April 17, 1934. I. F. REED 1,955,515

BUILDING CONSTRUCTION

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Fig. 1.

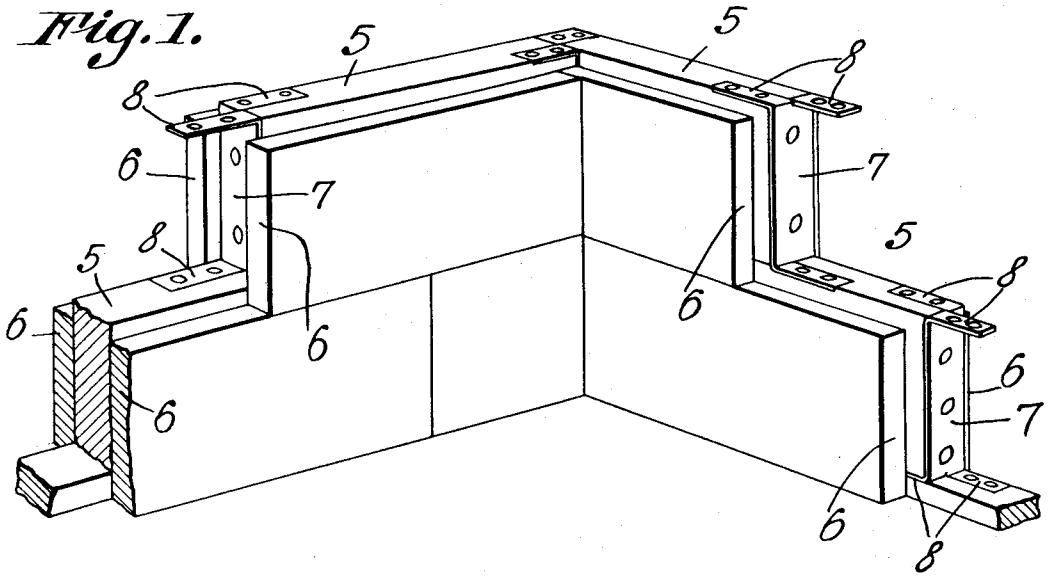


Fig. 2.

