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BRICK VENEERING STRUCTURE

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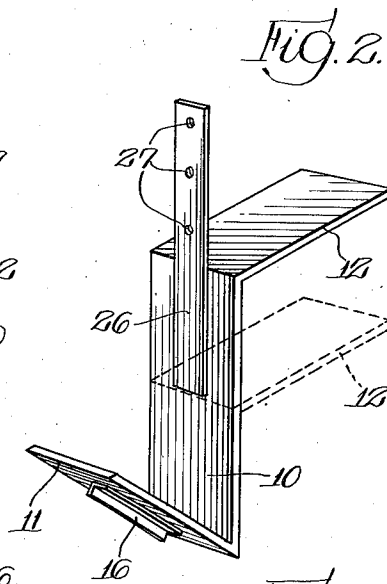
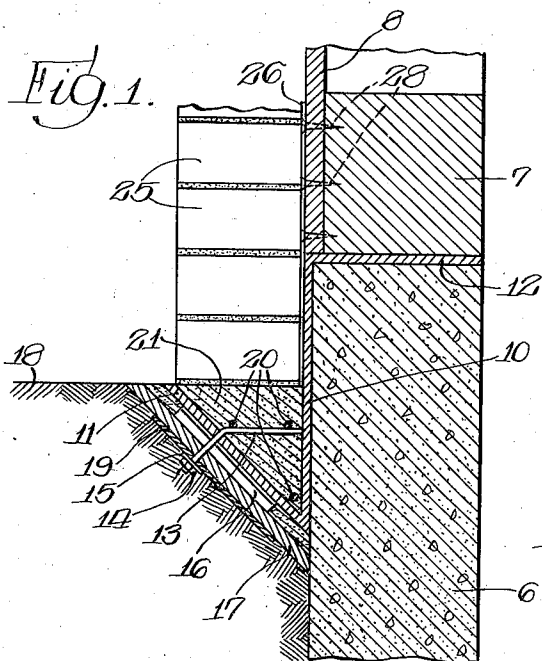
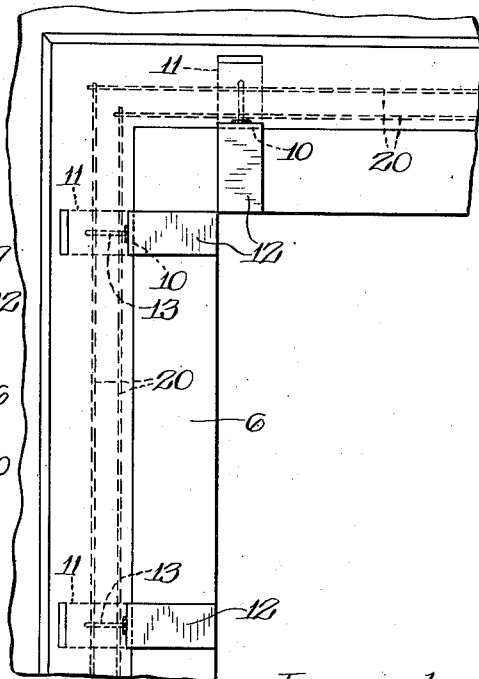
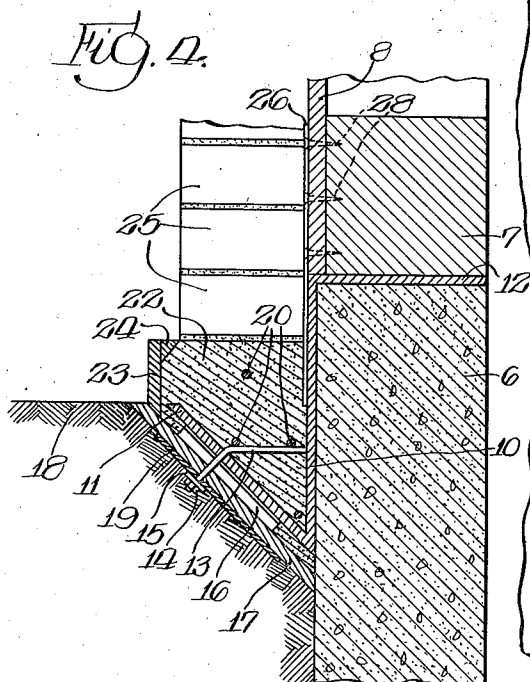


FIG. 3.



