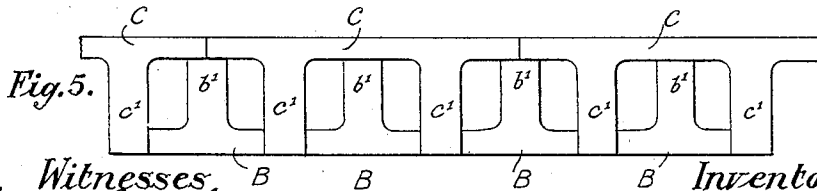
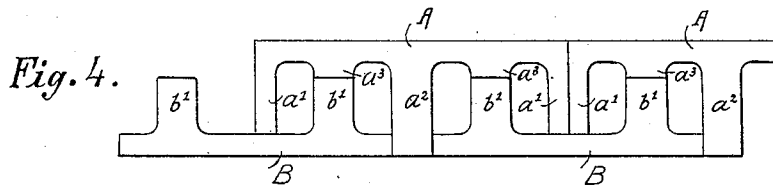
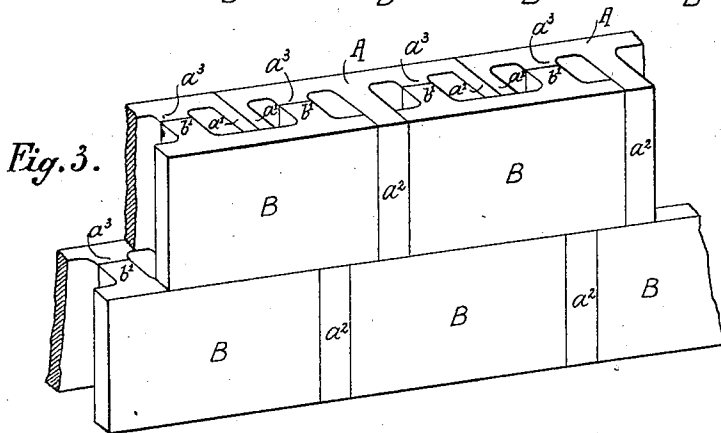
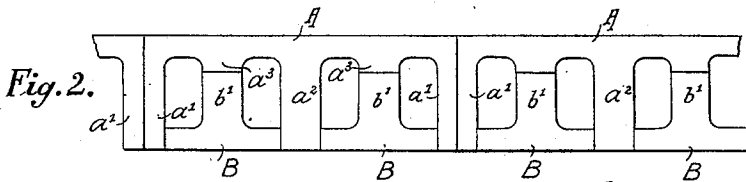
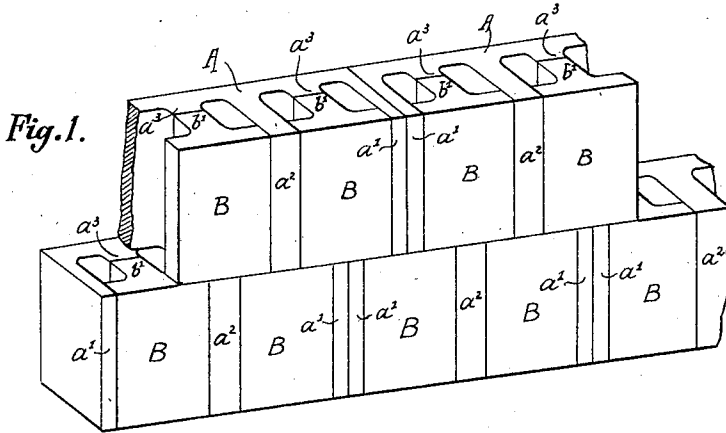


J. A. FERGUSON.

WALL.

APPLICATION FILED FEB. 8, 1905.



Witnesses
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 atty

UNITED STATES PATENT OFFICE.

JOHN ALBERT FERGUSON, OF DENVER, COLORADO.

WALL.

No. 796,833.

Specification of Letters Patent.

Patented Aug. 8, 1905.

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To all whom it may concern:

Be it known that I, JOHN ALBERT FERGUSON, a citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Walls, (Case D,) of which the following is a specification.

This invention relates to wall construction of a character in which the wall is composed of a plurality of blocks of concrete, cement, or any other suitable material.

It has for its objects to provide a wall possessing strength and minimum thickness or depth, as well as a series of air-ducts provided between the inner and outer faces of the wall adapted to add additional heat, cold, and moisture resisting facilities.

The principal object attained by the construction herein described is the great strength of the wall having minimum thickness, as the projections on the principal blocks are adapted to extend through to the opposite face of the wall, producing a very effective bonding.

This invention consists in a wall composed of blocks, each formed with a projection or projections extending from one side only thereof. The blocks are laid in tiers formed of two horizontal rows, the blocks in each row being preferably of the same shape. The blocks in each tier are laid to break joints.

The invention is fully illustrated in the accompanying drawings, forming a part of this application, in which—

Figure 1 is a perspective view of a portion of a wall constructed according to this invention. Fig. 2 is a top plan view of a course of the blocks forming one horizontal row. Fig. 3 is a perspective view showing a modified form of blocks. Fig. 4 is a top plan view of Fig. 3. Fig. 5 is a top plan view of a tier of blocks forming a wall somewhat modified in construction.

