Aug. 26, 1941. W. A. WARNER 2,253,667

PLYWOOD WALLBOARD

Filed Sept. 20, 1937 2 Sheets-Sheet 1

Fig. 1.

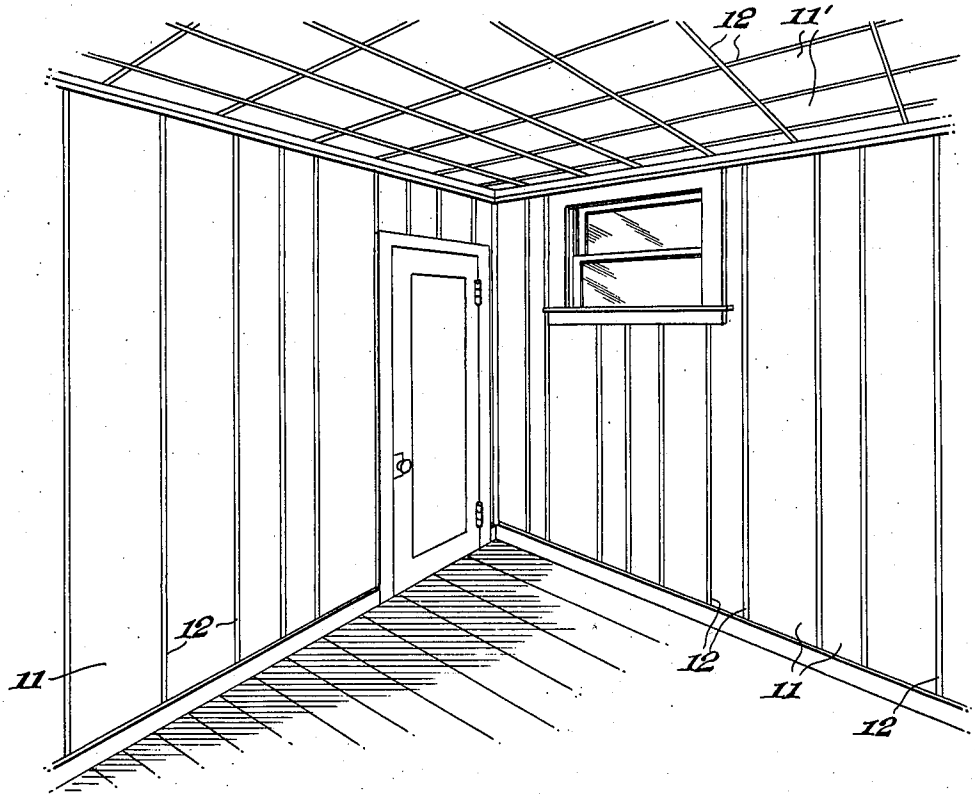
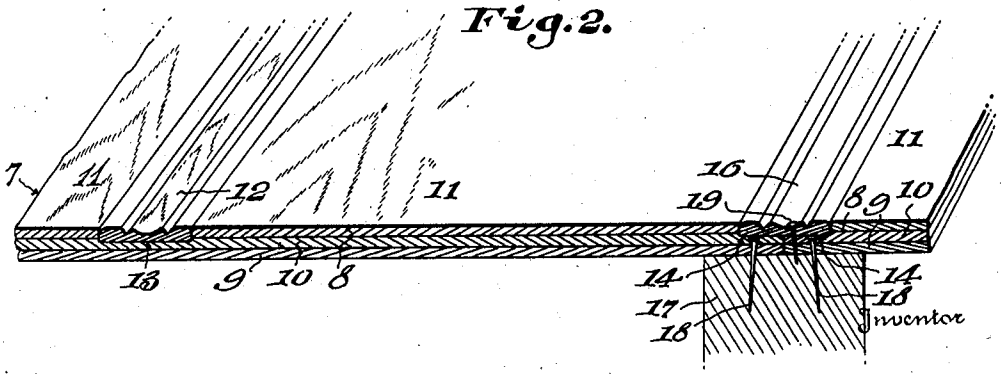


Fig. 2.



