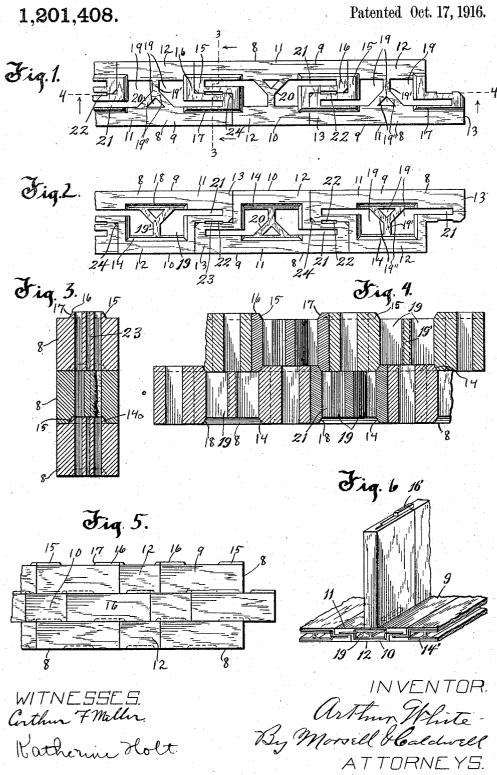
A. WHITE.
BUILDING BLOCK.
APPLICATION FILED JAN. 9, 1913.



## UNITED STATES PATENT OFFICE.

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## BUILDING-BLOCK.

1,201,408.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I. ARTHUR WHITE, a citizen of the United States, and resident of Sheboygan Falls, in the county of Sheboygan and State of Wisconsin, have invented new and useful Improvements in Building-Blocks, of which the following is a description, reference being had to the accompanying drawings, which are a part of 10 this specification.

This invention relates to improvements in building blocks formed of cementitious

material.

It is one of the objects of the present in-15 vention to provide a building block of the maximum strength with the minimum amount of material, and which is of such shape as to form a wall of great strength.

A further object of the invention is to

20 provide a building block so shaped that a wall constructed of a number of similar shaped blocks will have the appearance of being formed of blocks of different sizes thereby relieving the monotony of walls formed in the ordinary manner.

A further object of the invention is to

provide building blocks which interlock both endwise and sidewise with each other

when a wall is built therefrom.

A further object of the invention is to provide building blocks with air spaces so arranged that in a wall constructed there-from an imaginary line extended through the wall either transversely or obliquely 85 would intersect one or more of the said air

A further object of the invention is to provide building blocks in which the interlocking means also serves to positively aline the blocks vertically in a manner to break the joints in a line exactly in the center of the adjacent upper and lower blocks.

A further object of the invention is to provide a building block or slab which is 45 also adapted to be used in building floors. roofs, ceilings or side walls of a building.

With the above and other objects in view, the invention consists of the improved build. ing block and its parts and combinations 50 as set forth in the claims, and all equivalents thereof:

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views: Figure 1 is

55 a top view of several of the blocks assembled together. Fig. 2 is an inverted bottom view

thereof; Fig. 3 is a transverse sectional view of the blocks taken on line 3-3 of Fig. 1; Fig. 4 is a vertical longitudinal sectional view of several of the building blocks taken 60 on line 4-4 of Fig. 1; Fig. 5 is a side view of a portion of a wall constructed of the improved building blocks; and Fig. 6 is a perspective view of a floor and a partition wall formed of the improved blocks.

Referring to the drawing the numeral 8 indicates the improved building block or slab which is formed of a cementitious material and preferably approximates a Tshape and is adapted to lie upon its side 70 edges when assembled in a vertically extending wall, the long face 9 and the short face 10 forming the outer and inner surfaces of the wall. Each block is formed with a body portion 11, having a stem 12 projecting 75 medially, laterally from one vertical wall of the block to form the short face 10 of the block. The stem 12 projects from the body portion one half the total width of the block and is of a length one half the total 80 length of the block to provide for the blocks overlapping one another lengthwise, so that when the blocks are arranged with the long and short faces of adjacent blocks extending to the opposite surfaces of the wall they 85 will form a smooth even exterior wall surface of the width of one block. As the stem is of a length one half the total length of the block, the end portions 13 of the body portion 11 are each necessarily one half the 90 length of the stem or one quarter the total length of the block so that when assembled together each end of the block will be overlapped by one quarter of the length of the adjacent end block with the end portions of 95 each block abutting against the stem portions of the adjacent blocks.

