No. 654,733. Patented July 31, 1900.

H. S. HUMES.

WALL TIE.

(Application filed July 17, 1899.)

(No Model.)

FIG. 1.

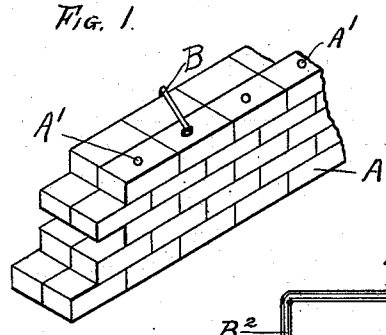


FIG. 2.

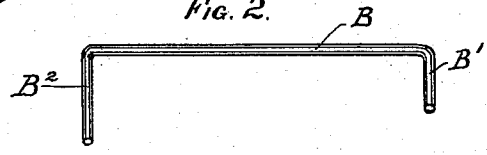


FIG. 3.

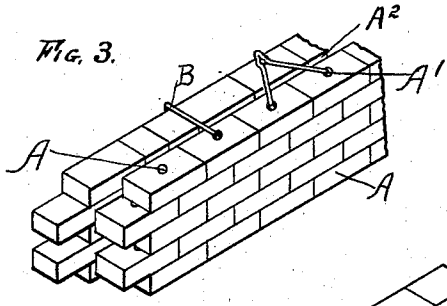


FIG. 6.

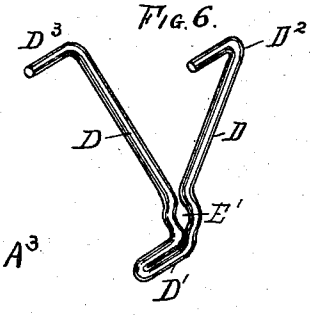


FIG. 4.

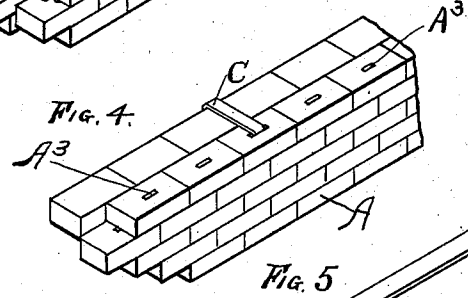
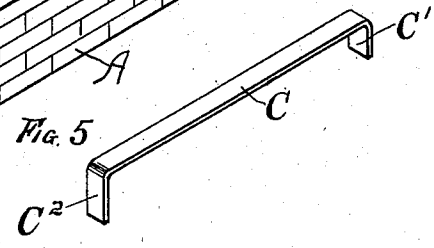


FIG. 5



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UNITED STATES PATENT OFFICE.

HARRY S. HUMES, OF DENVER, COLORADO, ASSIGNOR OF ONE-HALF TO SINGLETON M. MORRISON, OF SAME PLACE.

WALL-TIE.

SPECIFICATION forming part of Letters Patent No. 654,733, dated July 31, 1900.

Application filed July 17, 1899. Serial No. 724,133. (No model.)

To all whom it may concern:

Be it known that I, HARRY S. HUMES, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Wall-Ties, of which the following is a specification.

My invention relates to a class of wall-ties especially adapted to constructing pressed-brick walls, as in the building of such walls bricks cannot be used as ties owing to the disfigurement caused by the ends of the bricks extending out to the face of the wall.

The objects of my invention are to provide a wall-tie that will be efficient for binding a pressed-brick front to a brick backing, to a wooden backing, or to a frame building. It can be manufactured at a very low cost and can be used by bricklayers or masons without much extra labor.

I refer now to the drawings in further explaining the nature and objects of my invention, in which—

Figure 1 is a perspective view of a portion of an eight-inch wall tied by means of my new wall-tie. Fig. 2 is a view of the tie. Fig. 3 is a perspective view of a portion of a brick wall built with an air-chamber tied by means of my new tie. Fig. 4 is a modified form of Fig. 1. Fig. 5 is a view of the tie represented in Fig. 4. Fig. 6 is another modified form of the tie.

A represents the front course of a brick wall, being the pressed brick, which are provided with holes or apertures A′. Into these holes or apertures A′ fits the short end B′ of the tie B. The long end B^2 of the tie B is hooked over the backing-course of brick, as shown in Fig. 1. The wall in Fig. 1 is compact, there being no air-space. Hence in using the same tie that I do in Fig. 3 I lay the tie diagonally across the wall, which is as efficient as though it were placed at right angles with the wall.

In Fig. 3 the wall has an air-space A^2, but is firmly held together by means of my new tie.

In Fig. 4 I employ a strap-tie C (fully shown in Fig. 5) and provide the pressed or front course of bricks with elongated slots or apertures A^3. Into these slots or apertures A^3 fits the short hook C′ of the tie C, while the long hook C^2 is placed over the backing-course of brick in the wall A.

The tie represented by Fig. 2 is constructed of a single piece of wire having right-angle bends at each end of various lengths, while the modified form represented by Fig. 5 is made of a single strap of suitable metal having right-angle bends at each end designated by C′ and C^2, which can be of any suitable length. The V-shaped tie represented in Fig. 6 is also constructed of a single piece of wire. The point is bent at right angles, forming the hook D′. The ends are also bent at right angles, forming the hooks D^2 and D^3. At the point a small loop E′ is also provided, into which a nail or spike can be driven when desiring to fasten the wall to the joist or other parts of the framework of the building.

The construction shown is what will generally be used by me. I do not confine myself to any one mode of constructing my new tie, but desire to cover the principle by this application and vary the construction to suit the uses and purposes for which it is designed. Sometimes it may be most efficient to make it V-shaped, as above described, having right-angle bends on the ends and also on the V-point, as shown in Fig. 6. In this way the point of the V will hook over the backing-course of brick or other material, while the hooks on the ends of the V will be inserted into the holes or apertures in the front course of brick. Thus a very efficient tie will be produced and will be effective in its work, while very easy to adjust in laying the courses of brick.

Having thus described the nature and objects of my invention, with the manner of constructing and applying the same, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, a wall comprising a front course of brick having holes or apertures in the center or other parts of the brick, the backing-course of brick, the hook or tie, one end designed to be inserted into the hole or aperture in the brick on the face or outside course, and the other end of the tie hooked over the backing-course, substantially as specified.

2. As an article of manufacture, a wall-tie,

made of a single piece of wire in V shape, having the point of the V and the ends bent at right angles with the main portion of the tie, and also provided with a small loop near the point, substantially as specified.

3. In a wall-tie, of the class described, the combination, comprising the bricks having the apertures or holes, the V-shaped tie having right-angled turned ends designed to hook into the apertures or holes A′, A′, and the right-angle turned-up point of the V-shaped main portion over the backing-course, substantially as specified.

4. In a wall-tie, the combination, comprising the bricks having the holes or apertures, the V-shaped tie, with the ends bent at right angles with the main portion of the tie designed to be inserted into the holes or apertures in the bricks and having the small loop near the point of the V-shaped tie provided as means of securing the tie to the joist or other parts of the building, substantially as specified.

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

HARRY S. HUMES.

Witnesses:
SINGLETON M. MORRISON,
EMILE C. NEUMEISTER.