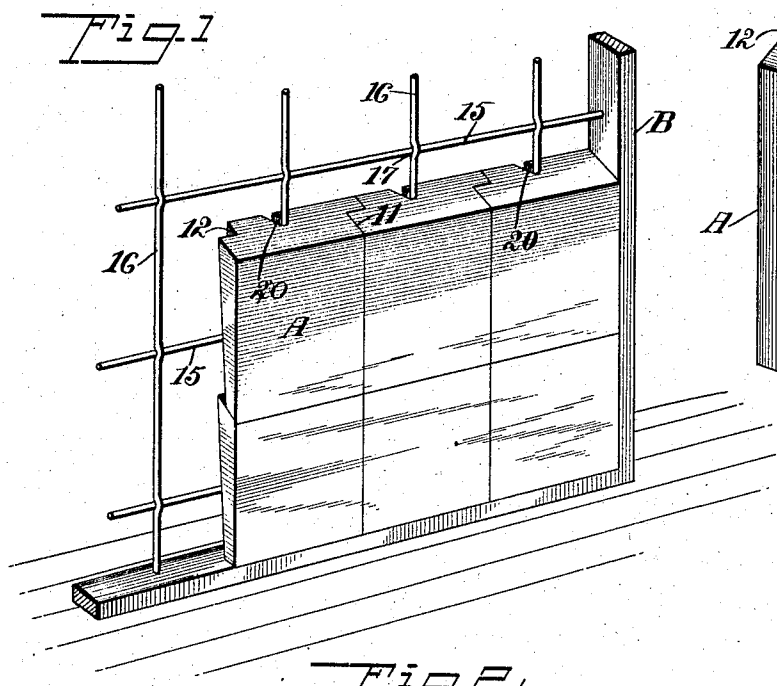
No. 791,291. PATENTED MAY 30, 1905.

G. J. ROBERTS.

BUILDER'S BLOCK.

APPLICATION FILED JULY 28, 1904.