Inventor

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WITNESS

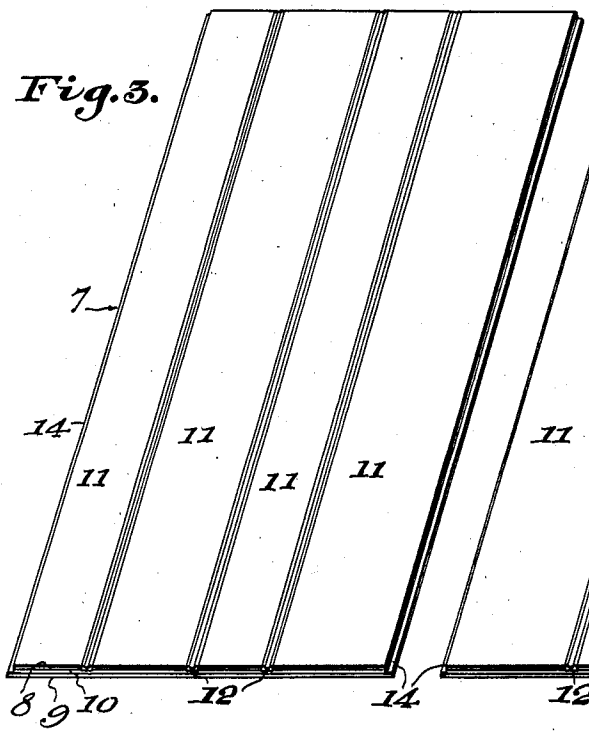
H. Worsdale

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PLYWOOD WALLBOARD

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Fig. 3.



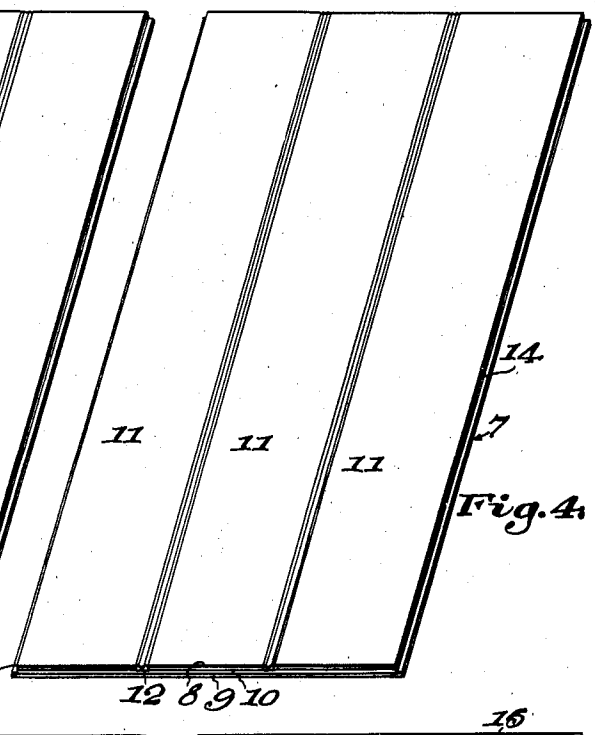
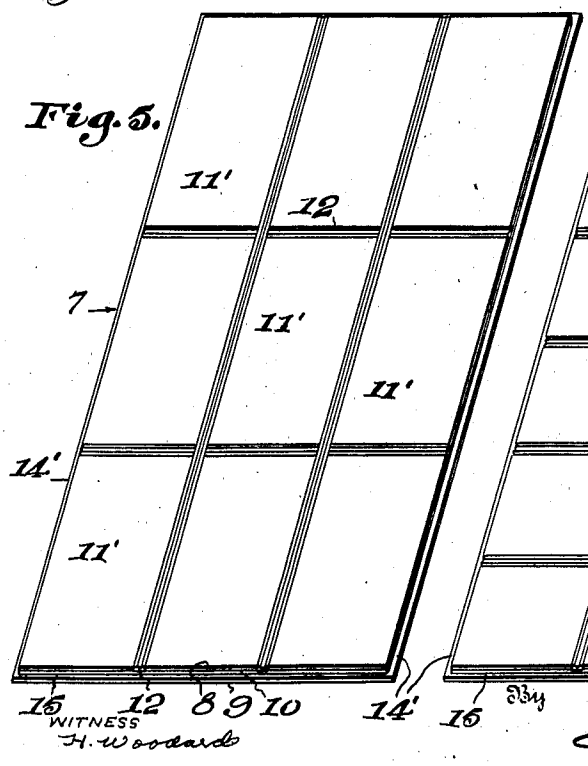


Fig. 4.

