Oct. 24, 1933. J. KUBLANOW 1,932,275

COMPOSITE SIDE WALL STRUCTURE

Filed Feb. 11, 1932

Fig. 1.

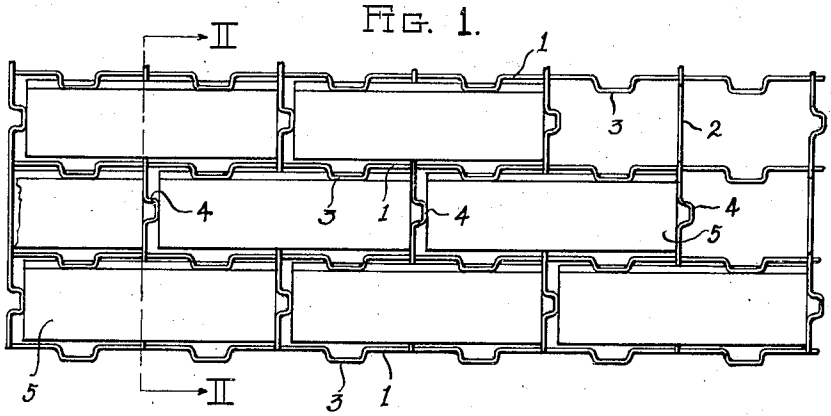


Fig. 2.

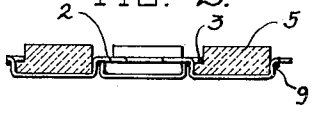


Fig. 3.

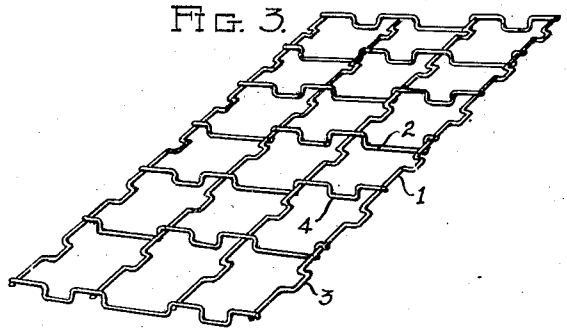


Fig. 4.

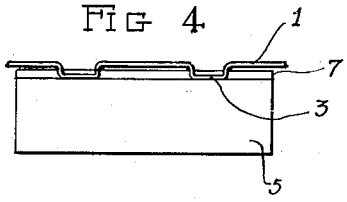


Fig. 5.

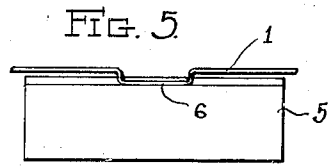


Fig. 6.

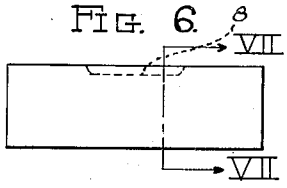


Fig. 7.

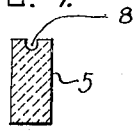
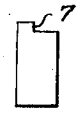


Fig. 8.



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COMPOSITE SIDE WALL STRUCTURE

Joseph Kublanow, Pittsburgh, Pa.

Application February 11, 1932. Serial No. 592,240

4 Claims. (Cl. 72—24)

This invention relates to improvements in composite side wall structures more particularly to a wire mesh formed to constitute a plurality of basket-like portions for receiving brick veneering or the like, and it is among the objects thereof to provide a sidewall structure in which the brick veneer or tile is adapted to be mounted on the walls of dwelling houses or the like in staggered relation and in which the veneer blocks are permanently secured in their assembled position by mortar or the like, whereby the mounting means or wire mesh structure for holding the veneer or tile is constituted a reinforcing element in the finished wall structure.

A further object of the invention is the provision of a facing brick which shall be provided with grooves or shoulders that cooperate with a crimped or off-set portion of a wire mesh structure to hold them in place whereby they become properly supported in alinement and in suitable spaced relation to provide spaces between adjacent tile or bricks for receiving mortar or the like.

In my copending application Serial No. 581,625, filed December 17, 1931, I have disclosed a composite side wall structure utilizing wire mesh for holding the brick veneer and the present invention is a modification of the form of such mesh which differs from the mesh shown in the aforementioned application primarily in that it is provided with portions which coact with cooperating portions of the brick or veneer members.

The invention will become more apparent from a consideration of the accompanying drawing constituting a part hereof in which like reference characters designate like parts and in which:

Figure 1 is a front elevational view of a wire mesh and brick veneer structure embodying the principles of this invention;

Figure 2 a cross sectional view taken along the lines II—II of Figure 1;

Figure 3 a view in perspective of the wire mesh;

Figure 4 an elevational view of a short strand of the wire mesh showing one means of providing engaging members or abutments which cooperate with a portion of the brick veneering;

Figure 5 a similar view of a modified form of a wire member;

Figure 6 a front elevational view of a tile or brick facing member;

Figure 7 a cross sectional view of a tile having a groove formed therein; and,

Figure 8 an end elevational view of the brick veneer of the type having a shoulder for engagement with the abutting element of the wire.