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BRICK VENEERING STRUCTURE

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6 Claims. (Cl. 72—0.5)

This invention relates to the method and the structure for applying a brick veneering covering to a house or other structure at the time it is being built, but more particularly after the structure has been erected and built.

The principal object of the invention is therefore in the method, apparatus and structure for supporting and applying a brick veneering structure in connection with a wall or structure previously built.

A further object of the invention is in providing spaced supports attachable to the base or foundation of a wall or building, for connecting or reinforcing them longitudinally of the wall, and in providing a reinforced base or structure upon which a veneering wall may be erected.

Other objects of the invention will appear hereinafter, the preferred construction, arrangement and method of application being illustrated in the accompanying drawing, in which

Fig. 1 is a sectional view illustrating the structure and the method of attaching it to an existing wall;

Fig. 2 is a perspective of one of the supporting brackets;

Fig. 3 is a plan view taken at the top of a foundation showing the construction at the corner of a building; and

Fig. 4 is a sectional view similar to Fig. 1 illustrating a modification.

It is frequently desirable to apply a veneering covering of brick to an old or previously built structure, either a wall or a building, but usually the foundation is flush with the outer wall and affords no suitable support or base for erecting a wall of brick thereon. The present invention is designed and intended to provide a suitable support which is attachable to the top of a foundation wall or between the foundation and the upper, usually wood, or other structure. The support in this case consists of a number of spaced brackets between which a reinforcing concrete structure is erected of sufficient width so that the veneering wall of brick or other material can be suitably supported and erected thereon without requiring any additional support or connection to the wall above the foundation.

Referring now more particularly to the drawing, this invention is represented as applied to a wall or side of a building comprising a foundation 6 and an upper wall structure consisting of a lower supporting beam 7 resting upon the foundation and a superstructure 8 supported by and extending above the beam. Usually the outer

face of the wall is substantially flush with the outer face of the foundation and it is impossible to apply a veneering cover therefor of brick or other material without providing a suitable support. To dig a foundation trench entirely around the foundation previously erected would be too costly.

The present invention comprises a series of metal brackets 10 having a lower angularly bent portion 11 and an upper right angular oppositely bent portion 12. These brackets are formed of rigidly bent metal strips or castings of sufficient width and thickness to properly support a load and in practice they are about four inches wide and one-half ($\frac{1}{2}$) of an inch thick. The upper bent portion 12 is inserted in a recess between the foundation 6 and the wall beam 7 and if there is not enough free space between these parts to insert the end of the bracket, a sufficient slot may be quickly made by means of an electric drill or any other suitable implement so that the upper extremity may be inserted in place with the intermediate portion of the bracket resting tightly against the outer side of the partition.

In each bracket is a reinforcing bolt 13 secured by a welding at its inner end to the upright or intermediate portion of the bracket and extending at its outer end through the angularly bent portion 11 and having a threaded fastening nut 14 and a washer 15 at its outer end which projects beyond the outer surface of the bent portion 11. On the outer face of the angular portion 11 is secured an angle spacer bar 16 which engages and spaces a form board 17 from the outer face of the bracket.

When this structure is erected a shallow angular trench is dug in the ground 18 at the outer side of the wall or foundation 6 if necessary, the brackets 10 are placed in position against the wall at spaced distances apart, the form boards 17 are secured in position against the outsides of the brackets from which they are held in spaced position by the spacer bars 16 and are held against the spacer bars by the fastening nut 14, its washer 15, and an anti-warping plate 19 which is interposed between the washer and the outer face of the board.

When a form structure of this kind is erected along the face of the wall or about the sides and corners of a structure, reinforcing bars 20 of iron are placed in and between the brackets and resting upon the bolts 13, and a supporting base 21 of concrete is poured in at the top, filling entirely around the brackets and against the

form boards 17 and against the inner face of the wall or foundation 6 between the brackets.

Thus a solid supporting base is provided and if desired a water shedding block 22 may be built at the top of the other structure and integral with it by adding an outer upright 23 and a top angular piece 24 to the outer edge of the form boards in which the concrete is poured. After the concrete is set these outer pieces 23 and 24 are preferably removed but the form boards 17 which are usually set in the ground may be left in place. If desired they may be removed after the concrete is set by disengaging the nuts 14, the washers 15, and the plates 19.

