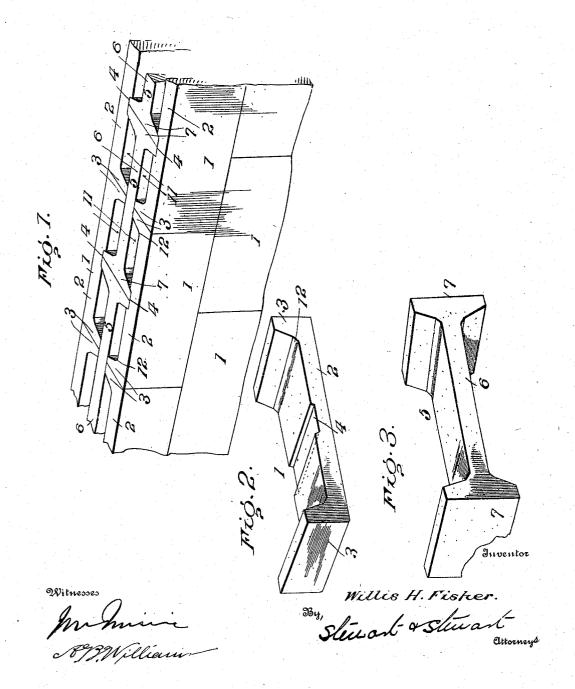
W. H. FISHER.
WALL STRUCTURE.
APPLICATION FILED JULY 12, 1905.



UNITED STATES PATENT OFFICE.

WILLIS H. FISHER, OF MOUNT GILEAD, OHIO.

WALL STRUCTURE.

No. 840,760.

Specification of Letters Patent.

Patented Jan. 8, 1907.

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To all whom it may concern:

Be it known that I, WILLIS H. FISHER, a citizen of the United States of America, and a resident of Mount Gilead, in the county of Morrow and State of Ohio, (whose post-office address is 124 Main street, Mount Gilead, Ohio,) have invented certain new and useful Improvements in Wall Structures, of which the following is a specification.

My invention relates to certain new and useful improvements in wall structures and blocks from which such structures are built.

In the form of my invention shown in this application the wall is a three-thickness wall and built by the use of two kinds of blocks, the blocks forming a series of air-chambers which extend the full height of the wall between the thicknesses composing the wall. Referring to the drawings, wherein I show

20 the preferred form of my invention and wherein the same part is designated by the same reference-numeral wherever it occurs, Figure 1 is a perspective view of a sectio of a wall built in accordance with my invention. 25 Fig. 2 is a perspective view of one of the blocks from which the two outer tiers of the wall are constructed. Fig. 3 is a perspective view of one of the blocks from which the inner tier is constructed.

1 designates a block of the kind from which the outer tiers of the wall are built. This block is composed of a body portion 2, provided with projections 3 at each end thereof, the projections 3 being of equal length and 35 angularly disposed with respect to the body These projections form with the portion. body portion a substantially E-shaped block. Located centrally of the body portion between the projections 3 3 is a groove or notch 4, which is of sufficient width to accommo-date two of the projections which are formed on the block 5.

5 designates one of the blocks from which the inner tier of the wall is built and is com-45 posed of a body portion 6, provided with a projection 7 at each end thereof, the projections extending across the end of the block and extending an equal distance on each side These projections form with the 50 body portion a substantially I-shaped block.

In order to construct a wall of these blocks, each tier is formed by laying the middle blocks 5 or 8 and then fitting on each side thereof the blocks 1, so that the projections 7 will enter the grooves or notches 4 of blocks

wall are securely bonded together. The succeeding tiers of the wall are laid so that they will break joints, and it will be noticed that all the joinst in the wall from one side to the 60 other are broken by this construction. By this construction there are formed between the outer and inner tiers of blocks the airchambers 11, which extend for the full length of the wall.

In order to strengthen the corners of the blocks, I provide in the angle formed between the body portion and the projections in all forms of the block shown a reinforcing portion 12, whereby the liability of the blocks to 70 crack or break is greatly decreased.

While I have described what I believe to be the preferred form of my invention, I desire to have it understood that many changes may be made in the form, construction, and 75 arrangement of parts without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is-

1. A wall of three thicknesses comprising a 80 middle thickness formed of blocks composed of a body portion having a projection extending out from each side of the body portion at each end thereof and substantially **E**-shaped blocks laid on each side of the middle thick- 85 ness to form the outer thicknesses of said wall, the projections on the middle thickness extending between the lateral ends of the substantially E-shaped blocks, the projections on the middle blocks being spaced apart 90 from the lateral ends of the E-shaped blocks, so as to leave vertical air-spaces in the wall.

2. A wall of three thicknesses comprising a middle thickness formed of blocks having a projection extending out from each side of 95 the body portion at each end thereof, and blocks composed of a body portion and a lateral projection extending at an angle from one side of the body portion at each side thereof, laid on each side of the middle thick- 100 ness to form the outer thicknesses, projections on the middle thickness extending between the projections of the blocks formed on the outer thicknesses, the projections on the middle thickness being spaced apart 105 from the lateral projections of the blocks of the outer thicknesses, so as to leave vertical air-spaces in the wall.

3. A wall of three thicknesses comprising a middle thickness formed of blocks composed 110 of a body portion, having a projection extend-1, as shown in Fig. 1, whereby all parts of the ling out from each side of the body portion at

each end thereof and blocks composed of a body portion and a lateral projection extending at an angle from one side of the body portion from each end thereof and a depression formed in the side of the body portion into which the projections on the blocks of the middle thickness are adapted to enter to lock the parts of the wall together, said projections on the blocks forming the middle thickness being spaced apart from the lateral pro-

jections of the blocks forming the outer thicknesses so as to leave vertical air-spaces in the wall.

Signed by me at city of Baltimore, State of Maryland, this 7th day of July, 1905.

WILLIS H. FISHER.

Witnesses:

GEO. W. HAULENBEEK, JOHN E. CROSS.