No. 790,009. PATENTED MAY 16, 1905.

H. A. STREETER.

HOLLOW TILE WALL FOR BUILDINGS.

APPLICATION FILED NOV. 10, 1903.

Fig. 1

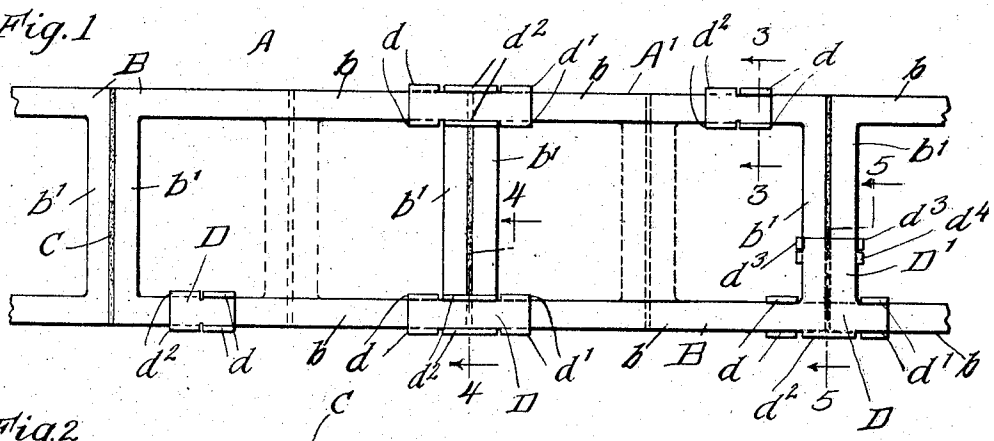


Fig. 2

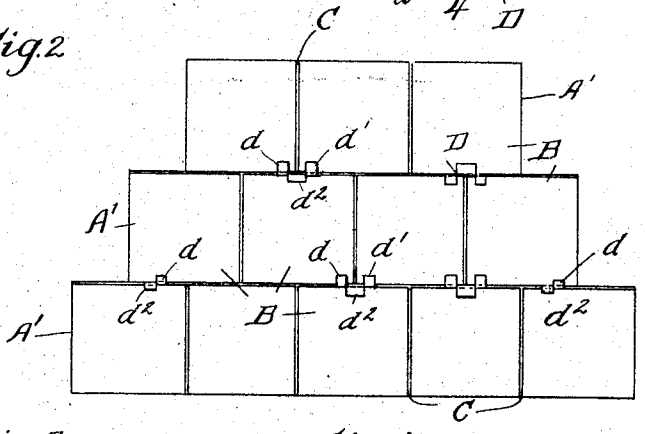


Fig. 3

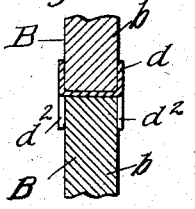


Fig. 4

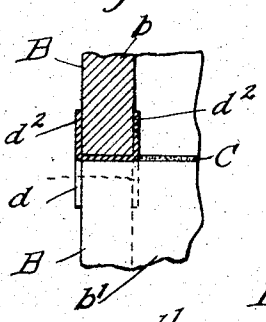


Fig. 5

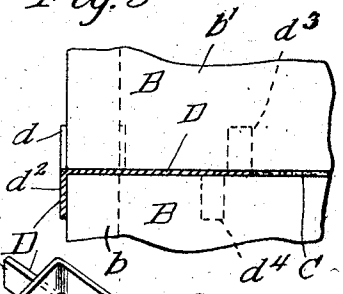


Fig. 6

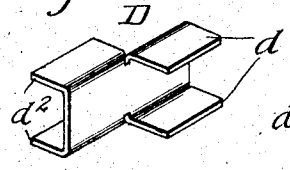


Fig. 7

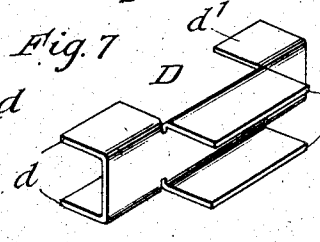
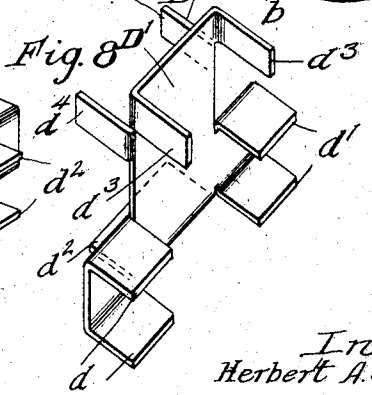


Fig. 8



Witnesses:

Wm. Geiger

H. M. Kinsey.

Inventor

Herbert A. Streeter

By Thornley, Curtis & Holcomb.

Attorneys

No. 790,009. Patented May 16, 1905.

UNITED STATES PATENT OFFICE.

HERBERT A. STREETER, OF CHICAGO, ILLINOIS.

HOLLOW-TILE WALL FOR BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 790,009, dated May 16, 1905.

Application filed November 10, 1903. Serial No. 180,558.

To all whom it may concern:

Be it known that I, HERBERT A. STREETER, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Hollow-Tile Walls for Buildings, of which the following is a specification.