Fig. 5.



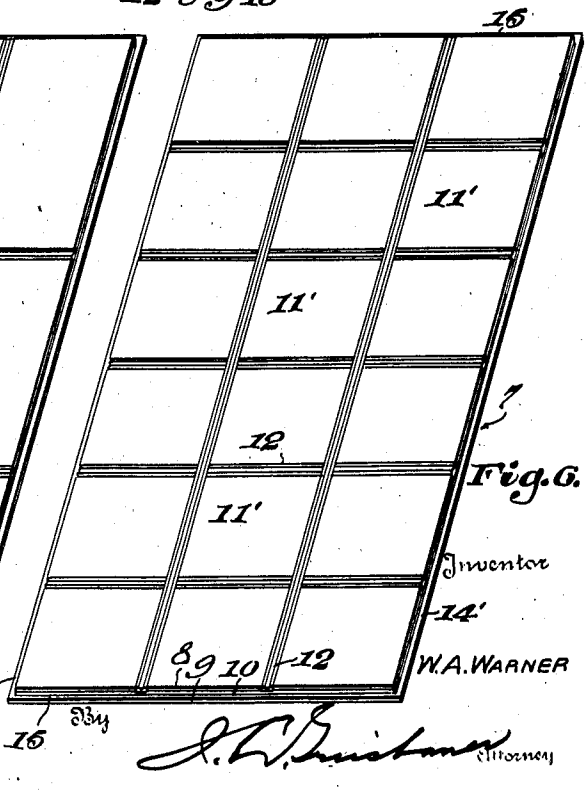


Fig. 6.

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2,253,667

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PLYWOOD WALLBOARD

Warren A. Warner, Portland, Oreg.

Application September 20, 1937, Serial No. 164,771

6 Claims. (Cl. 20—15)

My invention relates to wallboard and more particularly to plywood for use on interior walls and ceilings of dwellings and other buildings.

In building construction during recent years, there has been a tendency away from the use of wet-plastered walls, the many objections to which are well known. The development has been toward the use of dry construction employing plaster-board, compressed fibre composition boards and wood veneer plywood. While all of these wall coverings have certain well known advantages, they also have certain drawbacks, the principal one common to these coverings being the difficulty of concealing the joints between the large sheet or panels. With respect to plaster and compressed fibre composition wallboards or sheets, another marked objection has been that they produce a soft or fragile surface which is easily damaged, the joints between the sheets are weak and difficult to hide, and the range of surface decorative possibilities is more limited than with respect to a wooden surface. Among the advantages of laminated wood veneer or plywood wallboards over solid lumber, are greater strength, possibility of a large area in a single sheet or board, ease of obtaining natural grain finishes, etc. Notwithstanding these and other desirable qualities of plywood for the surfacing of interior walls and ceilings, it has not been extensively used especially in the more expensive residences. One of the reasons for this extremely limited use of plywood wallboards has been the lack of a satisfactory joint without the employment of overlapping and protruding trim strips or battens. My invention has overcome this and other objections and has already developed a new outlet for plywood.

One of the objects of my invention is to adapt this highly desirable material for use in the inexpensive production of planked, paneled or tiled effects on interior walls or ceilings in a manner that does away with the use of the conventional unsightly battens heretofore used to hide the joints between plywood panels.

A further object is to provide for the production of a wall of this character which is free from visible seams or joints and which uses portions of its own pattern to cover the joints.

With the foregoing and other objects in view, my invention resides in the novel subject matter hereinafter described and claimed, the preferred embodiments being illustrated in the accompanying drawings.

Fig. 1 is a perspective view of portions of two walls and a ceiling showing one of the various effects which can be produced by the use of my invention.

Fig. 2 is a sectional perspective view through portions of two abutting sheets of the wallboard showing one of the molding strips inlaid and another concealing the joint or seam at the abutting edges.

