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OUTSIDE SURFACING FOR WOODEN BUILDINGS

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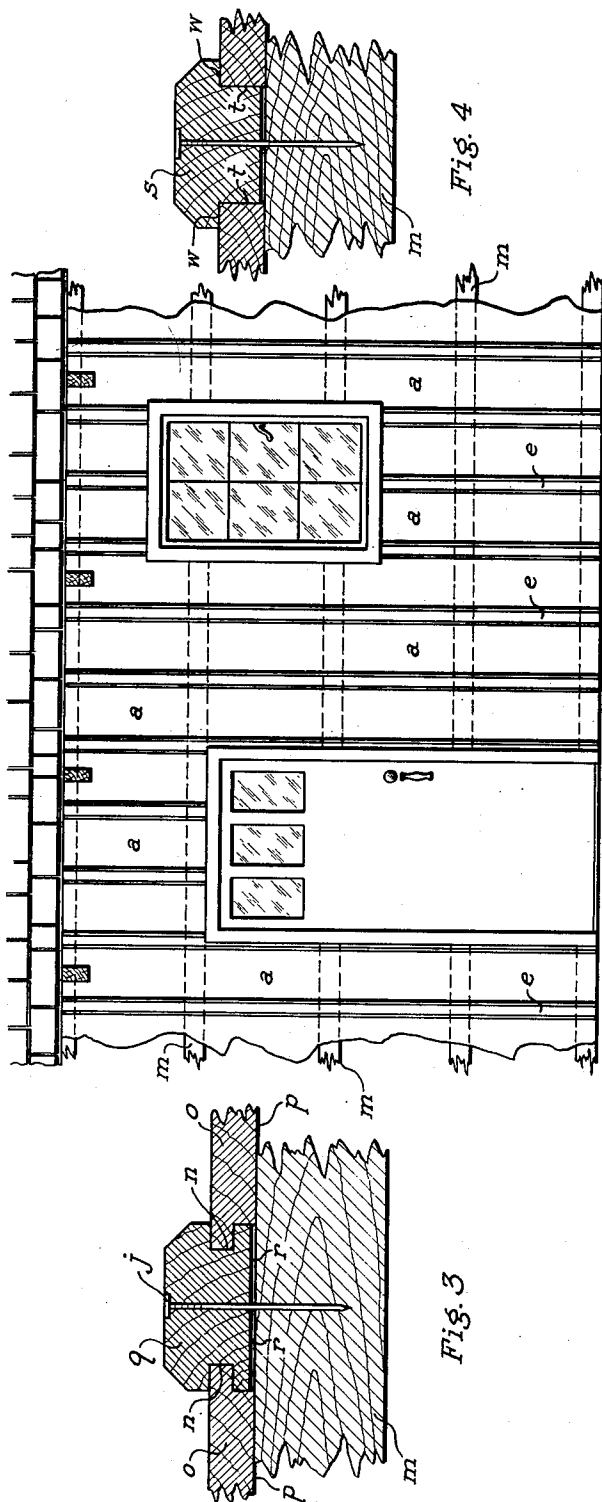
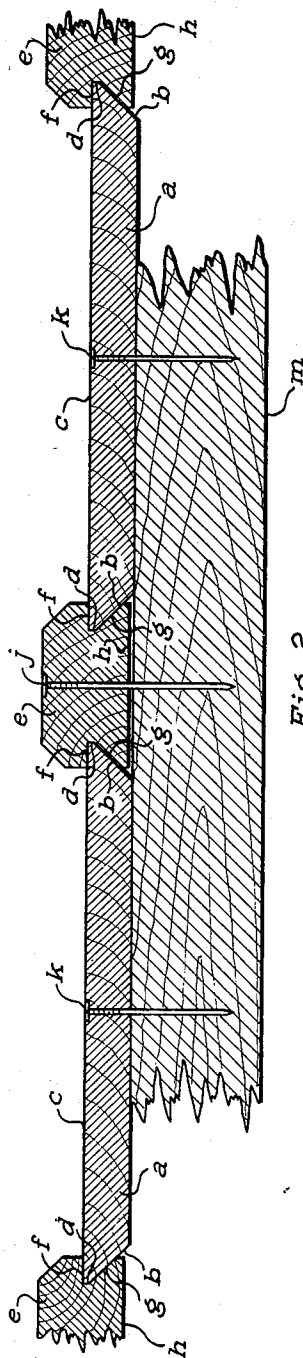