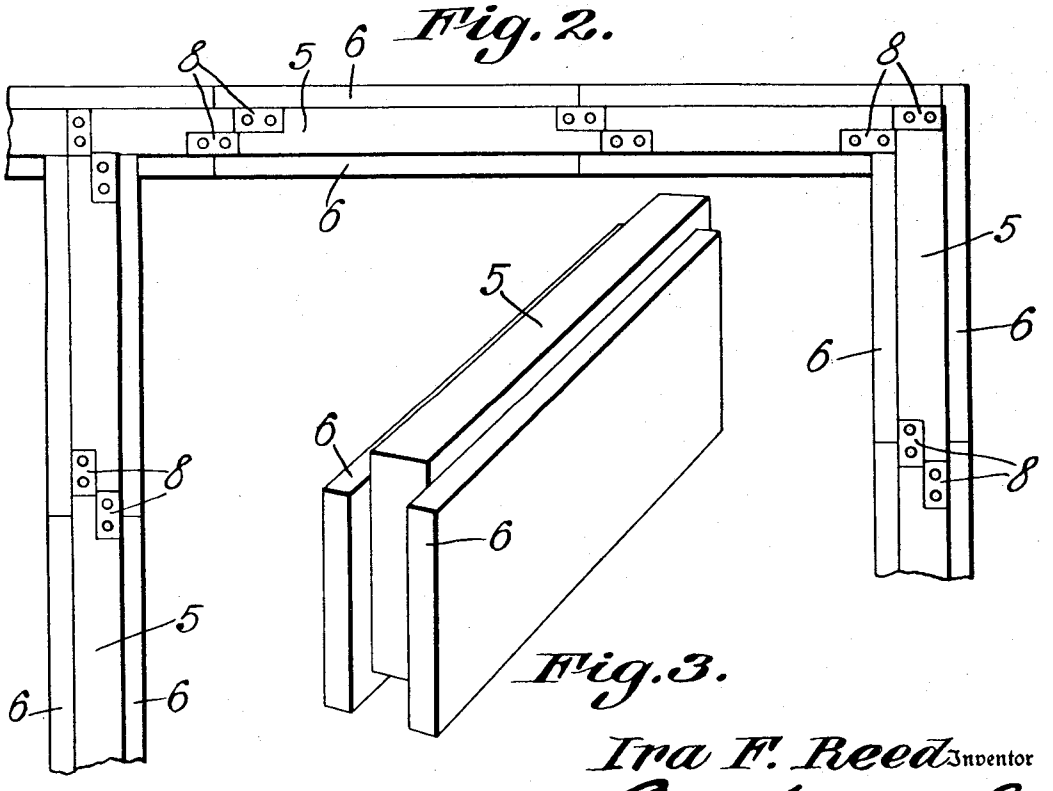


Fig. 3.

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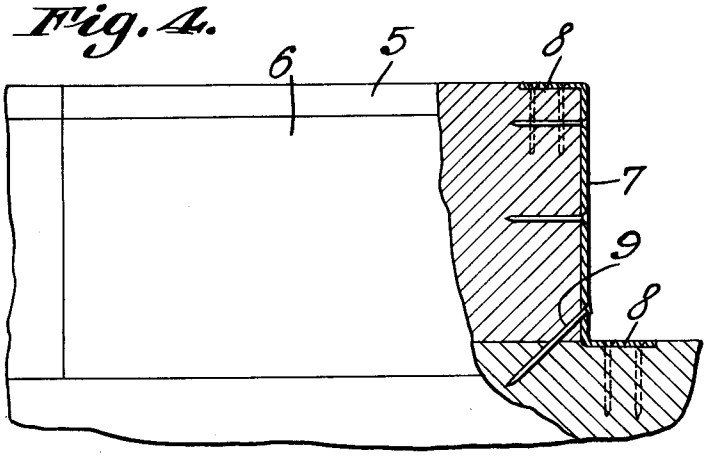
Attorneys.

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BUILDING CONSTRUCTION

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Fig. 4.



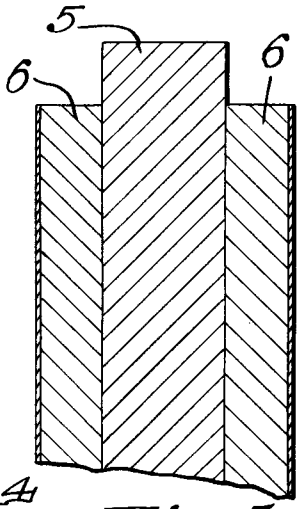
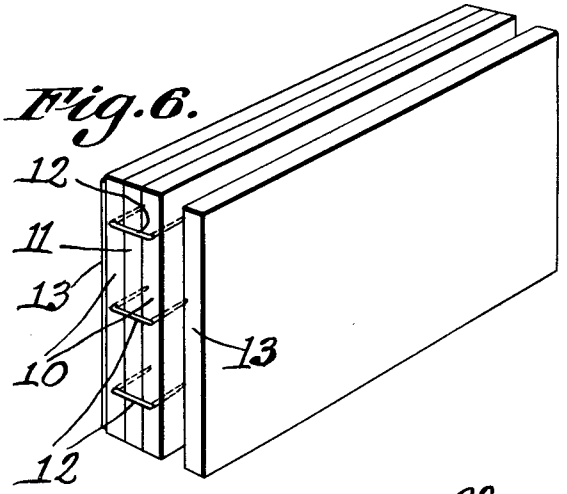


Fig. 5.

Fig. 6.