The lower medial portion of each block is provided with a rectangular locking recess or pocket 14 to accommodate the ribs 100 15 projecting from the upper surfaces of These ribs are formed on the the blocks. upper surface of the outer ends and on the stem portions of each block and when two of the blocks are assembled together the ribs 105 on adjacent end portions of the two blocks will combine to form a rectangular projection or rib 16 which will extend into and fit the locking recess or pocket 14 of a block placed on top of the adjacent blocks, the 110 upper block being positioned to break the joint of the adjacent blocks below. This

construction provides a strong longitudinal and lateral interlocking bond for the blocks and also serves to aline the blocks with relation to each other. The side edges 17 of the 5 ribs and the side walls 18 of the recessed portions of the blocks are beveled to permit the

ribs to easily enter the recesses.

Each block is formed with three vertically extending angular air spaces or flues 19

10 which are separated by an angular web portion 20 forming part of the blocks. The web portions 20 are Y-shaped in form with the stems 19' connected to the stem portions 12 and the diverging arms 19' connected to the 15 body portions 11. The angularity of the web provides for the flues side-lapping each other laterally to eliminate a direct straight line connection either transversely or obliquely through the wall from the front to 20 the rear portions of the blocks. The air spaces or flues are also formed with extension flues 21 which project into the end portions 13 of the blocks and side-lap the extension flues of adjacent blocks. This web

strengthen the side walls of the block.

The inner side faces of the end portions of the blocks are provided with recesses 22 which register with each other when the 30 blocks are assembled in a wall to form air spaces 23 interposed between the extension

25 construction also serves to materially

air spaces 21.

The inner corners 24 of the end portions of the blocks are beveled to provide space 35 for cementitious material (not shown) when it is desired to use a binder for the blocks.

In buildings where the blocks or slabs are used in constructing floors, ceilings, roofs, or partitions the blocks are elongated to a 40 considerable extent as shown in Fig. 6 over the other blocks shown and in some cases the locking tongues and recesses are formed on the ends of the blocks as indicated by the numerals 16' and 14' or are omitted en-45 tirely from the blocks when desired.

While the term "block" is used in the claims it is to be understood that the word contemplates a block, slab, tile or other form which may be used and is to be so interpreted in the specification and claims.

From the foregoing description it will be seen that the improved block provides for a wall, floor, ceiling or partition construction which is bonded together both laterally and longitudinally and that the inner portion of a wall formed of the blocks is insulated from the outer portion by air spaces or flues which side-lap each other and prevent direct radiation or transmission of heat, cold or dampness. It will also be seen that the

bonding means provides for alining the wall, floor, partition or ceiling during the course of construction thereof and that the necessity of skilled labor in forming the same is eliminated.

What I claim as my invention is:

1. A building block, comprising a body portion having a stem projecting medially from one side thereof and having a medial locking recess in one of the sides of the body 70 portion and the stem, and projecting spaced ribs on the opposite side of the said body portion and stem adjacent the end portions thereof, one of the ribs of the block being of a shape to combine with the rib of an 75 endwise adjacent sidelapped block and form combined rib corresponding approximately to the shape of the locking recess of the adjacent block and to enter the locking recess of a block covering the joint of the 80 endwise adjacent blocks in staggering relation to lock the three blocks together.

2. A building block, comprising a body portion having a stem projecting medially from one vertical side thereof and having 85 a pocket formed medially in one of the horizontal sides of the body portion and stem, and with spaced tongues projecting from the opposite horizontal side of said body portion and stem adjacent to the end 90 portions thereof, said tongues each being of a form approximately corresponding to the shape of one-half portion of the pocket, said body portion and stem also provided with side lapping air spaces extending ver-95 tically through the stem and the body por-

tion of the block.

3. A building block, comprising a body portion having a stem projecting medially from one vertical side thereof and provided with an air space divided by a medial partition or reinforcing wall having forked end portions which extend divergingly from one of the wall portions to the opposite side wall portion to form overlapping spaces, the longitudinally extending outer spaces extending beyond the junction of the stem portion with the body portion of the stem portion with the body portion of the block and beyond the ends of side-lapped similar blocks, whereby the said longitudinal spaces loverlap the joints formed between said sidelapped adjacent blocks when the block forms part of a wall of similar blocks.

In testimony whereof, I affix my signa-

ture, in presence of two witnesses.

## ARTHUR WHITE.

Witnesses:
C. H. Keeney,
Emily Schowalter.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."