Nov. 11, 1941. J. C. BAGLEY 2,262,130

WALL TIE

Filed May 6, 1940

Fig. 1.

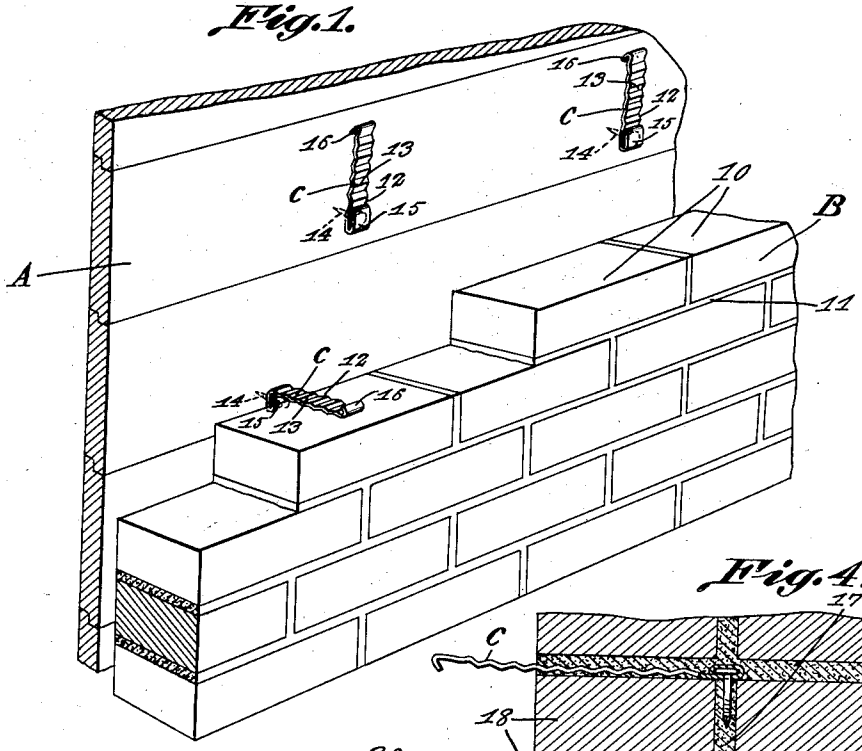


Fig. 2.

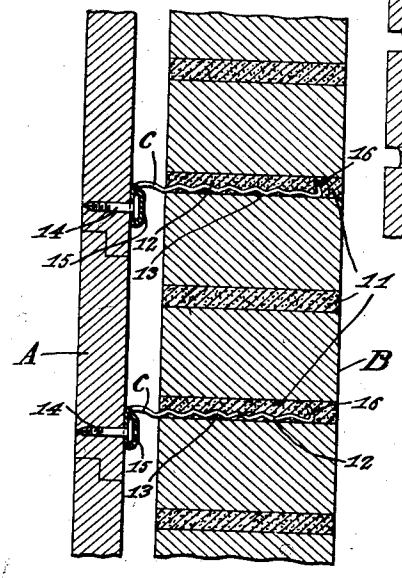


Fig. 4.

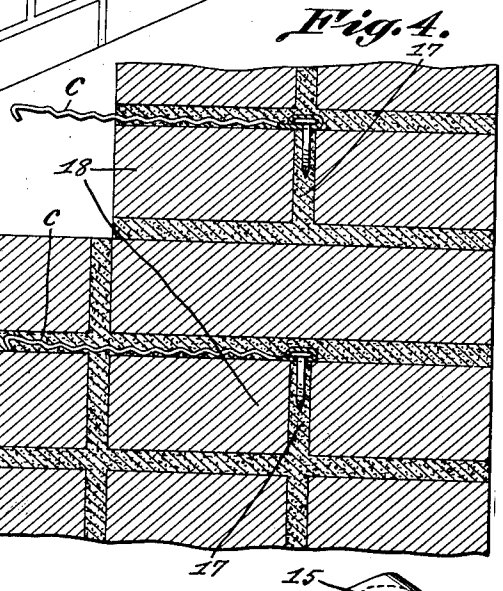
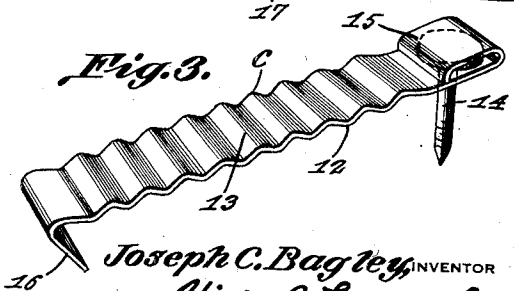


Fig. 3.



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2,262,130

WALL TIE

Joseph C. Bagley, Selma, Ala.

Application May 6, 1940, Serial No. 333,634

1 Claim. (Cl. 72—103)

The invention relates to wall ties and more especially to a nail type fastening device or wall tie.

The primary object of the invention is the provision of a tie of this character wherein a wood sheathing and brick veneer in the erection of a wall of a building will be tied together or a multiple brick wall will have the vertical columns of bricks involved therein bonded so that these will be tied together.