Like letters of reference indicate corresponding parts throughout the different figures.

The principle involved in this invention can be embodied in different forms. The forms herein shown and described are the preferred construction, though I do not limit myself to the construction illustrated, but desire to reserve the right to vary the forms of blocks to be used for my wall without departing from the general idea herein expressed.

Referring more particularly to the details of my invention, and especially to Fig. 1, the letter A designates the principal block used in constructing a wall in accord with this invention. It is provided with right-angled projections a' at the ends thereof and also has an intermediate projection a^2 of equal length to the end projections. It also has protuberances a^3 extending from the said body portion in the same direction as the said projections extend. The said protuberances are provided between the end projections and the intermediate projection, as illustrated. B represents a block of less length than the one designated by A. It is provided with a substantially central projection b' . In laying these blocks into a wall the blocks A are laid with their projections disposed in the same direction in all of the tiers, though they are laid to break joints. The blocks B are in this construction laid between the intermediate and end projections of the blocks A, adapted to have their faces substantially flush with the ends of the projections of said blocks A. The ends of the projections b' of the blocks B will then engage the protuberances a^3 of the blocks A, forming a seat therefor. Effective bonding is obtained by placing the next tier of blocks A a sufficient distance either to the right or left to bring the intermediate projections over the joints between the protuberances a^3 and the projection b' , also bringing the blocks B into a position where the joints on the face of the wall formed by the blocks B and the ends of the projections a' and a^2 are broken symmetrically, as will be made manifest by reference to Figs. 1 and 3 of the drawings. It will be observed that in the preferred construction the central or intermediate projection a^2 is double the thickness of the end projections a' , adapted to facilitate the symmetrical laying of the blocks in the wall. It is comprehensible that the protuberances a^3 may be dispensed with and the projections b' on the blocks B engage the body portion of the blocks A.

Referring more fully to the modified forms, especially to the form illustrated in Figs. 3 and 4, it will be observed that the central or intermediate projections a^2 are of greater length than the end projections a' and that the end projections do not extend through to the face of the wall, but engage the body portions of the blocks B between the projec-

tions thereof. In the modified form represented by Figs. 3 and 4 the blocks B are longer than those represented in Figs. 1 and 2 and have two intermediate projections instead of one, as illustrated. The blocks A are laid up in the same manner in constructing either the walls illustrated in Figs. 1, 2, 3, and 4, but in the modified form represented by Figs. 3 and 4 the blocks B are laid between the long projections a^2 , as illustrated, and have the intermediate projections b' of the blocks B engaging the protuberances a^3 on the blocks A. It is manifest that this construction is also well bonded, inasmuch as the central projections a^2 extend through to the face of the wall, and therefore provide a rigid bond.

Still another modified form is illustrated in Fig. 5, in which the main block C has intermediate projections c' . These blocks C are laid in the wall with their projections disposed in the same direction in all of the tiers and are laid to break joints. The blocks B are laid between the projections c' , having the projections b' engaging or substantially engaging the body portions of the blocks C.

It is comprehensible that neither of these modified forms changes the principle involved and that many other modifications can be made without departing from the idea herein expressed, as before stated.

What I claim as new is—

1. A wall formed by blocks each having a plurality of projections, projections of the blocks in one row of the tier adapted to extend through the opposite row of the same tier to the face of the wall.

2. A wall composed of two courses of blocks placed in horizontal rows, the blocks forming one course in each horizontal row having end projections and intermediate projections and protuberances of less length than said end and intermediate projections and disposed between said end and intermediate projections, the blocks forming the opposite course in the same horizontal rows having an intermediate projection and are adapted to be laid between the end projections and the intermediate projections of the blocks forming the opposite course, the projections of said last-mentioned blocks adapted to engage the protuberances on the blocks

forming the opposite course of the same horizontal row, substantially as specified.

3. A wall composed of a plurality of blocks arranged side by side and having projections, the blocks forming one course in the horizontal rows having end projections and an intermediate projection and also having protuberances between the end and intermediate projections, the blocks forming the opposite course in the same horizontal row having intermediate projections and are adapted to be laid between the intermediate projections of the blocks forming the opposite side of the wall, the intermediate projections of the blocks laid between the long projections adapted to abut the protuberances on the blocks of the opposite course, substantially as specified.

4. A wall composed of blocks laid in courses forming horizontal rows, the blocks of one course in each horizontal row having an intermediate projection and laid to break joints, the blocks in the opposite course being of less length and having an intermediate projection and adapted to be laid between the projections of the blocks of the first-mentioned course, the projections of the short blocks engaging portions of the said opposite blocks, substantially as specified.

5. A wall composed of two courses of blocks placed in horizontal rows, the blocks forming one course in the same horizontal row each comprising a body portion having end projections, an intermediate projection and a protuberance between each end projection and the said intermediate projection, the blocks forming the opposite course in the same horizontal row each comprising a body portion having an intermediate laterally-extending projection, said last-mentioned blocks adapted to be laid between the end projections and the intermediate projection of the blocks forming the opposite course, the projections of said last-mentioned blocks adapted to engage the protuberances on the blocks forming the opposite course of the same horizontal row.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN ALBERT FERGUSON.

Witnesses:

EVELYN S. CALVERT,
ORA M. LASSWELL.