W. J. LA FRANCIS.

BUILDING VENEER.

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1,052,670.

Patented Feb. 11, 1913.

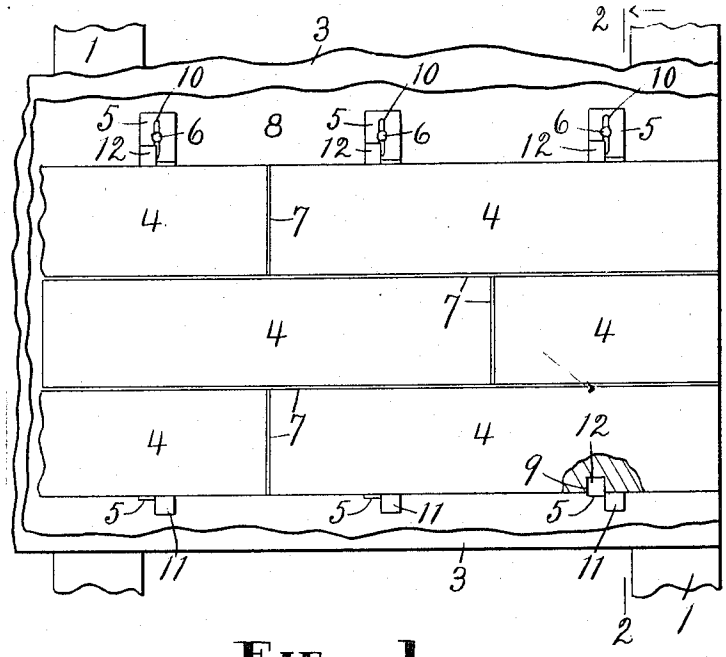


FIG. 1.

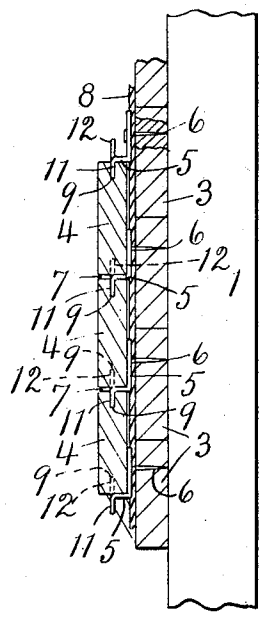


FIG. 2.

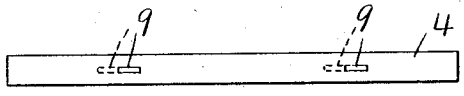


FIG. 3.

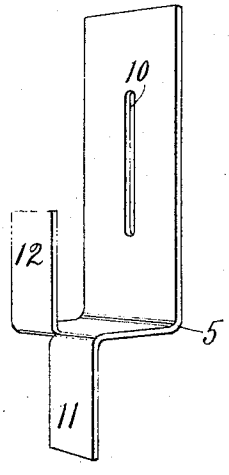


FIG. 4.

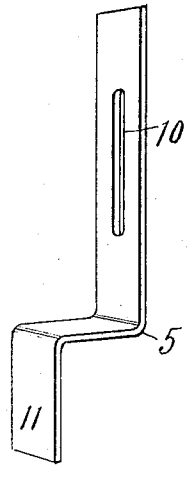


FIG. 5.

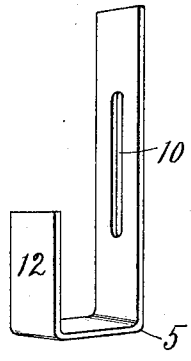


FIG. 6.

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BUILDING-VENEER.

1,052,670. Specification of Letters Patent. Patented Feb. 11, 1913.

Application filed January 31, 1912. Serial No. 674,488.

To all whom it may concern:

Be it known that I, WALTER J. LA FRANCIS, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Building-Veneer, of which the following is a specification.

My invention relates to improvements in facings or veneers for buildings, and consists of certain peculiar slab construction and means for attaching the slabs to the walls of a building, as hereinafter set forth.

The object of my invention is to provide a hard and durable veneer for buildings, and to provide means of attachment for such veneer, to the end that, unlike stucco and other common forms of hard exterior finish applied to the walls, especially if the latter be of wood, said veneer is unaffected by the shrinking of said walls or by other causes, being stable, retaining indefinitely its original form and shape without bulging or cracking, and so presenting a good and sightly appearance.