Fig. 1



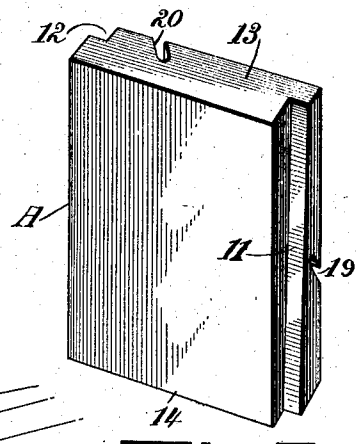


Fig. 3

Fig. 2

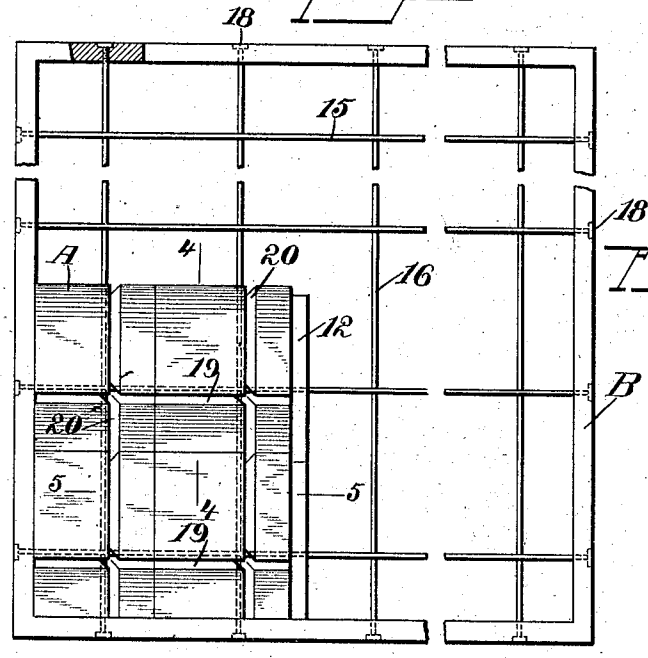


Fig. 4

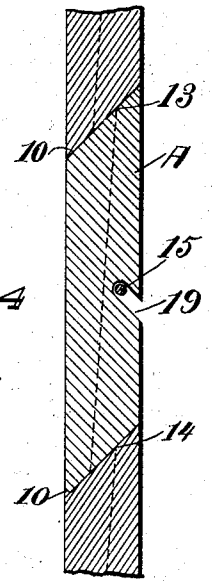
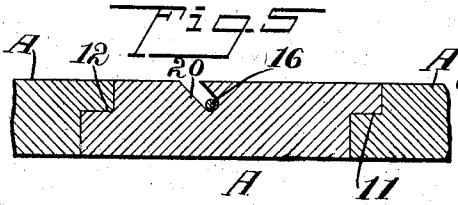


Fig. 5



WITNESSES:

J. A. Brophy

INVENTOR

George J. Roberts.

BY Munn & Co

ATTORNEYS

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO & PTG. CO. NEW YORK.

No. 791,291. Patented May 30, 1905.

UNITED STATES PATENT OFFICE.

GEORGE JAMES ROBERTS, OF WAKEMAN, OHIO.

BUILDER'S BLOCK.

SPECIFICATION forming part of Letters Patent No. 791,291, dated May 30, 1905.

Application filed July 28, 1904. Serial No. 218,510.

To all whom it may concern:

Be it known that I, GEORGE JAMES ROBERTS, a citizen of the United States, and a resident of Wakeman, in the county of Huron and State of Ohio, have invented a new and useful Improvement in Builders' Blocks, of which the following is a full, clear, and exact description.

The object of my invention is to provide a builder's block which can be held by transverse and longitudinal wires in such manner that a series of building-blocks may be brought together one series on the other and each series have an interlocking engagement, forming a fireproof wall and a wall which protects its supports, and at the same time each block in the wall is so closely in contact with an adjacent or engaging block as to prevent the possibility of flames passing between them in the event the structure of which the blocks form a part should take fire.

Another purpose of the invention is to so construct the blocks that they can be quickly, conveniently, and compactly laid and so that a given number of blocks may be fitted in a steel or metal frame, which frame supports the wires above mentioned, and a series of such frames may be employed in the erection of the structure of which the blocks are adapted to form a part.

Another purpose of the invention is to so construct the said building-blocks that their inner and their outer faces will be perfectly straight horizontally and vertically and, furthermore, to provide building-blocks capable of accomplishing the above-named results which will be simple and economic in their construction.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a portion of a panel in which the building-blocks are laid, said panel being viewed from the outside. Fig. 2 is an inner view of a panel, parts being broken away, illustrating sundry of the blocks in position therein. Fig. 3 is a perspective view of one of the building-blocks viewed from the front. Fig. 4 is a vertical section through portions of three blocks laid one above the other, showing the manner in which the engaging surfaces of the blocks abut, the section being taken on line 4 4 of Fig. 2; and Fig. 5 is a horizontal section through one of the building-blocks and a portion of two adjoining and contacting blocks, the section being taken on the line 5 5 of Fig. 2.

A represents a building-block constructed in accordance with my invention, which building-block may be made of any fireproof material—for example, such as cement. The said building-block is of rectangular form, as is shown in Fig. 3, and each building-block that is employed in a structure is provided with two vertical channels 11 and 12 at the side edges of the blocks, the channels 11 being made at the front of a block and the channels 12 at the rear or inner face at the opposite side. These channels 11 and 12 are L-shaped in cross-section and are made to taper to a greater or a lesser extent, the channel 11, for example, being widest at its top and narrowest at its bottom and the opposing channel 12 being narrowest at its top and widest at its bottom, so that when a series of these blocks are arranged horizontally, one block in contact with the other, they can be so placed that they will have an interlocking connection, and when a wall of such blocks is erected, as is shown in Fig. 1 and in Fig. 2, the front and the rear faces will be flush. Each block A is further provided with a beveled top and a beveled bottom surface, the top surface being designated as 13 and the bottom surface as 14, as is shown best in Fig. 4, and the two surfaces 13 and 14 are beveled in opposite directions, as is clearly shown in Fig. 4, so that when one block is laid upon the other a perfect joint is obtained, and no cement or binding material is necessary to complete the finish of the outer faces of the blocks when forming a wall, but the blocks are sustained in their laid position by means of horizontal wires 15 and vertical wires 16, the wires being of suitable gage and bent so

