(No Model.)

L. H. CREMERS.

BACKING FOR VENEERS.

No. 305,429. Patented Sept. 23, 1884.

Fig. 1.

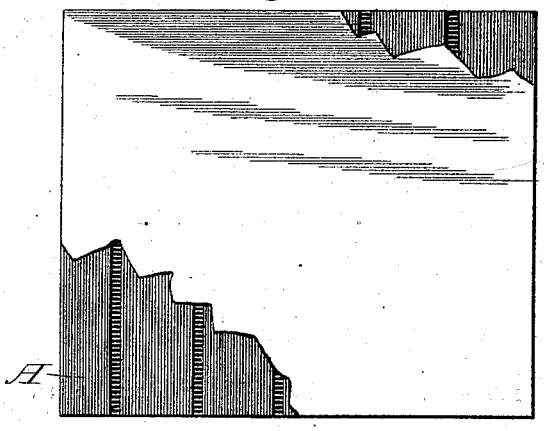
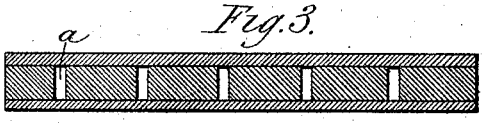


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

LEONARD H. CREMERS, OF PULLMAN, ILLINOIS.

BACKING FOR VENEERS.

SPECIFICATION forming part of Letters Patent No. 305,429, dated September 23, 1884.

Application filed May 12, 1884. (No model.)

To all whom it may concern:

Be it known that I, LEONARD H. CREMERS, a citizen of the United States, residing in Pullman, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Backings for Veneers, of which the following is a specification.

My invention relates to improvements in backings for veneers, constructed of a series of strips laid side by side, and faced on each side with thin boards or sheets of wood upon which the veneering is mounted, said boards forming the foundation for supporting on one or both sides any number of veneers or marquetry-work desirable to be employed.

Prior to my invention the series of strips have been laid side by side and in close contact with each other, and the boards have been glued directly to them. The objections to such a construction are that it requires a seasoned and unnecessary amount of material and time for drying to a degree sufficient to warrant the application of the veneers, and, besides, no provision is made for the swelling and shrinking of the strips by reason of the moisture already in the glue or afterward absorbed by it, or by the strips or the boards which are mounted upon it. The object of my invention is therefore to avoid these objections by providing between the strips air-spaces, which not only effects a saving and permits the use of otherwise waste material, but provides for the shrinkage and expansion of the strips and the boards, and for a circulation of air between them, resulting in facilitating the drying process necessary before applying the veneers. I attain these objects by the devices illustrated in the accompanying drawings, in which—

Figure 1 illustrates a plan view, with the covering partly broken away, of a backing embodying my invention; Fig. 2, an end elevation of the same; Fig. 3, a section taken transversely through the series of strips.

Similar letters of reference indicate the same parts in the several figures of the drawings.

A represents a series of strips of the same thickness and width; but said strips may vary substantially in width without departing from the spirit of my invention. The strips A are laid parallel to each other, so as to leave air-spaces *a* between them, preferably of the same width, and applied to one or both sides of the series of strips A are backing-boards B, of any desired thickness, but preferably of a thickness greater than the veneers, which are afterward mounted upon them, in order to give the structure solidity and rigidity. The grain of these strips should run from end to end, and the boards B be laid with their grain at right angles to that of the strips, for the reason that the strain from shrinkage or swelling is more evenly distributed throughout the entire structure, and hence the boards B more effectually secured against warping and cracking. In this connection it should be added that by preference the strips are composed of a wood differing from that of the backing-boards, in order that by such a difference in the woods they may not be subject to the same conditions as to shrinking and warping.

A veneer-backing constructed in the manner described has been found by a practical experiment to dry much quicker than where the strips are laid in contact with each other, and to maintain their original conformation under conditions that would have resulted in warping and distorting the former so as to unfit them for use. They also permit the employment of strips which would otherwise be waste material, require a less amount of material, both of wood and glue, and result in a proportionate less degree of work and time in their construction.

These backings have been for some time and are now in great demand for the construction of berths for sleeping-cars, which are subject to sudden and extreme variations in temperature and conditions of the atmosphere, and are not only advantageous for the reasons above set forth, but for the further reason that while they embody all of the necessary strength and rigidity they at the same time materially reduce the weight of the berth, which is an important feature of their construction. They may, however, be applied to all sorts and kinds of furniture in which veneers are usually employed, and especially desks, bureaus, and other cabinets. In conclusion, it should be stated that of two strips laid edge to edge each are liable to warp and squeeze out in opposite directions and show their joints in the shape of depressions or projections through the ve-

neer, and this is owing to the difference in the direction of their grain and their crowded condition; but by my invention this cannot occur, for the reason that the air-spaces permit the strips to swell and shrink at will.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A veneer-backing composed of a series of strips laid parallel to, but separated from, each other by air-spaces, and having secured thereto the usual backing-boards for supporting the veneers, substantially as described.

LEONARD H. CREMERS.

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