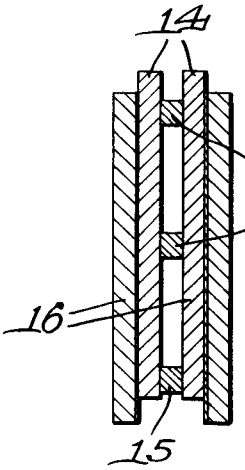


Fig. 7.

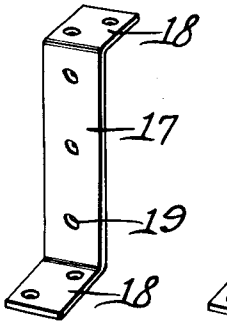


Fig. 8.

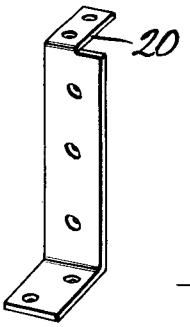


Fig. 9.

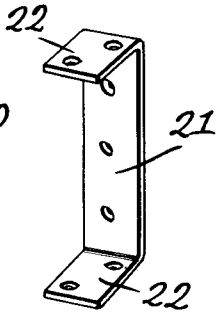


Fig. 10.

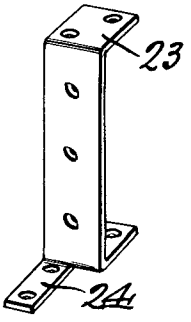


Fig. 11.

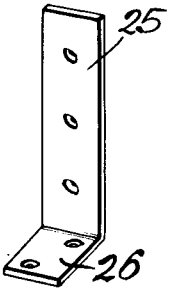


Fig. 12.

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UNITED STATES PATENT OFFICE

1,955,515

BUILDING CONSTRUCTION

Ira F. Reed, Johnstown, Pa.

Application August 31, 1932, Serial No. 631,241

2 Claims. (Cl. 20—4)

This invention relates to building construction, and aims to provide novel means whereby blocks constructed of composition material may be readily and easily bonded together in such a way as to provide a strong and durable wall structure.

Another important object of the invention is to provide a building structure embodying slabs constructed of cork-board, wood or the like material, the slabs being secured together to provide an insulated structure, insulated against heat, cold and moisture.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 illustrates a corner of a building structure, constructed in accordance with the invention.

Figure 2 is a fragmental plan view of the walls of a building constructed in accordance with the invention.

Figure 3 is a perspective view of one of the blocks.

Figure 4 is an elevational view partly broken away, illustrating the manner of securing adjacent blocks together, in the formation of a wall.

Figure 5 is a fragmental sectional view through one of the blocks.

Figure 6 is a perspective view of a modified form of the invention.

Figure 7 is a vertical sectional view through a modified form of building block.

Figure 8 is a perspective view of one of the bonding plates.

Figure 9 is a perspective view of another form of bonding plate.

Figure 10 is a further modified form of bonding plate.

Figure 11 is another form of bonding plate.

Figure 12 is a still further modified form of bonding plate.

Referring to the drawings in detail, the section of the wall shown by Figure 1 of the drawings, comprises a plurality of connected blocks, each block comprising an inner section 5, constructed of wood or other suitable fibrous material.

Arranged on opposite sides of the central section, are slabs 6, constructed preferably of cork-board, the central section 5 and slab 6 being of the same widths and lengths. The thicknesses of the central section and slab may vary, according to the construction of the wall to be built with the blocks.

In the construction of the blocks they may be made in any desired number of plys, nailed or secured together with asphalt or the like, which will not only act as a medium for securing the plys together, but will insulate the blocks against heat, cold and moisture.

The slabs 6 are secured to the central section 5 of each block in such a way that one of the longitudinal edges of the central section, will extend beyond the adjacent longitudinal edges of the slabs, and one end of the central section will extend beyond certain of the ends of the slabs providing a groove along one of the longitudinal edges of the block, and a groove at one end of the block.

From the foregoing it will be obvious that building blocks constructed in this manner provide what might be termed a tongue and groove construction, so that in the construction of a wall, of a building, the blocks will be interlocked at their sides and ends.