A further object is to provide a highly efficient retaining clip for such veneer, whereby the slabs which comprise the larger portion of the veneer can be easily, quickly and conveniently attached to the woodwork at suitable points, and there permanently retained, provision being made for the shrinkage of the wood without strain on the slabs and the liability of displacement of the latter incident to such strain.

Other objects will appear in the course of the following description.

Upon being united with the walls of a building the veneer becomes a permanent part of such walls, so that the latter term is applicable both before and after veneering.

I attain the objects and secure the advantages of my invention by the means illustrated in the accompanying drawings, in which—

Figure 1 is a fragmentary front elevation of a wall of a building having a preferred form of my veneer applied thereto, or consisting in part of such veneer; Fig. 2, a transverse vertical section through said wall, including said veneer, taken on lines 2—2, looking in the direction of the associated arrow, in Fig. 1, excepting that the section through the boarding is on a vertical plane that is in line with the vertical centers of the clips, being at the left of the plane represented by said lines 2—2; Fig. 3, a plan of one of the longitudinal edges of one of the slabs; Fig. 4, an enlarged perspective of the clip which I prefer to employ; Fig. 5, an enlarged perspective of a modified form of such clip, and, Fig. 6, an enlarged perspective of still another modified form of clip.

Similar figures refer to similar parts throughout the several views.

In the first two views I show a portion of the wooden wall of a building, comprising studs 1 and boarding 3, and on the face of such wall portion a veneer comprising a plurality of slabs 4 held to said boarding by means of a plurality of clips 5 and nails 6, such slabs being cemented together at their edges as indicated at 7. Preferably there is a layer of heavy paper 8 between the boarding 3 and the slabs 4 and clips 5. The studs 1 and boards 3 are old, so also is the paper 8.

Although the slabs 4 may consist of any suitable material, I prefer to make them of concrete or cement, and in any event each of said slabs should have one or more recesses 9 in each longitudinal edge, the number of such recesses depending on the number of clips 5 to be used in attaching the slabs to the boarding. Each recess 9 is in the middle between the faces of one of the slabs 4, the sides of such recess are parallel with said faces, and such recess has sufficient depth, is otherwise large enough, and is properly located to receive an engaging part of one of the clips 5, presently to be described. By thus providing both longitudinal edges of each slab 4 with the recesses 9, such slab is made interchangeable so far as the clips 5 are concerned, that is, the slab can be placed with either longitudinal edge up and with either face out, which is clearly an advantage.

The clip 5 in each case consists of an angle-iron having a central longitudinal slot 10 in its vertical part or shank to receive the nail (6), screw or other fastener by means of which said clip is secured to the boarding 3, and being provided at the front end of its horizontal part with a downwardly-extending lug or tongue 11, as shown in Fig. 5, or with an upwardly-extending lug or tongue 12, as shown in Fig. 6, or with both, preferably, as shown in Figs. 1, 2 and 4. The tongues 11 and 12 are designed to

enter the recesses 9 in any of the slabs 4 and so securely hold the slab in place against the boarding 3 or against the paper 8 and said boarding, when the clip 5 of which said tongues form parts is nailed in position, the tongue 11 entering one of the recesses in the top edge of said slab and the tongue 12 one of those in the bottom edge of said slab. The tongues are adapted to fit into the recesses 9 by reason of the fact that the length of the horizontal part of each clip, between the vertical planes of adjacent sides of the slotted part of said clip and the tongues, is approximately equal to the distance from either face of any slab to the adjacent edge of one of its recesses. The clips assist in a measure in supporting the slabs because the horizontal parts of the clips extend under the slabs, as well as serving by means of their tongues to hold the slabs to the building.

Each recess 9 might have a length equal to the combined width of a pair of tongues 11 and 12, for the purpose of rendering the slabs 4 interchangeable, as previously noted, and capable of being built up without requiring to be selected, but I prefer to make such recess only about as long as either of said tongues is wide, because then there is no appreciable space in the recess unoccupied by the tongue. This can be done without interfering with the interchangeable feature by locating companion upper and under recesses respectively at the right and left of an imaginary dividing line, which line in each case is the same distance from the adjacent end of the slab. The slabs are laid in courses and so as to break joints like bricks, hence the aforesaid imaginary line should come mid-way between adjacent ends of two full length slabs in two contiguous courses or tiers. In other words, said line is separated from the adjacent end of a slab by a distance equal to one-fourth the length of a full length slab, and this is true of the line adjacent to either end of a full length slab. Short slabs at the ends of the courses will each have at least two recesses therein, one in the top and the other in the bottom. While some deviation may be made in the arrangement of the recesses, the arrangement shown in full and by dotted lines in Fig. 3 is a correct and practicable one and probably the best for most purposes. The nail 6 in each case is passed through the slot 10 in any clip 5 and driven into the boarding 3 at a point remote from either end of said slot, and said nail is thus able to move either up or down in the slot, without disturbing the clip and the slabs in engagement therewith, with said boarding or as the woodwork expands or contracts. This is of the utmost importance, owing to the tendency of present-day woodwork to undergo quite extensive changes under different atmospheric conditions and especially to shrink. Practically all of this shrinkage is in a vertical direction, so that the vertical slots 10 permit the same to occur without having any effect on the veneer.

