June 5, 1923. 1,457,454

F. PATEE

BUILDING BLOCK

Filed June 21, 1920

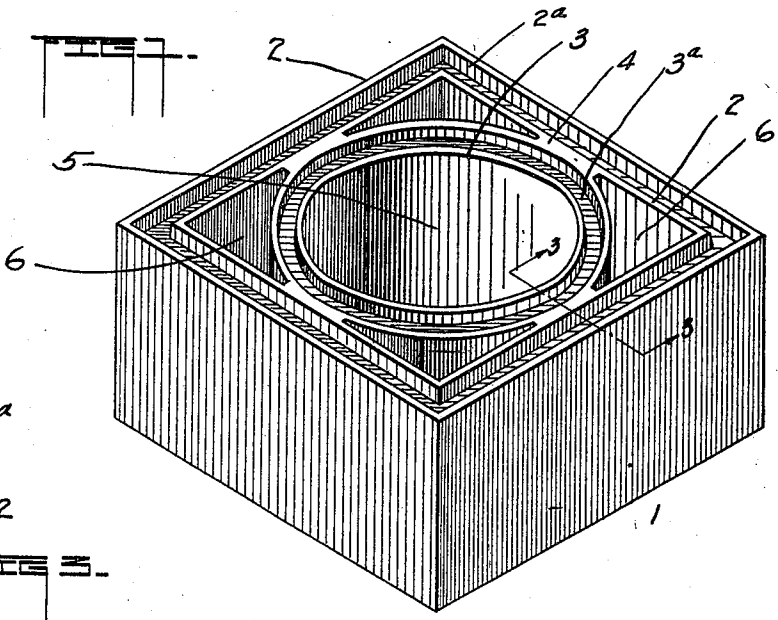


FIG 1.

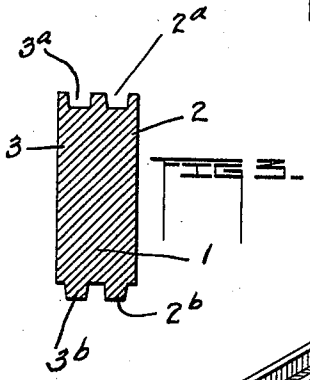


FIG 3.

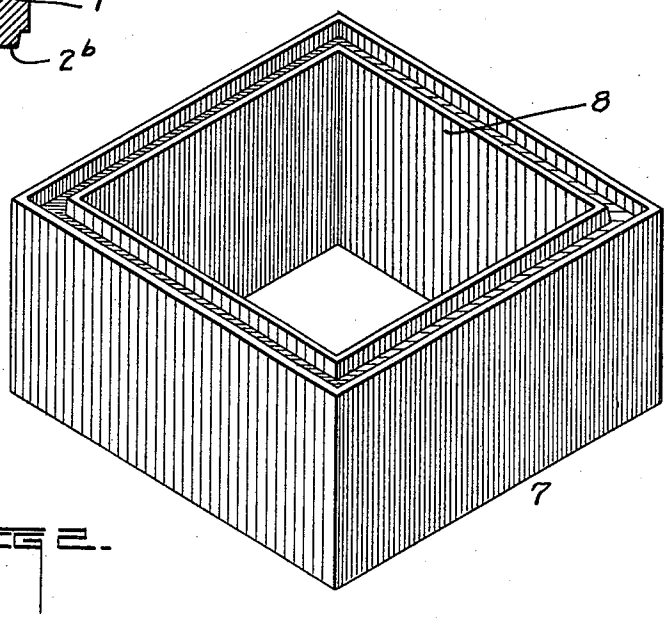


FIG 2.

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Patented June 5, 1923. 1,457,454

UNITED STATES PATENT OFFICE.

FRED PATEE, OF CASPER, WYOMING.

BUILDING BLOCK.

Application filed June 21, 1920. Serial No. 390,330.