My invention relates to improvements in hollow-tile walls for buildings.

Heretofore hollow-tile walls as ordinarily constructed have been comparatively weak against transverse or lateral strain or pressure owing to the fact that the vertical webs of the hollow tile are comparatively thin and afford little area for the cement or mortar joints between adjacent or superimposed tile.

The object of my invention is to provide a hollow-tile wall for interior partitions or outside walls of a simple, strong, and efficient construction without materially adding to the cost or weight of the wall.

My invention consists in the means I employ to accomplish this object or result—that is to say, it consists in a hollow-tile wall comprising, in combination, a plurality of hollow tile laid in courses and superimposed upon one another and breaking joints in the usual manner, of a series of metal clips interposed between the thin webs of the tile at the joints thereof, and having a plurality of flanges turned in opposite directions and fitting on each side of the upright webs of the superimposed and adjacent tile.

My invention also consists in the novel construction of parts and devices and in the novel combination of parts and devices herein shown or described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a plan view, and Fig. 2 a side elevation, of a portion of a hollow-tile wall embodying my invention. Figs. 3, 4, and 5 are vertical sections on lines 3 3, 4 4, and 5 5, respectively, of Fig. 1 and showing also portions of superimposed tile; and Figs. 6, 7, and 8 are detail perspective views showing different forms of the metal clips as used in different positions in the tile wall.

In the drawings, A represents a hollow-tile wall, the same being composed of horizontal courses A′ of hollow tile B having thin upright webs $b\,b'$, the tile B of one course breaking joints in the usual manner with the tile B of the courses above and below the same. As the upright webs $b\,b'$ of the tile are comparatively thin, ordinarily not exceeding three-quarters of an inch in thickness, it will be understood that the bonding area of mortar or cement C at the joints between the superimposed tile is very limited in extent and that on this account the wall, whether used for a partition-wall or for an outside wall, is necessarily comparatively fragile or weak against transverse or lateral pressure, and this has heretofore materially restricted the extent of use of hollow-tile walls.

To give strength and firmness to the wall against lateral strain or pressure, I interpose between the tile metal clips D at the horizontal joints between superimposed tile and the vertical joints between adjacent tile, said metal clips having two pairs of upright wings or flanges $d\,d$ and $d'\,d'$ to embrace the upright webs of two adjacent tile in the same course and a pair of oppositely-turned upright flanges $d^2\,d^2$ to embrace the vertical web of the tile in the next lower or upper course of tile. These metal clips are preferably made of thin sheet-steel, and their body portions lie flat upon or between the upright webs of the superimposed tile at the horizontal joints thereof, and thus do not interfere with the laying of the tile in the usual manner, while at the same time firmly bonding and securing the superimposed and adjacent tile together. Where the bonding-clips are used at the middle portions of superimposed tile, I provide the same with only two pairs of wings or flanges, one pair, $d\,d$, turned up and the other pair, $d^2\,d^2$, turned down. Where the metal clips are used at the upright joints between adjacent tile, the same may be provided with a right-angle extension D′ to fit in the horizontal joint between the cross-webs $b'\,b'$ of the adjacent tile and with oppositely-turned pairs of wings or flanges $d^3\,d^3$ and $d^4\,d^4$ to embrace the vertical cross-webs $b'\,b'$ of the upper and lower tile, the flanges $d^3\,d^3$ and $d^4\,d^4$ thus standing in planes at right angles to the planes of the flanges $d\,d$ and

d' d'. The metal clips D are embedded in the mortar or cement C between the joints, and thus serve to strongly, rigidly, and firmly unite all of the tile together.

I hereby disclaim as not of my invention the construction shown in the Gustaf Leitch Patent No. 523,359 and in Patent No. 637,906 to Venezia.

I claim—

1. A hollow-tile wall comprising in combination, hollow tile B having upright longitudinal webs b and cross-webs b' laid in horizontal courses breaking joints with each other, and interposed metal clips D in the horizontal joints of the tile, having two pairs of flanges embracing the webs of adjacent tile in the same course, and a pair of oppositely-turned flanges embracing the web of a tile in the next course, and thus bonding together, three tile, the cross-webs b' b' of said adjacent tile extending between the edges of the two inner flanges which fit against the inside of the longitudinal webs of adjacent tile, substantially as specified.

2. A hollow-tile wall comprising in combination, hollow tile laid in courses breaking joints with each other and having cross and longitudinal webs, and clips interposed between the tile in the joints thereof and having oppositely-turned flanges to fit and embrace the meeting webs of the tile, the cross-webs of adjacent tile extending between the two inner flanges which fit on the inside of the longitudinal webs of adjacent tile, substantially as specified.

3. A tile wall comprising in combination, tile laid in horizontal courses breaking joints with each other, and a metal clip having two pairs of right-angle flanges embracing the webs of adjacent tile and an oppositely-turned flange engaging the web of a tile in the next course and provided with a right-angle extension fitting between the cross-webs of adjacent tile and furnished with two pairs of oppositely-turned flanges to embrace the cross-webs of adjacent tile, substantially as specified.

HERBERT A. STREETER.

Witnesses:
H. M. MUNDAY,
WILLIAM A. GEIGER.