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LAMP SHADE AND PROCESS OF MAKING SAME.

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The present invention relates to improvements in the process of making paper lamp shades commonly known as parchment lamp shades. It is particularly proposed, for this purpose, to produce a parchment effect by subjecting suitable paper to a hot oil bath of a character to be set forth hereinafter. It is further proposed to produce a stippled effect on this treated paper by applying to the surface thereof a coat of quick-drying cement having the characteristic of transparency, and by treating this cement while it is drying to produce the stippled effect. It is further proposed to apply to the paper thus treated ornamental configurations by means of air brush and stencils. It is further proposed to provide a new process and means for producing raised outlines of the configurations so as to produce a relief effect and to cause these raised outlines to become so closely united with the previously treated paper that no amount of rubbing will injure the same. It is further proposed to produce an antique effect by rubbing a preparation over the finished design that will leave the raised surfaces of the stippled cement shining while filling the crevices between the same. It is further proposed to increase the antique effect by rubbing a powdered stone into the latter application while the same is drying. It is further proposed to provide certain improvements in connection with the mounting of the shade upon a frame.

Further objects and advantages of our invention will appear as the specification proceeds.

While in the following description, we have confined ourselves to setting forth the preferred process of manufacuring lamp shades, it should be understood that various modifications and changes may be made within the scope of the claims hereto attached without departing from the spirit of the invention.

In its preferred form, we carry out our process in the following manner:

Wire frames for the parchment lamp shades are made up in the regular way, spot welded at the joints, in accordance with any suitable artistic design.

The paper used is preferably German stock made purely of rags, but any suitable paper may be used. This paper is treated in a composition of oil as follows: Two-thirds pure raw linseed oil mixed with one-third reinforced Japan oil. This combination is mixed and thinned out with pure turpentine to approximately 75 degrees gravity and is then heated to a temperature of approximately 100 degrees Fahrenheit according to the effect desired. It is to be noted that the hotter the oil, the more transparent the paper will be, and the cooler the oil, the more opaque the paper will be. The paper is dipped in this mixture at the desired temperature and pulled thru gradually, one time only, and thoroughly wiped and cleaned and allowed to dry for at least 24 hours.

After drying, the paper is treated with a special surface that produces a rough, stippled effect. This surface treatment is put on by hand with a blunt stiff brush similar to a stencil brush. The material used is a quickly-drying cement that remains transparent after drying, and we preferably use for this purpose a pyroxylin cement. The fact that this cement dries very rapidly causes it to lie very nearly as applied and to produce the rough and stippled effect, and yet be transparent and clear.

To get this effect, it is necessary to pour the cement over the surface more or less evenly and to then apply the brush over the same with a rapid, up and down motion, the worker pounding or pressing the brush well into the cement on the downward stroke so that the brush will come well into contact with the cement. In raising the brush, the worker pulls the cement upward, away from the surface, in such a way that sections of the cement are raised, leaving a rough surface at each stroke, giving an uneven or relief effect. This work is done consistently and fast while the material is drying, and after the complete sheet has been gone over thoroughly in this manner two or three times, the cement has become set and cannot be worked any longer. It is then allowed to dry and become hard. The rough points settle slightly and blend into the remainder of the cement so as to eliminate all jagged edges, but to yet remain rough and to provide enough crevices to receive a settlement of burnt umber ground in oil which is to be applied later. It should be observed in this connection that the application of the cement makes the paper waterproof and prevents the color ground in oil, to be applied later, from working into and being absorbed by the paper.

Next the desired design is applied in color, pyroxylin products being preferred for this purpose. The colors are mixed in proper consistency in tone and are applied by any regu-

lar spray gun with the assistance of stencils that are hand cut. Stencils of this character are well known in the art and comprise sheets of material having those sections to which color is to be applied cut out and removed, while the remaining part protects the surface of the paper to which no color is to be applied. Different stencils are provided for different color effects on the same sheet.

The color is preferably applied by means of an air brush. A glass table is used arranged on a slight slant to taper upward in front of the operator with air suction at the upper edge of the table arranged to draw away fumes from the spray gun while allowing the color that is sprayed to settle upon the treated paper thru the openings in the stencil. The paper is positioned on this table by three hooks with vacuum atachments placed on the glass. The treated sheet of paper is checked in on these hooks, and all stencils that are to be applied are checked in with the same hooks so that successive stencils assume the same relative position on the paper. The stencils are cut on regulation oil board and cleaned when necessary in the pyroxylin solvent, known as a thinner.

After all colors are applied and the background shading is also done, all with the spray gun, it is then turned over and shellacked on the back with pure shellac thinned to the proper consistency with denatured alcohol.