When the supporting base thus provided has suitably hardened and set the courses of brick 25 may be erected thereon and built up against the wall. The simple brackets shown are sufficient to support a wall approximately four stories high and for any greater height the number of brackets or their sizes may be increased.

To additionally secure the brackets to a wall, a fastening metal strip 26 may be welded or otherwise secured to the intermediate or vertical portion of each bracket, extending upwardly beyond the upper right angle portion 12 and having a number of perforations 27 through which nails, screws, or other fastening devices 28 may be inserted into the wall 8 and the supporting beam 7.

No modification of the supporting structure is necessary to carry the brick veneering support at the corners for in such a case the brackets are located close to the corner as shown in Fig. 3, the reinforcing rods extending to and overlapping each other at the corner, the form boards 17 extending together at the corner so that the reinforcing structure is continued around the corner upheld by the supporting bars and the brackets adjacent the corner.

Although the upper angular portion 12 is positioned above the outer edge of the angular portion 11 in the form shown in Figs. 1 and 4, this portion may be bent in line with the upper edge of the bracket as shown in Fig. 2 or the intermediate portion may be made longer, depending upon the height of the top of the foundation above the ground, or whether it is desired to have the veneering support close to the top of the foundation or below it. It is also obvious that if desired the reinforcing between the brackets may consist of an angular metal plate which fits as a trough between adjacent brackets and into which the concrete may be poured. The concrete itself may be pre-formed in angular sections which are then placed between the supporting brackets and either internally or externally reinforced by metal bars. In any form in which it is made a suitable angular support is provided which rests against the foundation and is supported by brackets from the top of the foundation and is of sufficient strength to support a veneering coating of bricks which are applied thereto and built up against the outer face of the wall or structure, thus providing a brick veneering coating for existing wall structures which may be quickly erected with the least possible expense and trouble.

I claim:

1. A brick veneering structure for walls and the like comprising a plurality of brackets each having an angular portion at one end adapted to be inserted at the top of the foundation, an intermediate portion to rest against the outside of

the foundation, and an angular upwardly extending portion at the bottom, and a concrete supporting structure between the brackets and carried by the upwardly extending bracket portions at the outer side of the wall.

2. A brick veneering structure for a foundation wall or the like, comprising a plurality of brackets spaced apart along the wall, each bracket having an extremity to rest on top of the wall, and a bent extremity at the bottom extending outwardly from the wall, a concrete form supported by the brackets and extending between them at the outer edges thereof, and a concrete structure molded in the forms, adhering to and supported by the brackets and against the wall for supporting a veneering coating of brick and the like when the concrete is set.

3. The method of applying a veneering coating of brick and the like to an existing wall structure having a foundation which consists in applying spaced supports against the outer face and supported by the top of the foundation which project beyond the face of the foundation, in connecting the supports at the outer side of the wall by means of a base which is cast in place around the supports, and in erecting upon the base a veneering coating of brick and the like.

4. The method of applying a brick veneering cover to an existing wall having a flush foundation or base which consists in interposing a plurality of spaced supports between the top of the foundation and the bottom of the wall which project beyond the face of the wall, in connecting the projecting portion of the supports by a reinforced base of concrete and the like, and in building thereon when the concrete becomes set, a coating of brick and the like which covers the supports and the reinforced connection between them.

5. In a veneering wall support, a plurality of brackets each bent at one end to extend over the foundation of the wall and bent at the other end to extend from the outer face of the wall, a form board extending at the outer sides of the outer extensions, means for spacing the board from each of the outer supports, means in connection with each of the supports and extending through the form board for attaching it against the spacing means, the structure thus provided affording means for casting a concrete connecting structure between adjacent supports and surrounding the supports.

6. In a veneer supporting structure for walls and the like, a plurality of brackets each having a bent portion to extend over the top of a wall or foundation, an intermediate portion to rest against the outer face of the wall, and a lower outwardly extending portion, a bar connected to the intermediate portion of each support and extending through the outwardly extending portion thereof, a fastening device at the outer end of each bar, and a spacing bar at the outer side of each outwardly extending portion of the support and less in height than the outer end of the other bar, the said supports and fastening means being adapted to attach a form board to the outer face of each support and to space it from the outer face of the outwardly extending portion of the support to provide a space for allowing concrete poured in and around the outwardly extending portion of the support to surround and cover it and to extend between adjacent supports.

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