With reference to the several figures of the drawing, the structure therein illustrated comprises a wire mesh having longitudinal wires 1 and cross wires 2 of substantially the same cross sectional area as shown in Figure 3 of the drawing, the longitudinal members 1 being provided with off-set portions 3, and the cross wires 2 having off-set portions 4 spaced between two adjacent strands of the longitudinal wire members 1.

As shown in Figures 1 and 3 of the drawing, there are two extensions or off-sets 3 provided on the longitudinal strands between adjacent off-set members 4 of the cross strands so that there are two of the abutments 3 engaging one tile or brick veneer member 5, and in Figure 5 there is but one off-set abutment 6 for engaging the shoulder or groove of the veneer block 5.

The width of the abutments 3 and the abutments 4 are such as to cause them to lie in the mortar joints formed by the spacing of adjacent veneer blocks or tile and these projecting abutments are covered with the mortar after the joints are filled.

In Figure 2 of the drawing, the veneer blocks 5 are shown assembled in the basket-like mesh of the wire structure with their shoulders 7 engaged by the projecting abutments 3.

In Figure 7, the veneer blocks 5 are shown as provided with a groove 8 instead of an off-set or shoulder 7, this groove being a slot for receiving the projecting abutments 3 of the wire mesh to hold the veneer blocks in place.

As shown in Figure 2, the bottom of the shoulder 7 seats against a shoulder 9 formed by a bend in the cross wires 2 and with the projecting abutments 3 intimately contacting the shoulder 7 of the block, they are firmly secured in place ready to receive the mortar in the spacing or joints. When slots or grooves 8 are employed instead of the shoulders, they need not extend the full length of the block, but such grooves may be provided in the central portion only of the blocks as is shown in Figure 6 of the drawing. It is, of course, obvious that the groove may extend the full length of the block.

Similarly, the shoulder 7 in the type of block shown in Figure 8, need not extend the full length of the block but may only be formed in the region where the brick will be engaged by the abutments 3 or 6.

By virtue of the crimps or bends formed in the longitudinal and cross wires 1 and 2 both in a horizontal and vertical plane, the wire structure is in the form of a structural element and is very rigid.

In mounting the side wall structure as dis-

closed herein, the wire mesh is first secured in place on the side wall of a dwelling or building by securing the wire strands at intervals with suitable staples with the longitudinal wires 1 constituting the mortar line, or the facing line, of the brick veneer blocks 5.

After the wire mesh has been fastened in place, the veneer blocks 5 are disposed in their basket-like receptacles by inserting the shoulder portion 7 or the groove element 8 below or into the projecting abutments 3 and then supporting the tile on the bottom strand or shoulder 9. By forming the abutments 4 in the cross wires 2, the bricks are spaced a distance corresponding to the width of the mortar joint and since the abutments 4 are provided on alternate cross wires only, the veneer tile will assume a staggered relation forming a conventional brick wall and mortar joints.

After a given number of tile have been assembled on their wire structure in the manner shown in Figure 1, the mortar is applied in the joints to cover the wire structure completely as well as the shoulder and groove portion of the veneer blocks 5.

In the completed assembled side wall structure, the cross strands and longitudinal strands together with the projecting abutments 3 and 4 are constituted reinforcing elements in a composite brick and concrete wall structure which securely binds the veneer block and mortar and prevents cracking or distortion of the wall.

From the foregoing, it is evident that composite side wall structures employing preformed wire mesh supports may be rigidly constructed to form a strong durable wall and it is also evident from the configurations of the wire mesh shown in Figure 3 that various forms of coacting or abutting portions may be formed in the wire for engagement with shoulders, slots, or other portions of veneer block especially provided for engagement with such shapes.

I claim as my invention:

1. A side wall structure comprising a wire mesh, the longitudinal strands of which are provided with projecting abutments extending in a plane parallel with the wall on which the wire structure is supported and out of contact therewith, and veneer blocks having shoulder portions adapted for engagement with said projecting abutments to hold them in assembled position and in suitably spaced relation on the wall.

2. A side wall structure for dwellings or the like comprising a wire mesh having longitudinal and transverse strands formed to provide projecting abutments for engagement with veneer blocks, said wire structure having projecting abutments extending downwardly from the longitudinal strands of the wire structure parallel with a wall and said cross strands having projecting abutments extending in the same plane as said first named projecting abutments.

3. A composite side wall structure comprising wire mesh and veneer blocks, the wire mesh consisting of longitudinal and transverse strands joined to form a mesh of which the transverse strands are bent to hold the longitudinal strands in spaced relation from the side wall to which it is applied, the said longitudinal strands being bent to form projections parallel with the wall and veneer blocks cut out to receive said wire projections to hold said blocks in spaced relation to form a conventional mortar joint.

4. A sidewall structure comprising a rectangular wire mesh secured to the wall, the longitudinal strands of which are provided with abutments projecting in one direction only, and veneer blocks having off-set portions on one side to engage the projections of said strands to assemble the blocks in spaced relation on the wall.

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