said vertical sides of the projection diverging outwardly so as to provide a dovetail shaped projection, the other of said end walls having a recess extending down from the plane of the top surface of the wall to a horizontal bottom lying in said horizontal plane containing the bottom of said projection and said recess extending entirely through that wall from a plane containing the outer face to a plane containing the inner face with oppositely disposed vertical sides diverging from each other as they extend inward from the plane containing the outer face of their containing wall whereby a dovetail shaped recess is provided of like size and shape to said male projection and lying in alignment with said projection adapted to receive a like male connecting projection on a similar second block when said second block is slid into place so that its end wall having the male projection abuts the end wall of said first block having said recess, each of said side walls upper portions having oppositely disposed aligned recesses of like size, dovetail shape and use as said recess in said end wall and extending down from a plane containing the top of said side walls to a horizontal bottom lying in said horizontal plane containing the bottom of said projection and extending entirely through their respective walls from a plane containing the outer face to a plane containing the inner face of said side walls and with these recesses in said side walls lying in portions of said side walls intermediate said transverse wall and an end wall of said block.

B. L. TATUM.

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