The bonding plates form an important feature of the invention, and as shown by Figure 1 of the drawings, the preferred form of bonding plate, which is indicated by the reference character 7, comprises a length of sheet metal material, the ends thereof being split.

The ends of the plates are bent laterally in opposite directions, providing extensions 8 that are designed to contact with the upper and lower edges of adjacent blocks, where they are secured thereto, fastening the blocks together.

These bonding plates are preferably secured to the central sections of the blocks, which are counter-sunk to receive the extensions, so that the adjacent edges of the blocks, in the construction of a wall, will lie flush.

Suitable securing members such as nails are passed through openings in the plates, securing the plates to the blocks.

Securing nails 9 are also provided, and as shown are disposed at oblique angles with respect to the bonding plates, with the result that the nails extend through adjacent blocks, providing a further securing means for the blocks.

As shown by Figure 6 of the drawings, the building blocks are made up of a central section constructed of lateral wooden slabs 10, and a central cork board slab 11, the slabs being firmly

held together by means of the staples 12. To the outer surface of the wooden slabs, are secured slabs 13 constructed of cork board. To further secure the slabs together, the contacting surfaces of the slabs are supplied with cement, asphalt or other suitable securing medium having insulating qualities.

In the formation of the blocks in accordance with this method, the slabs are arranged in such a way that tongues and grooves are provided, for interlocking adjacent blocks, in the construction of a building.

In Figure 7, the building block embodies slabs 14, which are held in spaced relation by means of the bars 15, the outer surfaces of the slabs 14 being coated with cement or asphalt, to receive the outer slabs 16, which are constructed of cork-board or similar fibrous material.

The plate shown by Figure 8 of the drawings comprises a main portion 17 and end portions 18 extended in opposite directions. Openings 19 are formed in the plate, and afford means whereby securing nails may be passed through the plates to secure them in position.

The plate shown by Figure 9 of the drawings, has one of its laterally extended end portions formed with a cut away portion 20 so that it may fit properly around a suitable beam or offset portion of a partition.

The bonding plate illustrated by Figure 10 includes a main section 21 and lateral end portions 22, disposed in parallel spaced relation with each other.

As shown by Figure 11 the bonding plate is formed with parallel laterally extended end portions 23, and a rearwardly extended portion 24 extended in a direction opposite to the end portions 23.

Figure 12 illustrates a still further form of bonding plate, and this form comprises a main portion 25 and a laterally extended lower end portion 26. These bonding plates are designed for use in connection with building blocks embodying this invention, and provide means for securing the blocks together in the formation of partitions.

Building blocks of this character may be treated with asphalt, or other insulating material, coating the outer surface of the blocks, rendering them water and fire proof, and at the same time increasing the life of the blocks.

It is also within the scope of the invention to construct the slabs 5 of fire brick material in such a way that the sections 6 may be readily sawed and secured to the central sections 5 by means of nails or similar securing devices. In the use of fire brick material the fire brick slabs are treated with a moisture proof material such as asphalt or the like.

It might be further stated that it is also contemplated to employ slabs of slate material which are secured to the slabs 6 by means of asphalt or similar material.

Having thus described the invention what is claimed is:

1. A wall construction comprising blocks laid one upon the other, bonding plates adapted to secure the blocks together, each bonding plate embodying a length of sheet metal material split at its ends providing forwardly and rearwardly disposed extensions, said bonding plates being secured at the ends of the blocks, the forwardly and rearwardly disposed extensions being secured to the upper and lower edges of the ends of adjacent blocks, securing the blocks together.

2. A wall construction comprising blocks laid one upon the other, bonding plates, each of said bonding plates embodying a length of sheet metal material, the sheet metal material, at its ends, being split, the split portions of the plate being extended laterally in opposite directions, said bonding plates being secured to the ends of the blocks, the forwardly and rearwardly extended portions resting on the upper and lower surfaces of adjacent blocks, and means for securing the bonding plates to the blocks, to hold the blocks together.

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