The colored paper or panel is now ready to receive a raised line. This line is drawn by artists, outlining the design that has been placed on the treated paper by spray gun coloring in the manner aforesaid. The material used in this lining effect is applied by compressed air. It is substantially of the same nature as the cement used for the stippled effect, but is colored to produce a dark appearance and is mixed thoroughly and kneaded consistently until some of the material has evaporated and it becomes very heavy in consistency, resembling a pasty mass. For applying this material, we preferably use a lining gun, described in a co-pending application, Serial No. 160,760, filed January 12, 1927, the principal features of which are that the material is forced thru a pointed nozzle by compressed air, which latter is controlled by a valve, the entire arrangement being such that the operator may handle it very much in the same manner as he would a pencil, control being effected by the pressure of a finger without necessitating any change in the grip on the gun. The material can thus be regulated to flow fast or slow according to the amount of air that is allowed to bear on the material, forty pounds of pressure being usually sufficient. By means of this gun, the operator may outline the design in the same manner as he would with a pencil or pen. The material used for outlining, containing cement of the same kind as previously used for producing the stippled effect, and being slightly moist when applied, binds itself firmly to the cemented surface on the paper and is firmly held against peeling off. Because of the heavy consistency of this material and the quick drying nature of the product, it sets very rapidly, allowing the relief of the line to stay as it has been laid with very little change apart from a slight shrinkage in the center of the line which gives it a very artistic effect. The material hardens so rapidly that when dry, it almost retains its original form.

When the relief work is thoroughly dry, it receives a coating of burnt umber ground in oil to be applied in a rather moist condition. This material is then rubbed off immediately leaving all the color in the crevices of the stippled surface effect, previously described. By wiping it thoroughly, a polished effect is obtained on the higher raised parts, including the raised line. Before this oil paint becomes dry, a coat of powdered stone, familiarly known as rotten stone, is placed over the same and rubbed well into the paint that has been left. It is then given a slight polish in such a way that the dust is allowed to settle in the crevices along with the paint which gives it a soft, antique effect.

The panels are now ready for cutting to fit the wire frames and for gluing. The same cement is preferably used, the cement being applied with a brush on the parts to be cemented together. It is then allowed to dry. The edges to be joined are then placed together and are held over a suitable support, while a hot iron is carefully drawn slowly over the edges to be joined. The heat of the iron allows the cement to soften and melt sufficiently to run together. Upon removal of the hot iron, the cold air coming in contact with the cement causes it to harden immediately whereby the edges are held together. The panel or paper of whatever form it may be is then fastened to the wire frame, preferably by means of binding strips bent into U shape transversely so as to straddle the edges of the paper and a strand of wire, the sides of the strip being sewed together so as to enclose the wire strand and the extreme edge of the material. The binding itself is preferably given an antique appearance by applying the colored pyroxylin paint to the surface thereof and wiping over the same with the thumb or a suitable tool to break up the paint before it sets for antique effect. Parchment lamp shades made in this manner are very pleasing in appearance, durable, waterproof, and adapted to lend artistic design, character, and softness.

We claim:

1. The method of making parchment lamp shades which includes the step of applying a coating of liquid cement to the surface of a

prepared shade material and of stippling the cement while the same is drying.

2. The method of making parchment lamp shades which includes the step of applying a coating of a transparent, quickly drying cement to the surface of a prepared shade material and of stippling the cement while the same is drying.

3. The method of making parchment lamp shades which includes the step of applying a coating of a pyroxylin cement to the surface of a prepared shade material and of stippling the cement while the same is drying.

4. The method of making parchment lamp shades which includes the steps of saturating the shade material in a hot oil bath, in allowing the same to dry, in then applying a coat of liquid cement and in stippling the latter while the same is drying.

5. The method of making parchment lamp shades which includes the step of applying a coating of a pyroxylin cement to the shade material, allowing the same to dry and of applying raised lines of a pyroxylin paint to the shade material for outlining configurations thereon, the cement binding the paint firmly to the shade material.

6. The method of making parchment lamp shades which includes the steps of saturating the shade material in a hot oil bath, allowing the same to dry, of applying a coating of pyroxylin cement to the shade material allowing the same to dry and of applying raised lines of pyroxylin paint to the shade material for outlining configurations thereon, the cement binding the paint firmly to the shade material.

7. The method of making parchment lamp shades which includes the steps of saturating the shade material in a hot oil bath, allowing the same to dry, of applying a coating of pyroxylin cement to the shade material, of stippling the same and allowing it to dry and of applying raised lines of pyroxylin paint to the shade material for outlining configurations thereon, the cement binding the paint firmly to the shade material.

8. The method of making parchment lamp shades which comprises applying a coat of pyroxylin cement to the shade material, stippling the cement while drying, and rubbing a pigment ground in oil into the treated surface.

9. The method of making parchment lamp shades which comprises applying a coat of pyroxylin cement to the shade material, stippling the cement while drying, and rubbing burnt umber ground in oil into the treated surface.

10. The method of making parchment lamp shades which comprises applying a coating of pyroxylin cement to the shade material, stippling the cement while drying, rubbing burnt umber ground in oil into the treated surface and then rubbing a powdered stone into the surface while the latter application is still moist.

11. The method of making lamp shades which comprises dipping shade material in a hot oil bath and allowing to dry, applying a coat of pyroxylin cement and stippling the same while drying, applying in separate steps colored configurations on the treated surface, feeding raised lines of pyroxylin paint on the material for outlining the configurations, rubbing burnt umber or other color ground in oil into the treated surface and rubbing a powdered stone into surface while the latter application is still moist.

In testimony whereof we affix our signatures.

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