No. 649,978. Patented May 22, 1900.

H. BUYTEN.

DECORATIVE TREATMENT OF WOODEN SURFACES.

(Application filed Jan. 17, 1899.)

(No Model.)

FIG. 1.

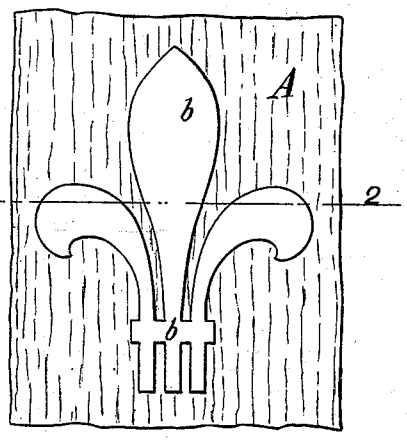


FIG. 2.

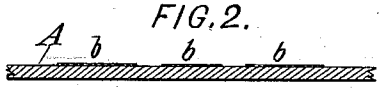


FIG. 3.

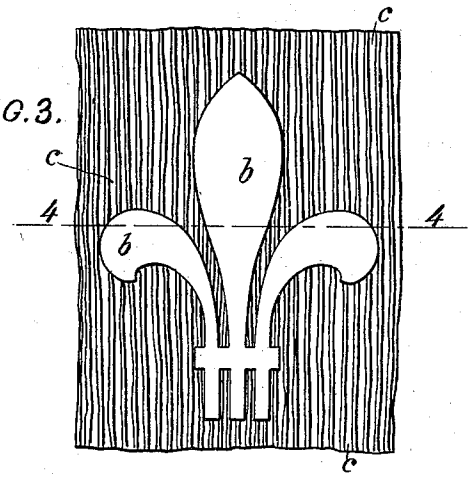


FIG. 4.



FIG. 5.

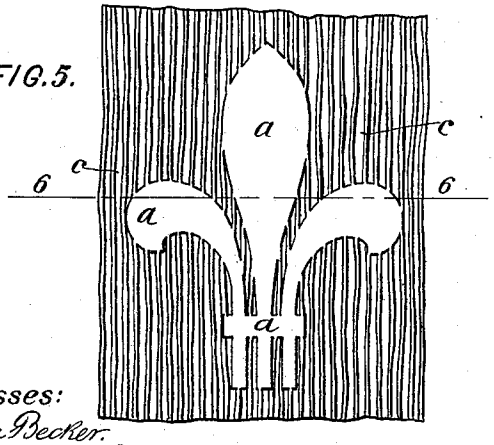


FIG. 6.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HERMANN BUYTEN, OF DUSSELDORF, GERMANY.

DECORATIVE TREATMENT OF WOODEN SURFACES.

SPECIFICATION forming part of Letters Patent No. 649,978, dated May 22, 1900.

Application filed January 17, 1899. Serial No. 702,468. (No specimens.)

To all whom it may concern:

Be it known that I, HERMANN BUYTEN, a citizen of the German Empire, and a resident of Dusseldorf, Germany, have invented certain new and useful Improvements in the Decorative Treatment of Wooden Surfaces, of which the following is a specification.

This invention relates to the production of ornaments on wooden surfaces by means of a sand-blast, which causes the ornaments and the grain of the wood to appear in relief.

In the accompanying drawings, Figure 1 is a face view of a wooden body provided with the protective coating; Fig. 2, a cross-section on line 2 2, Fig. 1; Fig. 3, a face view of the wooden body after the sand-blast has been applied and before the coating has been removed. Fig. 4 is a cross-section on line 4 4, Fig. 3. Fig. 5 is a face view of the wooden body, showing it finished and after the coating has been removed; and Fig. 6, a cross-section on line 6 6, Fig. 5.

The wooden body A is in the well-known manner first rendered even and smooth by planing, grinding, polishing, or similar operations, or it is provided with relief ornaments by engraving or cutting, or it is inlaid with wood, metal, or other suitable material. Subsequently those parts *a* which are not to be touched by the sand-blast, but intended to form a smooth pattern in the grained wood—for instance, the inlaid or engraved parts—are protected against the sand-blast by a protective coating *b*, which is attached to the surface of the wood. This protective coating may consist of prepared paper, india-rubber, or other suitable material adapted to resist the sand-blast.

For securing the protective-coating to the wooden surface I use an adhesive substance mixed with glycerin or other material adapted to facilitate the subsequent removal of the coating.

Instead of applying a protective coating by means of an adhesive substance those parts of the surface on which the sand-blast is not intended to operate are coated with a suitable protective substance made so that it can be easily removed after the operation.

If after the sand-blast treatment the protective coating *b* is removed, those parts *a* which have been thus covered will be found to project slightly over the remainder of the surface and to be smooth, while on the exposed parts or background *c* the wood has been attacked by the sand-blast more or less, according to the degree of hardness of the different parts, so that not only the ornamental design, but also the grain of the wood, appears in relief, the sand-blast being turned off before the grain is destroyed. The wooden surface is now finished by treating it with a soft steel-wire brush, so as to remove the burs or rough edges produced by the sand-blast process and also any splinters of wood which may still adhere to the surface. The parts which have not been touched by the sand-blast may remain smooth or they may be further treated in any desired manner.

If the wood is to be stained, the ornaments may easily be colored differently from the parts treated with the sand-blast. In this case the stain is applied to the wood before the protective coating has been removed, so that only the parts treated with the sand-blast will be stained, while the ornamental parts remain free from the staining liquid, or the surface may be stained again after the removal of the protective coating, preferably with a lighter-colored stain, so that the ornaments will have a lighter color than the remainder of the surface, or this treatment may be further modified by removing only a portion of the protective coating before the second staining and applying an additional stain after the complete removal of the coating. In this manner any desired number of shades or colors may be produced on the wood. The wood may, however, be stained before the application of the sand-blast, and after the latter has been applied, but before the protective coating has been removed, the low-lying part may be treated with a stain of a different color.

What I claim is—

The process of decorating wood, which consists in attaching a protecting coating to part of the surface of the wood, applying a sand-blast to remove the pith from the exposed background but without destroying the grain, and then removing the coating, so that the pattern and the grain of the exposed background will appear in relief, substantially as specified.

Signed by me at Dusseldorf, Germany, this 22d day of December, 1898.

HERMANN BUYTEN.

Witnesses:

WILLIAM ESSENWEIN,

GEO. P. PETTIT.