

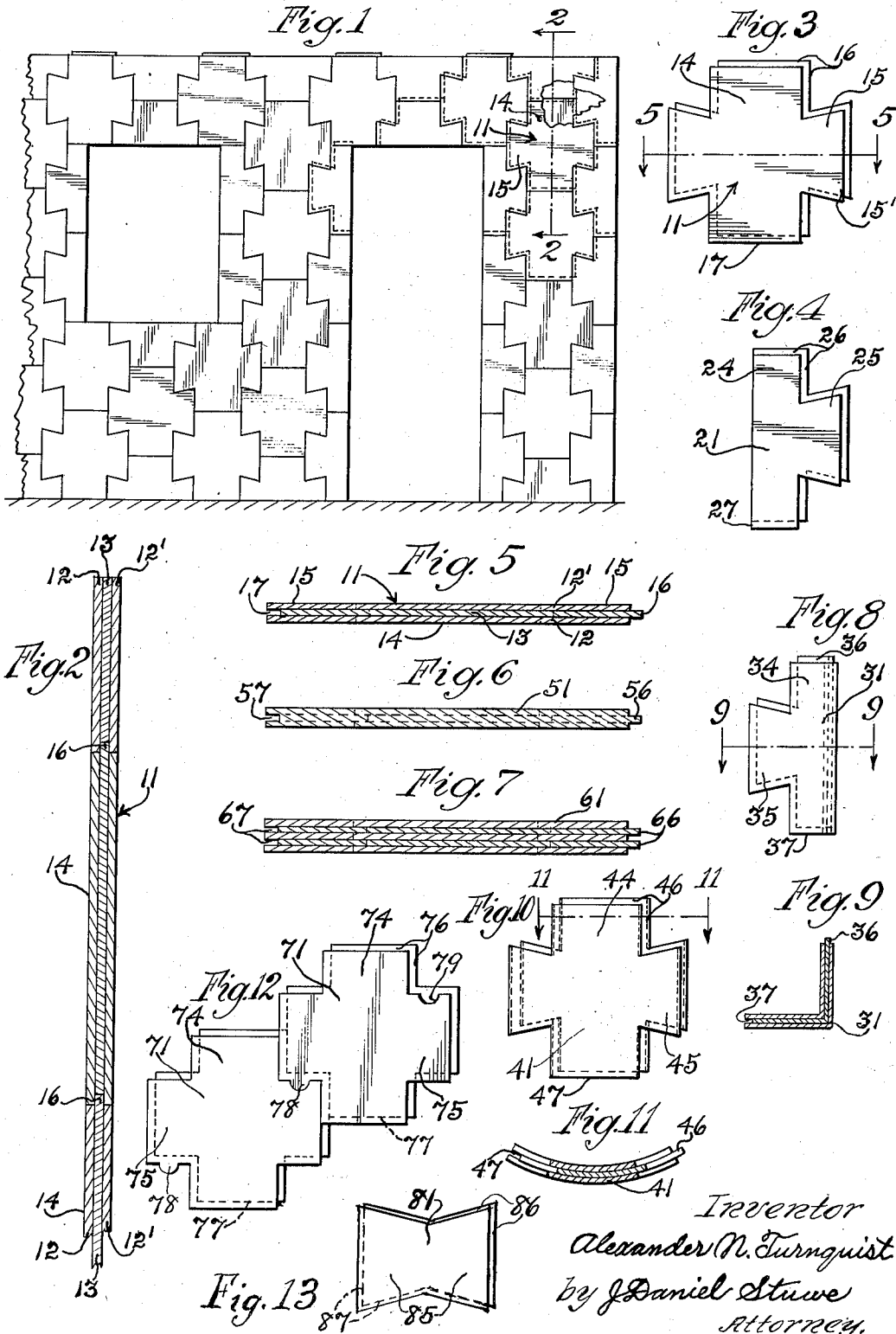
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BUILDING BLOCK

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BUILDING BLOCK

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2 Claims. (Cl. 72-25)

This invention relates to improvements in building blocks.

One of the main objects of this invention is to provide a form of building block which is arranged so that a group of such blocks can be easily set in position for building a wall, a roof, and the like, and the blocks will interengage in such a manner as to provide a complete, unitary and air tight construction, the blocks being held securely together without any additional fastening means.

