July 6, 1943. A. P. HILL ET AL 2,323,327

DOOR OR PANEL

Filed May 1, 1942

Fig. 1.

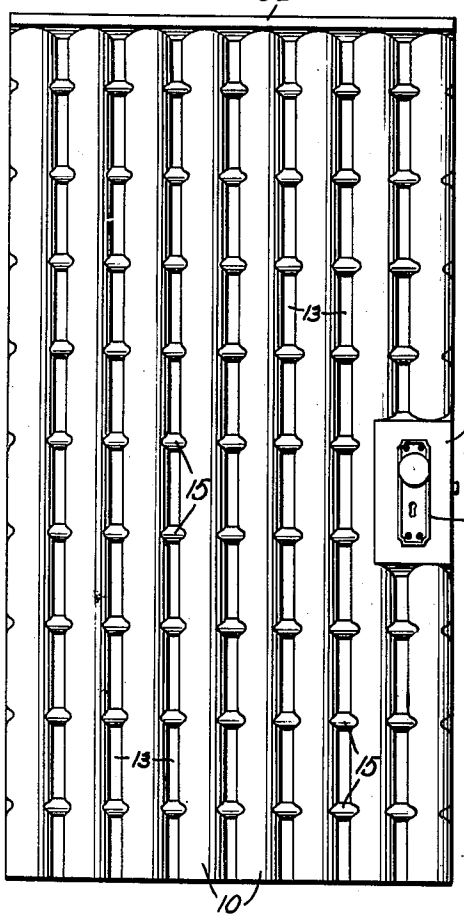


Fig. 2.

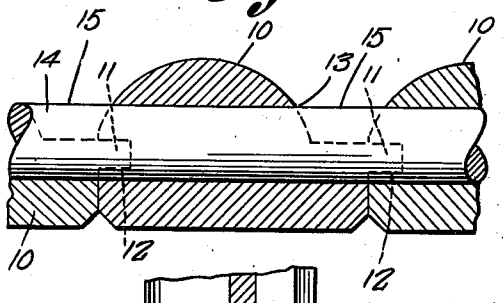


Fig. 3.

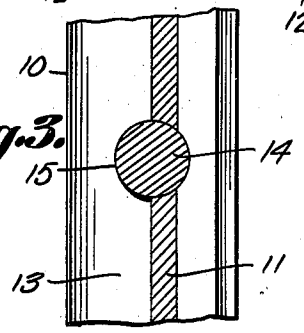


Fig. 4.

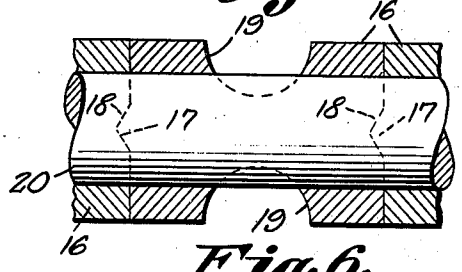


Fig. 5.

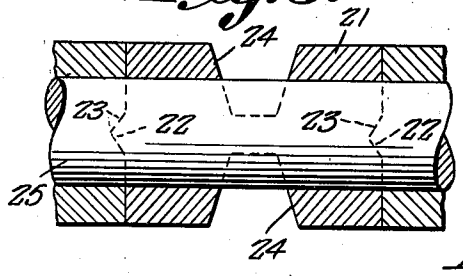
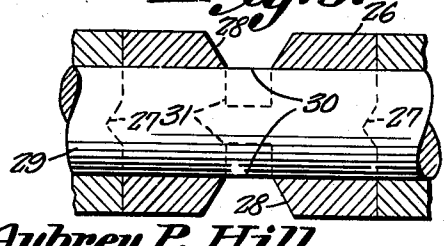


Fig. 6.



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DOOR OR PANEL

Aubrey P. Hill and Glenn W. Hill, Cook, Minn.

Application May 1, 1942, Serial No. 441,340

4 Claims. (Cl. 20—35)

This invention relates to a door but is also applicable as paneling for walls and ceilings.

An object of the invention is to provide the planks forming a door panel or the like with parallel grooves in one or both sides thereof, the planks being connected by dowels which have portions thereof extending across the grooves, whereby to expose portions of the dowels and thus add to the attractiveness of the door panel or the like.

A further object is to provide a door of this character having at its upper edge a strip which is recessed in said edge and strikes against the door jamb.

A further object is to provide a door of this character having at its free edge a plank which is recessed therein and which provides for the installation of a lock.

