April 21, 1959 W. L. DIEHL 2,882,713

BACKING SUPPORT FOR WALL VENEER

Filed Feb. 23, 1954

FIG. 1.

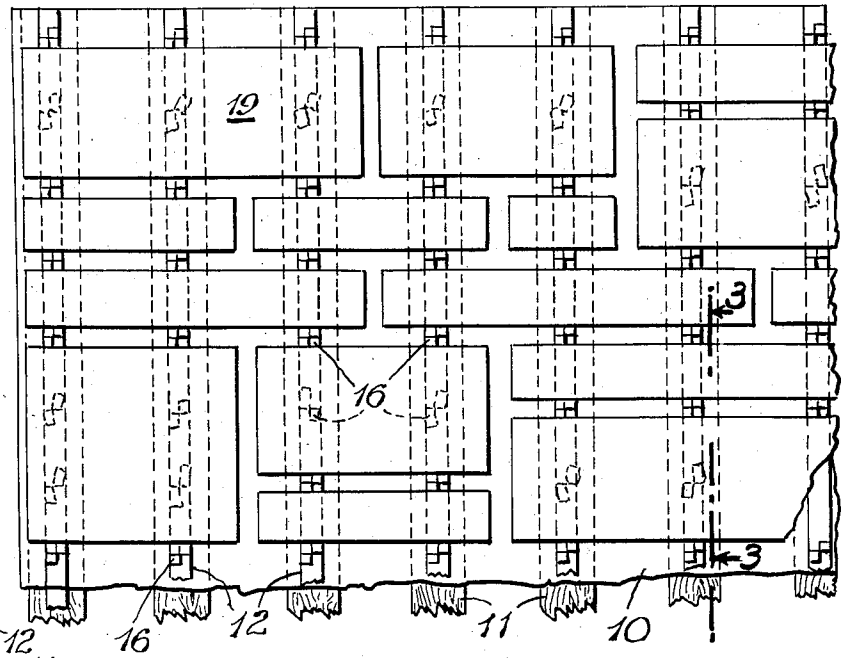



FIG. 4.

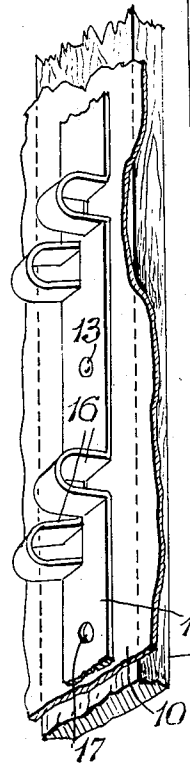



FIG. 2.

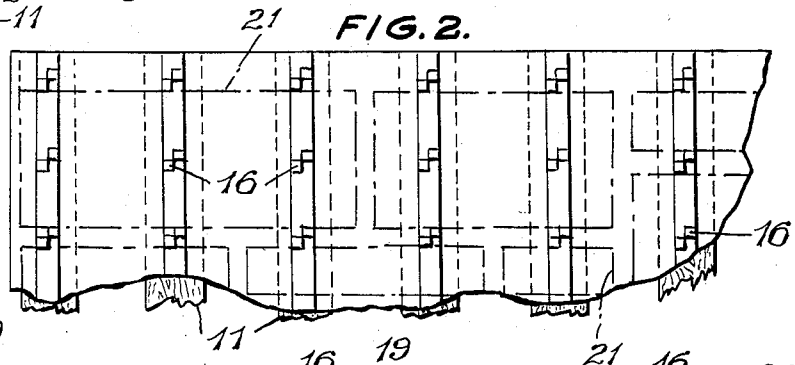



FIG. 6.

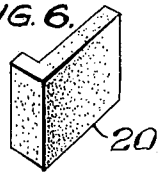



FIG. 3.