Fig. 3 is a perspective view of a sheet constructed to represent planks of random widths.

Fig. 4 is a perspective view showing one of the sheets constructed to represent planks of uniform width.

Fig. 5 is a perspective view showing one of the sheets provided with elongated rectangular panels for a tile effect.

Fig. 6 is a perspective view showing one of the sheets constructed to provide it with square panels for another tile effect.

Each sheet 7 of the improved wallboard may be of any desired size but is preferably standardized to a width of four feet and a length of from eight to twelve feet. Each sheet may be composed of any desired number of wood lamini, with each lamina of any desired thickness, but for most purposes, three lamini each of about one-sixteenth of an inch in thickness, will suffice, the three plus the thickness of the glue or cement used in securing them together, providing a board substantially one-quarter of an inch thick.

In the present disclosure, each sheet 7 embodies a top or anterior lamina 8, a bottom or posterior lamina 9, and an intermediate lamina 10. The top or anterior lamina 8 may be made of a series of spaced parallel strips, planks or panel portions 11 as seen in Figs. 1, 2, 3 and 4, or of a plurality of spaced plank or panel portions 11' as seen in Figs. 5 and 6. The planks or panels 11 or 11' are held in fixed spaced relation by at least the posterior lamina 9. In the boards for use on side walls of a room or other structure, as indicated in Fig. 1 and in Figs. 2, 3 and 4, the planks or panels 11 extend throughout the length of the sheet 7 to represent wooden boards or planks of either random widths or of uniform width. In Figs. 5 and 6, the smaller planks or panels 11' are spaced apart both transversely and longitudinally of the sheet 7 to give the effect of either rectangular or square tiles.

In all views, thin wooden molding strips 12 occupy the spaces between the planks or panels and are cemented to the lamina portions which connect said planks or panels in the present disclosure to the next under lamina 10, and it is preferable that the outer sides or faces of these molding strips be flush or substantially flush with

the outer faces of the planks or panels. While the strips 12 are shown in Fig. 2 somewhat thicker than the anterior lamina 8 and the grooves 13 which receive said strips therefore extend slightly into the intermediate lamina 10, the invention is not restricted to this strip thickness and groove depth.

Each sheet 7 constructed to represent boards or planks extending from end to end thereof, is preferably provided with rabbets 14 extending along only its longitudinal edges and opening through its anterior side. Each sheet intended to represent tile or relatively small panels, is not only provided with corresponding rabbets 14' along its longitudinal edges, but is similarly rabbeted at its ends as indicated at 15 in Figs. 5 and 6. The rabbeted edges of the sheets are to abut each other as shown in Fig. 2, and joint covering molding strips 16 are provided to be secured in the rabbets of said edges, the various sheets being, of course, secured to the usual studs 17 or to any other desired supporting structure before said molding strips 16 are applied. In fastening the sheets to the supporting structure, suitable nails are driven through the rabbeted edges and at any other necessary points, and the nails passing through said rabbeted edges are covered and obscured by the molding strips 16, the latter being secured in place by small brads 18 or by glue or cement, or by both of these means. When casein glue is used, the strips are practically "welded" to the sheets and the joint is sealed for insulation. Any nails necessarily so located that they cannot be covered by the strips 16, are of course finish nails countersunk in the usual manner so they are not visible on the completed wall.

The joint-covering molding strips 16 are identical with the molding strips 12. Both the strips 12 and 16 are preferably made from the same kind of wood veneer used for the planks or panels forming the top lamina 8. Moreover, the visible relation of the strips 16 with respect to the planks or panels 11, 11', is identical with the visible relation existing between the inlaid strips 12 and said planks or panels. Thus, in a completed wall, the separate sheets 7 absolutely lose their identity and an apparently seamless paneled or tiled wall is produced. It will, of course, be understood that the joint covering strips 16 and the inlaid strips 12 have the same appearance and that they may be of any cross-sectional shape. Since these pattern-forming strips 12 and 16 are of the same width, the panel areas 11 and 11' are uniformly spaced, and the rabbets 14 and 15 at the edges of the sheets 7 are of a width equal to half the spacing between said panel areas.