In practice, when the woodwork is ready, the bottom row of clips 5 is nailed to the boarding 3, care being taken to properly locate the clips in this row relative to the recesses 9 in the first course of slabs 4, provided the double-tongued clips or single-tongued clips like that shown in Fig. 6 are used. Recesses must be cut in the water-table of the building for the tongues 11 of the first row of either the double-tongued or single-tongued clips like that shown in Fig. 5. Assuming, now, that the double-tongued clips are used, the first course of slabs 4 is next placed on the horizontal parts of such clips with the tongues 12 of said clips in the recesses 9 in the bottom edges of said slabs. Then the second row of clips is nailed to the boarding with the tongues 11 of said clips in the recesses 9 in the upper edges of the slabs in the first course, and the second course of slabs is placed above the first with the tongues 12 of said second row of clips in the recesses in the bottom edges of the slabs in said second course. The third row of clips and the third course of slabs are placed and laid in precisely the same way as were the second row of clips and the second course of slabs, and so on until the entire wall is covered and completed. As the slabs are laid they are cemented together at top, bottom and ends, as represented at 7 in Figs. 1 and 2.

The Fig. 5 clip may be used in lieu of the double-tongued clip for the upper edge of the top course of slabs if desired. Either the Fig. 5 clip or the Fig. 6 clip may be substituted throughout for the double-tongued clip, or the two forms may be employed together, the former for the tops and the latter for the bottoms of the slabs. Then, again, one or both of the single-tongued clips may be combined with the double-tongued clips in other ways besides those hereinbefore pointed out. In case one of the single-tongued clips is exclusively employed, the recesses 9 in one longitudinal edge or the other of the slabs are not needed and might be omitted, only the upper recesses being required for the Fig. 5 clip, and the lower recesses for the Fig. 6 clip. Obviously the double-tongued clip is to be preferred for the reasons that it renders the slabs doubly secure, as compared with either single-tongued clip when employed alone, and is more convenient than are the two forms of single-tongued clips when used in combination in the manner above explained. The nails 6, when driven into the boarding, cause the slotted shanks of the clips to be embedded in the paper 8, presuming that

the latter is employed as by preference it is, so that the space between the boarding and the back side of the veneer is filled by the paper except where said shanks come. Thus the paper serves as a backing for the veneer. In the absence of the paper the slabs rest against the clip shanks only, unless some material be introduced as a filling behind said slabs. Besides holding the slabs to the woodword and assisting in supporting them from below, the clips also assist in securing said slabs against endwise movement. Although the nails are driven in until their heads engage the edges of the slots 10 very forcibly, such engagement is of a nature that allows said nails to slide in said slots under the force exerted by the boarding in shrinking, so that the veneer remains undisturbed, said veneer being strong and rigid enough to resist the downward force or pressure of the nails, which it would not be if the slots were not provided.

The slabs may vary in size and shape and be arranged differently from the arrangement herein shown and described.

In Fig. 1, a portion of one of the bottom slabs 12 is broken away to show in full one of the clip engagements at the bottom.

What I claim as my invention and desire to secure by Letters Patent, is—

The combination, with a veneer slab having recesses in the top and bottom edges thereof, said recesses in each pair of companion top and bottom recesses being located relatively on opposite sides of a vertical transverse plane through such slab between the recesses in such pair, of an attaching clip for such slab, such clip consisting in part of upwardly and downwardly extending tongues arranged relatively, like said recesses, on opposite sides of a vertical plane between the inner or adjacent edges of said tongues, and adapted to fit into said recesses, and such clip consisting further of a shank which has a slot therein to receive a fastening member and permit the latter to move independently of the clip.

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