Fig. 1

Fig. 2



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OUTSIDE SURFACING FOR WOODEN BUILDINGS

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3 Claims. (Cl. 20—5)

My invention relates to the surfacing or sheathing of wooden buildings, and especially to the use of vertical sheathing or panels and battens. Such outside surfacing with vertical sheathing and battens is commonly employed in the construction of small houses, sheds, cabins, and the like.

One of the difficulties encountered with this construction or surfacing is the fact that it has been practically impossible to prevent the opening up of cracks between the vertical sheathing and the battens. Such cracks develop due to various causes, such as uneven shrinkage of the lumber, settling of the buildings, bowing of the battens, etc., and thus it has been practically impossible to keep buildings constructed in this way weather tight.

Another fault with such construction has been that it is customary to nail the battens at the edges of the adjoining strips of the vertical sheathing, the nails extending thru the battens and sheathing at the edges, and the lateral shrinkage of the sheathing, due to the drying of the lumber, tends to cause the sheathing to crack thru the center. Similar cracks are sometimes caused in the battens themselves.

The object of my invention is to overcome these difficulties by providing pre-formed battens and by securing the battens and sheathing in place in such manner that shrinkage of the lumber or bowing of the battens or sheathing will not cause any cracks to develop or open up in the building surfacing.

The manner in which I accomplish my object and the way in which I fabricate the batten strips are described with reference to the accompanying drawing constituting a part of this specification.

In the drawing:

Fig. 1 is an elevational view of the portion of an outside wall illustrating the manner in which the improved vertical sheathing or siding and battens of my invention may be employed;

Fig. 2 is a horizontal sectional view, drawn to a larger scale, of two panels or strips of vertical sheathing or siding and associated battens;

Fig. 3 is a similar fragmentary horizontal section illustrating a slightly modified form of my invention; and

Fig. 4 illustrates a further modification.

Referring first to Figs. 1 and 2, the sheathing or siding boards *a*, which may be of any reasonable and convenient width, have their edges preferably beveled so that when these boards are set in place the bevel faces are turned towards the

interior of the building. The bevel faces *b* begin preferably a short distance from the outer surface *c* so as to provide shoulders *d* and avoid objectionable sharp edges.

The battens *e*, which may be approximately double the thickness of the sheathing or siding boards *a*, are made with longitudinal rabbets in each edge, formed so as to coincide with the edges of the sheathing or siding boards *a*; thus these rabbets include edges *f* and bevels *g* of the battens *e*, cut to correspond with the overlapped portions of the outer surfaces *c* and bevel faces *b* of the sheathing or siding boards *a*.

A very important feature of my batten *e* is the fact that the distance from the inside surface *h* to the edges *f* of the longitudinal rabbets is made slightly less than the thickness of the sheathing or siding boards *a*. Consequently, when the battens *e* are nailed or secured to the usual horizontal studding *m*, the edges *f* will constantly press firmly on the overlapped portions *c* of the sheathing or siding boards *a*, thus insuring weather tight joints. This difference is preferably made so slight, however, that the space between the inside surface *h* of the batten and the studding *m* would be approximately only $\frac{1}{2}$ of an inch when the batten is secured in place, and this small space could not cause any splitting off of the edge or tongue of the sheathing due to the pressure exerted through the batten edge *f*.

