C. J. SCHRECK.
WALL TIE FOR BRICK AND VENEER STRUCTURES.
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Inventor:
Conrad J. Schreck,
by
David Moore,
his Attorney
To all whom it may concern:

Be it known that I, Conrad J. Schreck, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Wall-Ties for Brick and Veneer Structures, of which the following is a specification.

My invention relates to ties used in the erection of buildings for the purpose of either tying together or securing the several layers of bricks composing the walls thereof or for tying a single wall of bricks to the wooden or veneer structure; and my object is to produce a tie for this purpose which shall be simple and inexpensive in its construction and which will provide a better fastening means than those at present in use.

With this and other objects in view my invention may be said to comprise a tie composed of a single piece of metal having its central portion stamped up or cut out so as to provide an extension adapted to embrace one layer of bricks, while the open portion embraces the other layer when used in tying brick walls.

My invention further comprises a tie composed of a single piece of metal having its central portion stamped up or cut out so as to form an extension the edges of which are inclined, so as to make one end of said extension wider than the other, and having perforations therein to receive nails for securing it to the wooden or veneer structure when used for tying a single wall of bricks, the open portion of said tie embracing the bricks, as will be described.

My invention further comprises a tie made of a single piece having its central portion stamped up or cut out so as to provide an extension the edges of which are corrugated or scalloped, said extension having perforations wherein to receive nails for securing it to the wooden or veneer structure when used for tying a single wall of bricks, the open portion of said tie being adapted to rest upon and embrace the bricks and having at that end contiguous to and from which said extension merges a flange adapted to lie between the layers of bricks or between the brick wall and wooden or veneer structure.

My invention further comprises certain novel features of construction to be hereinafter more fully described, and particularly pointed out in the appended claims.

In the drawings forming part of this specification similar reference-letters indicate corresponding parts in all the figures thereof, and wherein—

Figure 1 represents a portion of a veneer structure, showing my improved tie applied thereto. Fig. 2 represents a similar view of a solid brick or wall structure, showing my invention applied thereto. Fig. 3 represents a plan view of my invention before the same is bent into shape for use. Fig. 4 represents a perspective view thereof, showing the extension bent up in position for use on a veneer structure. Fig. 5 represents a similar view showing the extension bent back in position for use in connection with a solid brick or wall structure. Fig. 6 represents a perspective view of a modified form, showing the inclination of the edges of the extension disposed in an opposite direction to that shown in Figs. 1 to 5, inclusive.

Referring to said drawings, a designates the body portion of the tie, which, as clearly shown in Fig. 3, has its center stamped or cut out so as to form an extension b when such extension is bent either at right angles to said body portion, as shown in Fig. 4, or bent back or fully extended, as shown in Fig. 5. In the latter instance the tie is intended for securing the bricks which compose the walls of a solid brick structure, while in the former instance the tie is used for securing a single wall of bricks to the wooden or veneer structure.

That end of the body portion a which is contiguous to and from which the extension b merges is bent at right angles or approximately at right angles to form a flange c, which is adapted to lie between the two walls of bricks, as shown in Fig. 2, or between the bricks and the wooden or veneer structure, as shown in Fig. 1.

As will be observed by reference to the drawings, the edges of the extension b and
those of the opening in the body portion \( a \) are inclined, so that one end of each will be larger than the other end, and I may make this inclination begin from the point where the extension merges from the body portion and gradually increase it outwardly, as clearly shown in Figs. 1 to 5, inclusive, or I may make the inclination so that its widest portion will be at the point contiguous to and from which the extension merges from the body portion, as clearly shown in Fig. 6, and by preference I scallop or corrugate the edges of both the extension and opening in the body portion, so that when my invention is applied to solid brick structures it will be apparent that the mortar will enter the opening in the body portion and fill in between the corrugations, thereby more securely holding the same in place, and in like manner will the mortar surround and fill in between the corrugations of the extension \( b \), also effecting a very secure hold thereon.

By reason of the inclination that is given to the opening in the body portion \( a \) and the corresponding inclination given to the extension \( b \) they will act as a sort of wedge, so that any tendency of the walls to separate will be resisted, as the mortar will be wedged in against the edges of the opening and the surrounding edges of the extension when used for solid brick walls, so that its hold on the mortar is increased, while in the case of the veneer structures the same conditions will prevail, and by reason of forming the tie out of a single piece of metal it will be apparent that a compact and economical construction is produced which makes it handy and convenient for shipment in the condition shown in Fig. 3 and when desired for use may be readily bent in proper form to adapt itself to the various forms of building structures. The perforations \( d \) in the extension \( b \) are for the purpose of receiving the nails for securing it to the veneer or wooden structure, as will be understood.

If desired, the corrugations or scallops may be omitted and the tie, owing to the wedge-like contour of the opening in the body portion and of the extension, an effectual fastening may be secured, and while I reserve the right to make them in this manner still I prefer the constructions herein shown and described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is as follows:

1. A tie for the purposes described, comprising a single piece, having its central portion stamped up or cut out so as to provide an opening therein and an extension thereon adapted to embrace one layer of bricks, while the open portion embraces the other layer.

2. A tie for the purposes described, comprising a single piece, having its central portion stamped up or cut out so as to provide an opening therein and an extension thereon, the edges of which are inclined so as to make one end of said extension and opening wider than the other, said extension having perforations therein to receive nails for securing it to the wooden or veneer structure.

3. A tie for the purposes described, comprising a single piece, having its central portion stamped up or cut out so as to provide an opening therein and an extension thereon, the edges of which are corrugated or scalloped, said extension having perforations therein to receive nails for securing it to the wooden or veneer structure, and said body portion having a flange thereon, adapted to lie between the layers of bricks or between the brick wall and wooden or veneer structure.

4. A tie for the purposes described, comprising a single piece, having its central portion stamped up or cut out so as to provide an inclined extension, the edges of which are corrugated or scalloped to correspond with an opening, formed in the body portion of the tie, and a flange formed on said body portion, contiguous to the point from which said extension merges therefrom and adapted to lie between the brick wall and wooden or veneer structure.

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

CONRAD J. SCHRECK.

Witnesses:
C. S. MARSHALL,
E. D. ODELBACH.