A further object of this invention is to provide a set of relatively thin or slab-like building blocks which are adapted to be set upright in building a wall, or in forming the outside finishing layer of a wall or the like, and which have interengaging means provided on their edges, so that the blocks can be readily pressed down in position and will then be held securely together, to prevent relative movement between the blocks in a direction outwardly of the wall and likewise longitudinally of the wall.

A more specific object of this invention is to provide such a building block which can be readily set in place and wherein the blocks are firmly held together, preferably by the use of interengaging tongue and groove means on their edges, serving to form an air tight wall and to prevent relative movement between the blocks transversely thereof, and which have anchoring means to prevent the blocks from separating laterally from each other.

These and various other objects and advantages are attained with this invention, as will become apparent from the following description, taken in connection with the accompanying drawing wherein this invention is shown in a few of its various forms of construction, it being apparent that various other forms and modifications may be resorted to for carrying out the objects and purposes of this invention.

In the drawing:

Fig. 1 is an elevational view of a wall portion built from a group of blocks embodying this invention in its preferred form of construction.

Fig. 2 is an enlarged vertical sectional view thereof, taken on line 2-2 of Fig. 1.

Fig. 3 is an elevational view of a complete block in the preferred form of construction.

Fig. 4 shows a half block, used in connection with the complete blocks, for finishing the top and bottom and edge parts of a wall, as indicated in Fig. 1.

Fig. 5 is an enlarged sectional view thru the block, taken on line 5-5 of Fig. 3, showing a block composed of three superposed layers.

Fig. 6 is a sectional view of another form of block, which is made solid as by casting or molding it.

Fig. 7 is a sectional view of a further modified form of block, which is composed of a number of layers and is provided with a plurality of tongues and grooves on its edges.

Fig. 8 is a view of an angular block adapted for use at the corners and edges of a building.

Fig. 9 is a sectional view, taken on line 9-9 of Fig. 8.

Fig. 10 shows a curved block adapted for use on silos, catch-basins, and the like.

Fig. 11 is a sectional view, taken on line 11-11 of Fig. 10.

Fig. 12 is an elevational view of two interconnected blocks showing a modified form of anchoring means thereon.

Fig. 13 discloses another modified form, of two flaring wings.

Briefly, these blocks are shaped so as to be easily set in place in building the walls and the roof of a house, garage, silo, and the like. They are provided with interengaging means on the edges to form a firm and air-tight connection. They also have anchoring means, such as flaring wings, or lugs and notches, and the like, for preventing separation lengthwise of the block; and these wings diverge outwardly from a central stem as shown in Fig. 3, or from a central axis, as shown in Fig. 13, thereby tending to draw the blocks together.

The blocks may be constructed with a plurality of layers secured together, as best shown in Figs. 5 and 7, and they may be made solid, as shown in Fig. 6, by casting or molding the same. They may consist of tile, metal, plasterboard, Celotex, and the like.

In the form illustrated in Figs. 1 to 5 inclusive, the block 11 is relatively thin or slab-like, and is constructed from three layers, two outer layers 12 and 12' and an intermediate layer 13 therebetween. The block includes a main bar or stem portion 14 having its side edges substantially parallel; and having wings 15 extending laterally in opposite directions from the stem.

The blocks are provided with tongue means 16 and groove means 17 on opposite edges. For this purpose the layers 12, 12', and 13 are preferably made substantially alike in shape and size and are secured together so that the intermediate layer 13 overlaps or projects beyond the outer layers 12 and 12', around one-half of the edge of the block; while around the other half of the edge of

the block the outer layers 12 and 12' overlap the intermediate layer 13, as illustrated.

The block is then placed so the tongue means is on the upper edge of the block for receiving the groove means on the lower edge of the succeeding block, being thus adapted to shed moisture outwardly of the wall.

In this form of construction the wings 15 are flared outwardly to be broadest at the outer end 15', being substantially dove-tailed in shape, and thereby provide anchoring means to prevent separation of the blocks laterally of the wall, the blocks being positioned upright and joined edge to edge, as indicated in Fig. 1.

As illustrated in Fig. 4, I also provide half blocks 21 including a main stem portion 24 from which an outwardly flaring wing 25 extends laterally, the block includes upper tongue means 26 and lower groove means 27, as in the preceding form. This block is adapted for use at the edges of the wall and at the door frame, and the like.