Another object of the invention is the provision of a tie of this character wherein the same carries a nail or other like fastener so that the latter can be driven into a piece of work without liability of injury to a person when driving the nail or fastener into the work in that the tie is susceptible of being held remote from the nail or fastener and such tie will bond together sheathing and brick veneer or columnar bricks in the building of a wall and also such tie is effective as a time saver because the nail or fastener is at all times a part thereof so that an artificer will not be required to place the nail and tie together as well as avoiding the possibility of the loss of the nail or fastener.

A still further object of the invention is the provision of a tie of this character wherein the transverse corrugations or crimps present therein enable the tie to be embedded in the mortar and effective as a wedge as the greater the strain upon this tie the stronger the wedging action becomes to resist the separation of the wall.

A still further object of the invention is the provision of a tie of this character wherein it can be preset in a piece of work so that veneer or facing material may be bonded in place as the work progresses in the erection of a wall, partition or the like.

A still further object of the invention is the provision of a tie of this character, which is extremely simple in its construction, easy of handling and application, thoroughly reliable and efficient in operation, strong, durable, and inexpensive to manufacture and install.

In the accompanying drawing:

Figure 1 is a fragmentary perspective view of a veneered wall showing ties constructed in accordance with the invention in association with the sheathing and the brick veneer of a wall erection.

Figure 2 is a fragmentary vertical transverse sectional view through the wall with the ties bonding the sheathing and the brick veneer together.

Figure 3 is a perspective view of a tie constructed in accordance with the invention.

Figure 4 is a fragmentary vertical transverse sectional view through a brick-faced wall with the tie in place for the bonding of the facing constituting a part of said wall.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, particularly Figures 1 to 3, A designates a portion of a wood sheathing and B brick veneer, respectively, in a wall construction. The bricks 10 of the veneer are set by mortar 11 in the usual well-known manner. The mortar is between faces adjacent to each other of the bricks 10 while the veneer and sheathing are joined by wall ties C, each being constructed in accordance with the invention and hereinafter fully described in detail.

Each tie C comprises a determined length, strip or strap 12 of bendable metal having formed removed from the ends thereof transversely disposed corrugations 13 effective for wedging activity in the installation of the said tie. The strip or strap 12 removed from one end thereof has a suitable hole or opening for the insertion of a headed nail or other like fastener 14 therethrough while turned over the head of this nail or other fastener is the end 15 of the said strip or strap 12 thus permanently holding the nail or fastener intact with the said strip or strap. The other end 16 of the strip or strap is turned outwardly presenting a hook bill angled to the plane of the major portion of said strip or strap as is clearly shown in Figures 1, 2 and 3 of the drawing. This hook bill 16 creates an anchorage in the mortar 11 when the tie is embedded therein between superposed bricks 10 involved in an erected wall.

The strip or strap 12 is susceptible of being bent at the will of a user so that the turned over end 15 for holding the headed nail or fastener 14 intact with the said strip or strap can be bent at an angle to the plane of the said strip or strap for positioning as is illustrated in Figures 1 and 2 of the drawing to enable the bonding of the sheathing A and veneer B together. Normally the strip or strap with the end 15 thereof is constituted as shown in Figure 3 of the drawing. This enables a user of the tie to drive the nail or fastener 14 into the sheathing A without liability of injury from a blow of a hammer used for the driving of such nail or fastener in that the strip or strap 12 can be held at the hook end 16 thereof remote from the nail or fastener 14 when installing the tie upon the

sheathing in advance of the upbuilding of the veneer B. When the strip or strap 12 has been nailed to the sheathing, it can be bent upon itself to have the end carrying the nail at substantially right angles to the remainder of said strip or strap whereby the remainder of the strip or strap can become embedded in the mortar between superposed bricks 10 of the veneer B as is clearly shown in Figures 1 and 2 of the drawing and in this way a firm bonding between the said sheathing and veneer will occur.

The corrugations 13 effect a wedging action upon mortar 11 when the strip or strap 12 is embedded in this mortar so that when any strain exists between the sheathing A and the veneer B the tie tightens to resist the strain and the hook end 16 is effective as a permanent anchorage in the mortar to avoid the withdrawal of the tie therefrom when once embedded therein.

In Figure 4 of the drawing there is shown a further application and use for the tie C wherein the end 15 carrying the nail or fastener 14 need not be bent as shown in Figures 1 and 2 of the drawing to have this end at right angles to the strip or strap in that the nail or fastener is driven into the mortar in a vertical course 17 between adjacent bricks 18. The corrugated extent 13 and the hook end 16 of the said strip or strap will be embedded in the mortar in a horizontal course and a brick facing 20 will become bonded or tied by the said tie C to the columnar bricks 18 as is clearly illustrated in said Figure 4 of the drawing. The wedging activity of the ties C will take place when strain thereon exists while the hook end 16 effects an anchorage of the tie in the facing 20. The ties C employed in the erection of a wall can be preset with respect to the extent of rise of the veneer or facing forms for such wall and the fastening of the ties can be had without liability of injury to a workman during installation of such ties, as has been heretofore set forth.

What is claimed is:

A tie of the character described, comprising a bendable strip having transverse corrugations therein, said strip having an opening spaced from one end thereof, a headed tacking element loosely passing through the opening and the end of the strip bent over on the headed tacking element and bent downwardly in engagement with the strip, and a laterally bent portion carried by the opposite end of the strip.

JOSEPH C. BAGLEY.