A further object is to provide a door of this character which will be formed of a few strong, simple and durable parts, which will be inexpensive to manufacture, and which will not easily get out of order.

With the above and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

Figure 1 is a front elevation of a door constructed in accordance with the invention.

Figure 2 is a detail cross sectional view showing contiguous planks of the door connected by a dowel pin which is exposed at the parallel grooves.

Figure 3 is a detail vertical sectional view of the door taken at one of the tongue and groove joints of adjoining planks.

Figure 4 is a detail cross sectional view of a modified form of door in which the grooves are duplicated on both faces of the door and are of different shape than shown in Figure 2.

Figure 5 is a detail cross sectional view of another modified form of door in which the grooves are of different shape than shown in Figure 4.

Figure 6 is a detail cross sectional view of another modified door in which the grooves are of different shape than shown in the other forms of the invention.

Referring now to the drawing in which like characters of reference designate similar parts in the various views, a door is shown comprising a plurality of planks 10 connected together at their longitudinal edges by joints comprising a tongue 11 and a groove 12. As is illustrated in Figure 2 the planks are cut away on one face to coact in forming parallel grooves 13, at the tongue and groove joints. Dowels 14 are engaged transversely through the planks to connect the planks together and these dowels extend across the grooves whereby to expose portions 15 of the dowels, these exposed portions alternating with exposed portions of the bottom walls of the grooves 13, see Figure 1. This arrangement of dowels having exposed portions extending across the grooves in the panels provides an artistic ornamental effect of panelling in doors, walls, or ceilings, while at the same time the dowels rigidly secure the panels together. Although in Figures 1, 2 and 3 the dowels are cylindrical the dowels may be of any irregular or other contour in cross section, and also the grooves may not only be formed on one face of the panelling but may be formed on both faces if desire to enhance the ornamental effect while still maintaining the rigidity of the panel structure by use of the dowels extending transversely through the panels and across the grooves.

In Figure 4 is shown a modified form of the invention in which the planks 16 are butted together at their longitudinal edges and are formed with V-shaped tongues 17 fitting in companion V-shaped grooves 18 in adjoining planks and these butted edges and tongues and grooves may be glued together if desired. In this form of the invention the planks 16 are each formed on both faces with semicircular depressions 19 forming parallel grooves when the planks are assembled and rigidly secured together by dowels 20 engaged transversely through the planks and extending across the grooves to leave portions of the dowels exposed at the grooves as heretofore explained.

In Figure 5 is shown another modified form of the invention in which the planks 21 are formed with abutting longitudinal edges provided with V-shaped tongues 22 received in V-shaped grooves 23 in adjoining planks as heretofore described, but in this form of the invention each plank 21 is provided between its longitudinal edges, on both sides with grooves 24 of frustrum shape in cross section through which portions of the dowels 25 which are engaged transversely through the planks, are exposed.

In Figure 6 is shown a still further modified form of the invention in which the planks 26 are also provided with butting longitudinal edges having V-shaped tongue and groove joints designated

by the numeral 27. In this form of the invention each plank is provided in its opposite faces with grooves 28 through which the planks securing dowels 29 are engaged, these grooves having inclined walls extending to the exposed portions 30 of the dowels and inwardly of these inclined walls each groove is formed substantially rectangular in cross section as shown at 31 to provide the flat inner walls of the grooves, hereto indicated by the numeral 11 in Figure 1.

In all forms of the invention the dowels may be formed of different material than the planks to enhance the attractiveness of the panelling.

As shown in Figure 1 the door is provided at its upper edge with a wear strap 32 which is recessed in the door, since both faces of the door are irrgular due to the formation of the grooves. This strip strikes against the top door jamb.

As also shown in Figure 1 the door is provided with a substantially rectangular plank 33 which is recessed in the free edge of the door and provides for the installation of a conventional rock 34.

From the above description it is thought that the construction and operation of the invention will be fully understood without further explanation.

What is claimed is:

1. Panelling comprising juxtaposed planks provided with parallel longitudinal grooves, and transversely disposed dowels connecting the planks together and having exposed portions extending across the grooves.

2. In a door, juxtaposed planks provided with parallel longitudinal grooves in an exposed side thereof, dowels engaged transversely through the planks for connecting the planks together and having exposed portions extending across the grooves.

3. The structure as of claim 1 and in which the planks are provided in their longitudinal abutting edges with V-shaped tongue and groove joints.

4. The structure as of claim 1 and in which the planks are connected together at their abutting longitudinal edges by tongue and groove joints.

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