For use at the corners of a building these blocks are also made in angular form, as indicated by block 31 in Figs. 8 and 9. It may be constructed substantially like the form shown in Fig. 3, and includes a stem 34 and outwardly flaring wings 35 extending laterally therefrom. It is bent at the longitudinal center line of stem 34 to provide the desired angle at the corner of a building. This block, like the preceding ones, has tongue means 36 at its upper end and at one side, and has groove means 37 at the lower end and at the side opposite to the tongue means, to cooperate with corresponding groove and tongue means on the adjoining blocks.

As illustrated in Figs. 10 and 11 the blocks will also be made curved for constructing curved walls, in building silos, catch basins and the like. This block 41 includes a main stem 44 and outwardly flaring wings 45 extending in opposite directions therefrom, the block being provided with upper tongue means 46 and lower groove means 47, as in the above described blocks.

My improved block may consist of several layers united, as stated above, and may also be made of an integral construction, as by casting or molding it, as indicated by block 51 in Fig. 6. Such block is provided with tongue means 56 and groove means 57 at its opposite edges, in the manner described above.

As indicated by block 61 in Fig. 7, the block may be provided with a plurality of tongues 66 at one part and a plurality of grooves 67 at the opposite part. This may be accomplished by constructing the block from a plurality of layers and having the alternating layers overlap or project at the opposite edges of the block, to provide the tongue means and groove means, as indicated.

Fig. 12 illustrates another modified form of block. Herein the block 71 includes the main stem 74 which is preferably positioned vertically in the wall and includes wings 75 extending laterally in opposite directions from the stem. Tongue means 76 are provided half way around the edge of the block, and groove means 77 around the other half of the block, like in the preceding form. In this form the wings 75, as well as the stem 74, have their opposite sides arranged parallel; but different anchoring means is provided. Herein the anchoring means includes a lug 78 provided on the edge of one part of the block, and a notch 79 provided in the edge on the opposite part of the block for receiving the lug of an adjoining block.

In Fig. 13 a further modified form of block 81 is shown. It consists of two flaring wings 85 which diverge from each other or from a vertical central axis, instead of diverging from a central body or stem, as in the preceding forms. It also has tongue means 86 provided on its edge, half way around the block, and groove means 87 around the opposite half, to provide for a firm interlocking connection between the blocks.

My improved block, in either of its forms of construction, can easily be set in position in constructing a wall and the like, and, due to the dove-tailed or flaring side wings, the blocks can be readily pressed down and slid tightly together into firm interlocking position with the blocks of the preceding row. The blocks are set in position to have the tongue means placed upwardly in the construction, in order to shed the rain and moisture outwardly. The dove-tailed or flaring arrangement of the wings serves to slide the blocks tightly together and also serves as anchoring means for preventing separation of the blocks in the direction longitudinally of the wall; and the interengaging tongue and groove means prevents separation of the blocks transversely thereof or outwardly of the wall, and also provides an airtight and weather-tight construction. This interengaging and interlocking arrangement also produces a firm connection between the blocks and a relatively rigid wall structure, without the use of any special securing means for holding the blocks together, and very little or no special frame means or bracing means is required with this improved block, in the small structure for which it is intended.

When the blocks are of metal or wood, they are usually painted, and the paint will serve also as sealing means for fully sealing any possible crevices that may exist at the junctures of the blocks. When the blocks are of tile or cement, then any liquid coloring or coating applied to the surface thereof will likewise serve as sealing means, or the joining edges of the blocks may have a cementitious grout applied thereto to provide a positively sealed connection.

I claim:

1. A slab-like building block consisting of a plurality of superposed layers of material, one layer of which protrudes beyond the adjoining layer continuously for one-half way around the edge of the block, and recedes continuously for the other half way, thereby providing tongue means on half the perimeter and groove means on the other half of the perimeter of the block to interengage with corresponding groove and tongue means on the perimeter of the adjoining blocks to prevent relative movement in one direction, and flaring means on said blocks including their tongue and groove means to prevent separation thereof in another direction.

2. A slab-like building block comprising a main central stem portion, being adapted to be placed upright and to be readily set down in position upon similar blocks in a construction, dove-tail wings extending laterally in opposite directions from said stem adapted to hold the blocks against separation laterally, and tongue and groove means extending entirely around the edges of the wings and stem, to interengage with and to closely fit corresponding groove and tongue means extending around the edges of similar adjoining blocks, whereby to secure the blocks together and to provide a rigid and substantially airtight construction.

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