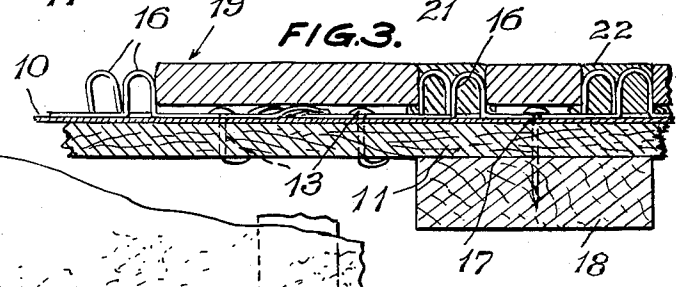
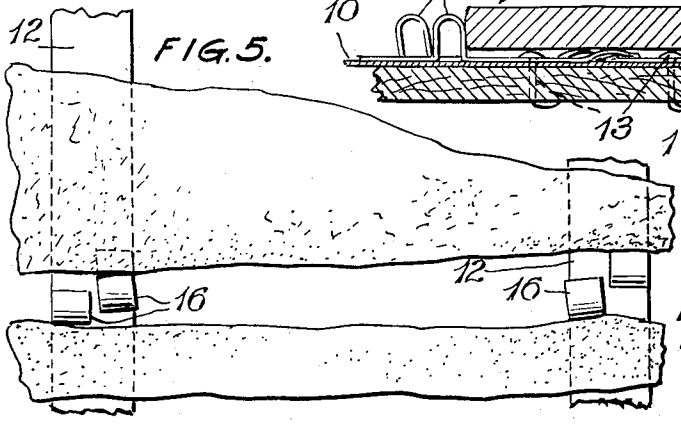



FIG. 5.




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United States Patent Office 2,882,713
Patented Apr. 21, 1959



2,882,713

# BACKING SUPPORT FOR WALL VENEER

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Application February 23, 1954, Serial No. 411,853

1 Claim. (Cl. 72—19)

The present invention relates to a veneer wall construction and is concerned more particularly with improved means and methods for producing a brick or stone veneer which can be applied directly to the walls, either inside or outside of a building.

In the building trades, it is highly desirable to provide an inexpensive easily installed and manufactured veneer construction of thin brick or stone which when finished will give the actual appearance of a full sized brick or stone wall, but which can be applied easily and directly to the frame of a building or to a finished wall surface of a building so that the weight will be distributed entirely over the wall frame and where the work of laying the stone veneer is reduced to a minimum.

To provide for such a brick or stone veneer construction, the instant invention contemplates the provision of a building or assembly sheet into which the stone or brick can be placed and held in position, before the application of mortar to fill the joints, and thereafter mortar can be applied to fill the joints and to aid in maintaining the stone or bricks in place.

It is a general object of the invention, therefore, to provide an improved construction and method for placing a stone or brick veneer on a wall surface.

Another object of the invention is to provide a veneer construction which is economical to manufacture and which facilitates the use of somewhat irregular stone segments in the veneer.

A further object of the invention is to provide a building sheet or assembly means for a veneer wall surface of the above character.

Still another object of the invention is to provide an assembly sheet of the above character which is adapted for use with different sizes of stone or brick which are applied in a random fashion and irregular pattern, and which facilitates the assembly of the stone in place by indicating the size and/or color of the stone or brick which are to be placed in a given location.

Other objects and advantages of the invention will be apparent from the following description of a preferred embodiment thereof, as illustrated in the accompanying drawings, in which:

Figure 1 is a fragmentary elevational view of the veneer as it would appear on the walls of a building, the veneer being a stone veneer with different sizes of stone laid in a random pattern.

Figure 2 is an elevational view similar to Figure 1, but showing the assembly sheet as it would be applied to the wall before the insertion or mounting of a stone or brick therein.

Figure 3 is a fragmentary sectional view taken in a plane indicated by the line 3—3 in Figure 1.

Figure 4 is a fragmentary perspective view showing the resilient retaining strip.

Figure 5 is a fragmentary view illustrating the flexibility of the retaining strip in the mounting of irregular stone.

Figure 6 is a perspective view of an angle shaped piece



of stone such as may be used in turning a corner with the building assembly sheets of the instant invention.

Generally the invention includes an assembly sheet of flexible character and of a standard size which can be nailed or otherwise secured to the wall to be covered with the veneer, and including means for securing more or less regularly shaped pieces of veneer-type stone or brick in place. In general this assembly sheet comprises a flexible layer or sheet such as building paper, for example a building paper known in the trade as "Sisal Kraft," with backing strips or lath secured in parallel relation to one side thereof to the building paper or flexible sheet and to the supporting strips.