that one will readily pass the other. Instead of wires, however, rods may be employed, if so desired. Ordinarily the vertical wires or rods 16 are kinked, as shown at 17 in Fig. 1, where they pass the horizontal rods 15. These rods or wires 15 and 16 may be of any desired length and may be secured at their ends in any suitable manner to any convenient support. Usually, however, these rods 15 and 16 are secured in a frame B, and these frames are laid in suitable position to form a wall when the blocks are placed therein, or each frame B may be of sufficient size to extend from one surface to another. The frames are preferably made of metal in order that they may be more or less fireproof.

As is illustrated in Fig. 2, the rods 15 and 16 are shown as headed in the frame adapted to receive the blocks A, the heads 18 of the said rods being countersunk to a greater or lesser extent in the frame. In order that the blocks may be readily supported and accurately and positively sustained by the said rods 15 and 16, which may be termed "tie-rods," I provide in the back of each block A a transverse groove 19, located at or near the center, and a vertical groove 20, which crosses the transverse groove 19 at the center of the block. These grooves 19 and 20 are given more or less of an inclination, the vertical grooves 20 being inclined from one side, each in direction of the other, so as to provide more or less of a dovetail receptacle for the vertical rods or wires 16, while the transverse grooves 19 are outwardly and upwardly inclined, as is best shown in Fig. 3, so that they will have a firm support on the transverse rods or wires 15. Thus it will be observed that in erecting a wall with blocks or slabs A constructed as has been described and providing for such blocks or slabs the supporting wires or rods 15 and 16 the slabs or blocks are held firmly in the positions in which they are placed, and it requires but the slightest of pointing to make the finish perfect at each side of the wall. It is further evident from the foregoing and by reference to Fig. 1 that as the wall is made of slabs constructed in the manner set forth the said slabs are so interlocked that in addition to their supporting rods or wires they cannot move from the position in which they may be set.

Slabs or blocks constructed as stated are exceedingly simple in their construction, as well as being economic in manufacture. They can be produced readily in any appropriate mold and conveniently withdrawn from the mold when desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A building block or slab having side recesses L-shaped in cross-section and facing in opposite directions, opposite ends of the recesses being of different width the said block being provided in its inner face with an inclined vertical groove and an inclined transverse groove crossing the vertical groove.

2. A building slab or block provided with diagonal grooves in its inner face, extending vertically thereof, and upwardly-inclined grooves transversely produced in the same face, crossing the vertical groove.

3. A building block or slab, provided with vertical recesses in its side edges facing in opposite directions, the recess at one side being widest at the bottom and the recess at the opposite side being widest at the top, the said slab or block being provided with a vertical groove in its rear face diagonally located, and a transverse recess upwardly and outwardly inclined.

4. A building block or slab provided with inclined side recesses facing in opposite directions and oppositely inclined, the said block or slab being provided with a slanting vertical groove in its inner face and with an upwardly and forwardly inclined transverse groove.

5. Vertical and transverse rods, and building-blocks having inclined side recesses facing in opposite directions and tapered in opposite directions, the said blocks being provided with vertical grooves in their rear faces, receiving the vertical rods, and with transverse grooves also in their rear faces, receiving the transverse rods, the vertical grooves being diagonally disposed and the transverse grooves having an upward and forward inclination.

6. A building block or slab having side recesses L-shaped in cross-section and facing in opposite directions and tapered in opposite directions, the said block being provided with a beveled top and a beveled bottom surface, and having in its inner face an inclined vertical groove and an inclined transverse groove.

7. The combination with vertical and transverse rods or wires, and a support to which the ends of the rods or wires are secured, of building-blocks having diagonal grooves in their rear faces extending vertically and receiving the said vertical rods or wires, the blocks also having transverse grooves in their rear faces, the transverse grooves having an upward and forward inclination and receiving the said transverse rods or wires.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE JAMES ROBERTS.

Witnesses:

SARAH J. PEASE,

ROSE WIESLER.