My improved plywood wallboards may be easily and inexpensively manufactured from large standard sheets of plywood by simply forming grooves or dadoes 13 of suitable depth, in one or both directions, rabbeting the opposite edges or all of the edges to the same depth, and then gluing the molding strips 12 in the grooves or dadoes. Since the finished articles are flat, uniform in size and relatively rigid, they may be safely handled by the workmen without danger of damage. They also lend themselves to being compactly packed for shipment in a package containing also enough of the joint covering strips 16 and the necessary nails or brads to install the number of sheets that the package contains.

This new article of manufacture overcomes the real objections to the use of plywood wallboards since the joints between the sheets or panels are invisible and a substantially flat wall is formed free from the unsightly and objectionable battens heretofore used. The neat narrow molding strips 12, 16 which are flush or substantially flush with the surface, not only cover all joints or seams but break up an otherwise plain surface into attractive, decorative panels. Being all wood, the sheets or panels are adaptable to various conditions on account of the ease of sawing them to shape, and they have various advantages such as strength, hardness, insulating properties and adaptability for receiving numerous surface finishes, such as stained or varnished natural grain, painting, enameling, etc. The construction is also such that the wall may be quickly and inexpensively put up without special tools or materials and without the necessity of employing especially skilled labor.

Excellent results have been obtained from the exact details herein shown and described, and they have proven to be advantageous from standpoints of manufacture, sale, installation, and decoration. They may, therefore, be considered as preferred, with the understanding, however, that variations may be made within the scope of the invention as claimed. For example, the front lamina may simply be grooved to provide molding areas corresponding to those areas formed by the faces of the molding strips 12, such grooving serving at the one operation to divide the face of said lamina into the plank or panel areas 11 or 11' and the intervening molding areas 12.

I claim:

1. A wall or ceiling comprising all-wood laminated veneer wallboard sheets having abutting edges, the anterior lamina of each sheet having plank or panel areas and molding areas between said plank or panel areas, said abutting edges being rabbeted at their anterior sides, and joint-covering molding strips secured in the rabbets of said abutting edges, the faces of said joint-covering molding strips and said molding areas being substantially identical with each other, whereby the visible relation of said faces of said joint-covering molding strips with said plank or panel areas and the visible relation of said molding areas with said plank or panel areas being substantially identical, and an apparently seamless paneled wall is produced.

2. A laminated wall board made of wood veneer the top lamina of which is composed of a plurality of uniformly spaced planks or panels, and molding strips intervening between the planks or panels, the molding strips being secured to the next under lamina and having their top faces in the same plane as the top faces of said planks or panels.

3. A laminated wallboard of which the top lamina is composed of a series of planks or panels uniformly spaced with those at the edges of the board inset from said edges a distance equal to half the spacing between the planks or panels to provide rabbets at the edges, and molding strips intervening between the planks or panels and disposed in the rabbets of adjacent boards, the molding strips being secured to the next under lamina and having their top faces in the same plane as the top faces of said planks or panels.

4. An article of manufacture comprising a wallboard sheet made of laminated wood veneer and having the face of its anterior lamina composed of plank or panel areas separated by an intervening molding area, the latter being substantially flush with said plank or panel areas to give

a flat panel or tile effect, said sheet having two opposite edges rabbeted on its anterior face, the rabbets having a width equal to one-half of the width of said molding area, whereby two abutted sheets may have their contiguous rabbets filled by a thin wooden molding strip having the same width and appearance as said molding area for the purpose set forth.

5. A plywood wallboard made of laminated wood veneer and having its top lamina composed of at least two spaced planks or panels and a molding strip intervening between adjacent planks or panels, the molding strip or strips being secured to an under lamina and having the top face thereof in substantially the same plane as the top faces of said planks or panels.

6. A plywod wallboard made of laminated wood veneer and having its top lamina composed of a series of planks or panels uniformly spaced with those at the edges of the board inset from said edges a distance equal half the spacing between the planks or panels to provide rabbets at the edges, and molding strips intervening between the planks or panels and disposed in the rabbets of adjacent boards, the molding strips being secured to an under lamina and having their top faces in substantially the same plane as the top faces of said planks or panels.

WARREN A. WARNER.