March 28, 1933. K. WINKLER 1,903,076

WOOD PLATE

Filed July 7, 1930

Fig. 1

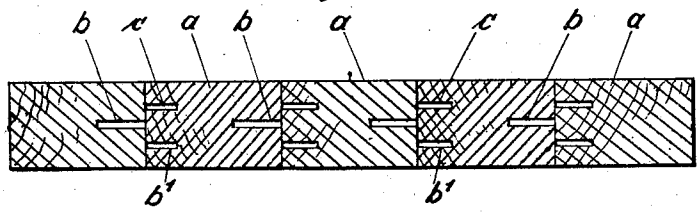


Fig. 2

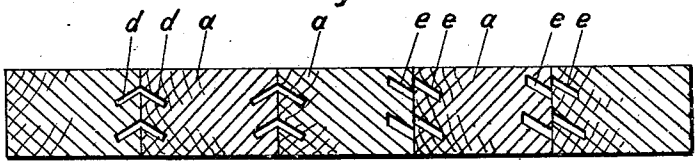


Fig. 3

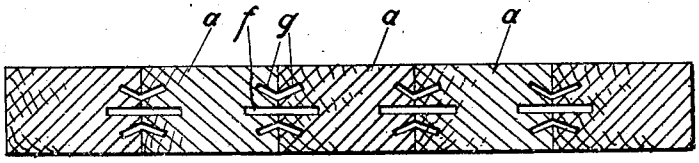


Fig. 4.

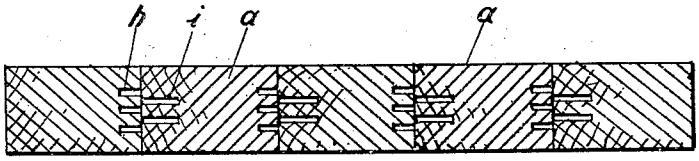
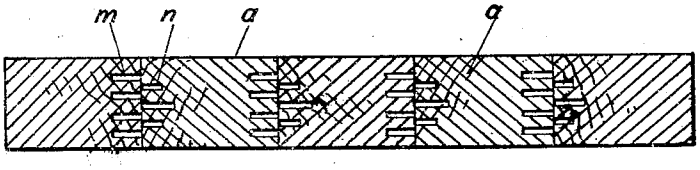


Fig. 5



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UNITED STATES PATENT OFFICE

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WOOD PLATE

Application filed July 7, 1930, Serial No. 466,260, and in Germany July 1, 1929.

My invention relates to improvements in wood plates, and more particularly in wood plates composed of a plurality of boards or cleats combined by gluing and having slits or grooves cut into the same from the contacting faces thereof to provide longitudinal passages, the object of the said slits or grooves being to counteract warping of the wood and to admit air to the inner parts of the glue for uniformly drying the same. The object of the improvements is to provide a wood plate of this type in which warping is more effectively counteracted, and drying of the glue is made more uniform, and with this object in view my invention consists in providing the boards at their adjoining sides or edges with more than two slits or grooves.

For the purpose of explaining the invention several examples embodying the same have been shown in the accompanying drawing, in which the same letters of reference have been used in all the views to indicate corresponding parts. In said drawing,

Fig. 1 is a sectional elevation showing a wood plate in which the boards or cleats are provided at the adjoining edges with three slits or grooves, two of the said slits being provided in one board and the third slit or groove in the other board,

Fig. 2 is a similar sectional elevation showing a board in which four slits or grooves are provided in adjoining boards or cleats, and

Figs. 3 to 5 are similar sectional elevations showing modifications of the form and number of the slits.

In the example shown in Fig. 1 the wood plate consists of boards or cleats *a* disposed one beside the other and glued together with their edges, the grain of the wood running longitudinally of the adjoining edges. At the said edges the adjacent boards are formed with longitudinal slits or grooves *b* and *b'*, and as shown one of the boards is formed at the said edge with a single slit *b* and the adjoining board with two slits *b'*, the slits *b* and *b'* of the adjacent boards being displaced with relation to each other, and the single slit *b* being deeper than the slits *b'*, so that the volumes of wood cut from the boards at the adjoining edges are substantially alike. By thus displacing the slits with relation to each other they may be cut comparatively deep.

In Fig. 2 I have shown a modification in which the boards or cleats are provided at their adjoining edges each with two slits or grooves *d*, and at the left hand part of the plate shown in the figure corresponding slits *d*, *d* merge into each other, while at the right hand part of the figure corresponding slits *e*, *e* are displaced with relation to each other so that they do not merge into each other. While in Fig. 1 the slits *b*, *b'* are perpendicular to the adjoining edges of the boards, they are disposed, in Fig. 2, angularly of the said edges.

In the modification shown in Fig. 3 each board is provided at the edge glued to the adjacent board with three slits *f* and *g*, the corresponding slits of adjacent boards being connected with each other so as to provide a single passage. The outer slits *g* are disposed angularly of the adjoining edge of the boards, while the inner slits *f* are perpendicular thereto.

In the modification shown in Fig. 4 the boards are provided at their adjoining edges respectively with two and three slits *h* and *i*, the said slits being displaced with relation to each other and being perpendicular to the adjoining edge.

In Fig. 5 I have shown another modification in which the boards are provided at their adjoining edges respectively with three and four slits *m* and *n* displaced with relation to each other. Figs. 4 and 5 show that the slits *i* and *n* are cut deeper than the slits *h* and *m*.

By providing the boards at their adjoining edges with a large number of slits warping of the wood plate is prevented, so that the outer faces of the plate remain plane. The reason for this feature is that the slits are provided in several planes within the woods of the plate, and that broad bridges are provided between the slits.

I claim:

A plate of wood comprising a plurality of joined boards arranged side by side and provided in their abutting faces with more than two slits, the slits in one board being displaced relatively to the slits in the other

board and the slits of one board being covered by the plane edge surface of the adjacent board, said slits forming passages through the boards to admit air to glue joining the boards and to uniformly dry said glue.

In testimony whereof I hereunto affix my signature.

KURT WINKLER.