As shown in Fig. 2, in my invention the battens *e* clamping the edges of the sheathing or siding boards *a*, are fastened on the horizontal studding *m* by a single row of centrally disposed nails or screws *j*. Heretofore, as mentioned above, outside battens have been made in the form of a single slat which covered the crack between adjacent siding boards. These slats are held in place by rows of nails driven thru the battens and thru the siding boards close to the edges of each, the natural shrinkage of the siding boards, due to the drying of the wood, causing the slats and siding boards to split. With my battens, when the siding boards *a* shrink, such shrinkage will cause the bevel faces *b* to pull away from the corresponding edges *g* of the battens, the edges *f* of the battens continuing, however, to overlap the edges of the outer surface *c* of the siding boards *a*; but such shrinkage will not cause any splitting of either siding boards or battens. Due to the lateral clamping features afforded by the beveled rabbets in my battens *e*, cooperating with the beveled edges of the siding boards *a*, I have not found it necessary to nail the siding boards *a* to the studding *m* under ordinary circumstances.

But such nailing may be desirable when siding boards having unusual width are used. In such cases, however, a single row of nails or screws *k* may be driven into the studding along the center of the siding boards.

Referring to the modified construction shown in Fig. 3, the edges of the siding boards *o* are made with a tongue *n* of rectangular cross section. A corresponding longitudinal groove is made in each edge of the battens *q*. These tongues and grooves are parallel to the inner surfaces *p* and *r* of the siding boards and battens. In other respects the construction is the same as that already described with reference to Fig. 2. The tongue and groove construction of Fig. 3, however, may under some conditions provide an even better joint between batten and siding board than the construction of Fig. 2, for it will be observed that with lateral shrinkage of the siding boards *o* the two parallel faces of the tongue *n* will still maintain their contact with the corresponding surfaces of the groove of the batten.

My battens could, with slight modification, be used with ordinary siding boards if desired,—that is, boards the edges of which have not been beveled or which have not been provided with tongues. This is illustrated in Fig. 4. In this case the rabbets of the battens would be square, the edges *t* extending at right angles to the edges *u*. However, I have found the bevel construction of Fig. 2 or the tongue and groove construction of Fig. 3 to be much more desirable and advantageous in that it prevents, in the case of any tendency of the battens to bow outwardly or to curl at the edges, any separation from the siding boards *a*.

It is also possible to use battens of the types described where, however, the distance from the inside surface *h* to the edges *f* of the longitudinal rabbets (Fig. 2) is exactly the same as the thickness of the sheathing boards *a*, but I have found it preferable to make this distance slightly less.

Other modifications in the joints between siding boards and battens would be possible with-

out departing from the principle of my invention and it is not my intention to limit myself to the specific joints illustrated.

I claim:

1. An exterior wall surfacing comprising vertical sheathing, battens secured to the wall between adjacent pieces of sheathing, said battens having lateral flanges extending over the edges of the sheathing, an inwardly facing bevel at each edge of said sheathing, each side of said battens beneath said flanges being grooved to fit around said bevel, the distance between the under side of said flanges and the rear face of said battens being slightly less than the thickness of said sheathing, whereby said flanges will be caused to press firmly against the edges of the sheathing which they overlap, regardless of any shrinkage of said sheathing.

2. An exterior wall surfacing comprising vertical sheathing, battens secured to the wall between adjacent pieces of sheathing, said battens having lateral flanges extending over the edges of the sheathing, the edges of said battens beneath said flanges being provided with longitudinal grooves and the edges of said sheathing formed correspondingly to fit into said grooves, the distance between the under side of said flanges and the rear face of said battens being slightly less than the thickness of said sheathing, whereby said flanges will be caused to press firmly against the edges of the sheathing which they overlap, regardless of any shrinkage of said sheathing.

3. An exterior wall surfacing comprising vertical sheathing, battens secured to the wall between adjacent pieces of sheathing, said battens having lateral flanges extending over the edges of the sheathing, the distance between the under side of said flanges and the rear face of said battens being slightly less than the thickness of said sheathing, whereby said flanges will be caused to press firmly against the edges of the sheathing which they overlap, regardless of any shrinkage of said sheathing.

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