To all whom it may concern:

Be it known that I, FRED PATEE, a citizen of the United States, a resident of Casper, in the State of Wyoming, have invented new and useful Improvements in Building Blocks, of which the following is a specification.

This invention has reference to building blocks.

One object of the invention is to provide a building block of asbestos.

A further object of the invention is to provide an asbestos chimney block, to insure that the chimney, when built, shall be absolutely fire and weather proof, and which will not expand or contract.

The invention has for a further object to provide an asbestos chimney block for use in dwellings, and which is constructed with a preferably round, smooth smoke chamber in the center of the block, and with ventilating chambers in the corners. Such ventilating chambers being used to carry off the cold air from the floor of the room or to carry off smoke, fumes and foul air from the top of the room just under the ceiling.

The invention has for a still further object to provide an asbestos block which may be used as a lining for brick chimneys, each block being made with tongue and groove joints, insuring rigid construction.

That the invention may be more fully understood, reference is had to the accompanying drawings forming a part of this description, in which is illustrated a preferred embodiment of the invention, and wherein,—

Figure 1 is a perspective view of a block having the center smoke opening and corner ventilating openings;

Figure 2 is a view similar to Figure 1, except that the block has one opening and is such a block as would be used as a lining for brick chimneys, and

Figure 3 is a cross-section on the line 3—3 of Figure 1;

Like characters of reference denote corresponding parts throughout the figures.

The contour of the block is preferably rectangular in outline and of suitable depth.

For convenience, 1 designates the block formed of the rectangular outer wall 2 and the circular inner wall 3 joined to the outer wall at points 4 to produce an integral element. The wall 3 produces the central round, smooth smoke chamber 5, and 6 are corner ventilating openings formed by the circular wall 3, and the outer wall 2, and are useful as vents to carry off cold air from the floor of a room, or to carry off smoke, fumes and foul air from the top of a room just under a ceiling. It is, of course, understood when a plurality of blocks have been laid one upon the other to build up a chimney, openings would have to be made communicating with the central opening 5 and corner openings 6.

When forming the blocks 1, I prefer to provide one face with grooves 2^a and 3^a in one face of the walls 2 and 3, respectively, and with tongues 2^b and 3^b in the opposite face of the walls 2 and 3 respectively. These tongues and grooves, respectively, when the blocks are laid one upon the other, insure tight joints and a rigid construction.

In Figure 2, I have illustrated a block 7 in all respects similar to Figure 1, except that it comprises only the rectangular wall 8 formed with the one central smoke opening. This block is designed for the building of an asbestos flue lining for brick chimneys, so as to produce an absolutely fire proof chimney.

The materials employed in the construction of these blocks include asbestos aggregate, 5 to 7 parts; Portland cement, 1 part; hydrated lime 10 to 20 per cent of weight of the cement, the same mixed with water, the amount of which will vary, depending on the amount of moisture in the asbestos.

No claim is herein made to an asbestos block, the component parts of which are asbestos aggregate, Portland cement, hydrated lime and water in the amounts stated, as this subject matter forms the basis of a companion application Serial No. 390,331, filed June 21, 1920, patented May 30, 1922, No. 1,418,160.

What I claim is:

1. A building block having a wall surrounding a central opening therethrough, the upper surface of said wall comprising spaced upstanding flanges providing a groove therebetween, one flange being integral with the outer surface of the wall; the lower surface of said wall having a depending flange complementary to the groove on its upper surface, whereby blocks of like construction may be interlocked in tiers.

2. A building block including an outer

rectangular wall and an inner circular wall integral therewith, said walls being united mediate the ends of the sides of said block to provide corner openings through said block, the upper surfaces of said rectangular and circular walls provided with grooves corresponding in contour to the walls, and the lower surfaces of said rectangular and circular walls provided with depending flanges complementary to said grooves, whereby an interlocking relation may be made with corresponding blocks when erected in tiers.

In witness whereof, I have hereunto affixed my hand and seal this 12th day of May, 1920.

FRED PATEE.