Referring to the drawings, the assembly sheet of the instant invention includes a flexible sheet or strip **10** of a desired rectangular size, having on one side a series of parallel backing strips **11** made of suitable material such as wood lath, and on the other side a series of retaining strips **12**. The retaining strips **12** and the wood lath **11** are secured on either side of the sheet **10** by securing means such as nails **13** having their ends clinched over beneath the wood lath. The spacing apart of the wooden backing strips **11** from center to center is preferably a uniform dimension suitable to standard sizes of building stone or brick, and for example they are shown as being spaced 4″ from center to center. The metallic or retaining strips **12** preferably are formed with a series of pairs of off-set fingers or U-shaped bends projecting outwardly from the building strip, a pair of bends **16** being placed on 4″ centers, and being of a dimension to fit in the normal space allowed for mortar between brick. This normal space for mortar for use with a 2¼″ basic brick is ½″. Each pair of resilient deformable U-shaped retaining elements **16** preferably occupy approximately one-half of the width of the strip and are offset with respect to each other to reduce the overall length of material used in making the retaining strips and to enable individual movement or adjustment of the respective retaining elements of a pair in cooperating with the different adjacent stones held thereby. Preferably, these retaining elements **16** are bent slightly from the perpendicular with respect to the portion of the strip **12** engaged with the building paper to provide for gripping a stone or brick which is slightly undersized with respect to the standard. Because of their U-shape, they retain their resilience and gripping action on a brick when forced therebetween even though they must be offset somewhat by use of a suitable tool such as a screwdriver in the operation of forcing a brick therein. Also, the U-shaped retaining elements or keys on retaining strip **12** can be hammered flat (see Figure 3) so as to enable use of a stone which is a multiple of the uniform dimension selected in making the building strip.

Preferably also the assembly sheet or building strip is constructed to provide for instruction of the mason or other worker in assembling the stones into strips by having printed on the layer of paper indicia of the pattern, for example, rectangular indicia **21** corresponding to the size of stone or veneer piece which is to be laid in each location. Thus the strip as shown in Figure 2 has printed thereon outlines of the size of the stone shown assembled thereon in Figure 1. In this way the building strip or assembly sheet can be used in selling a packaged unit to a user so that he will have no difficulty in properly assembling the different size stones supplied to him in a desired pattern. These rectangles can also have printed thereon color indicia, giving an indication of the color of stone to be placed in a given location, where a color pattern is to be followed in erecting a wall.

Preferably the building strip is assembled of fabricated on a table having suitable grooves for receiving the laths

11 in appropriate spaced relation, the backing or flexible building paper **10** is then placed over the laths, the metal strips **12** are put in place and then the nails **13** are applied leaving certain of the apertures **17** in the retaining strips free for later nailing to backing, for example, as indicated at **18** in Figure 3. After fabrication of the assembly sheet, it can be shipped in rolled condition to the site of the building to which it is to be applied, and there unrolled and nailed to the wall of the building or to the framework. Thereafter the stone pieces indicated at **19** are placed in the desired design on the building wall by insertion between the resilient retaining clips or keys **16**. After the entire veneer or desired portion thereof is assembled in place on the wall, the usual form of mortar **22** is used to fill the cracks, the spaces encompassed by the U-shaped retaining keys or extensions **16**, and to extend slightly between the stone or brick and the wall surface. This completes the operation in constructing a veneered wall, and results in a wall surface giving the exact appearance of a finished wall of bricks or stones of complete thickness.

Figure 5 illustrates the flexibility of the assembly sheet of the invention in accommodating the irregularity of thin pieces of natural stone, where highly regular surfaces are impractical, and the offset nature of the retaining keys **16** at each retaining location provides for the necessary deformation of these elements into substantially parallel relation when required. Corners of the building are turned either by overlapping the stone or brick in the usual fashion, as by using a special preformed corner element such as shown in Figure 6 at **20**. This element **20** is L-shaped and has the two portions of the L conforming to the regular dimensional spacing of the assembly sheet so that it will be held in the assembly sheets on both walls forming a corner.

While I have shown and described a preferred form of the invention, it will be apparent that the invention is



capable of modification and variation from the form shown, so that it should be limited only by the scope of the claim appended hereto.

I claim:

In an article of manufacture adapted for use in veneer wall construction for holding building elements on a building wall prior and during the application of masonry therebetween, the combination comprising a sheet of flexible material, a series of substantially parallel substantially rigid backing strips positioned on the side of said sheet that is adapted to face the wall, a series of substantially parallel stone retaining strips positioned on the other side of said sheet, means fastening said backing strips and said stone retaining strips to said sheet to form an assembly that is adapted to be wound into a roll with all of said strips parallel with the roll and which is adapted to be unwound and secured with the backing strips thereof against the building wall, and said stone retaining strips having a plurality of spaced stone engaging keys extending laterally from said last mentioned strips to frictionally engage the stones and hold them in place on the wall when the assembly is attached to said wall.

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