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[54] **METHOD OF PRODUCING LAMINATED
DECORATIVE OBJECTS**
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156/60, 327, 332, 280, 183, 267, 278; 117/161

[56]

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ABSTRACT: This is a method of mounting engravings, etchings, or other types of prints on any surface, laminating them to the base, and providing them with an oil painting appearance by means of a synthetic resin emulsion latex, and the product produced thereby. The method is an improvement over the old French art form "decoupage."

FIG. 1

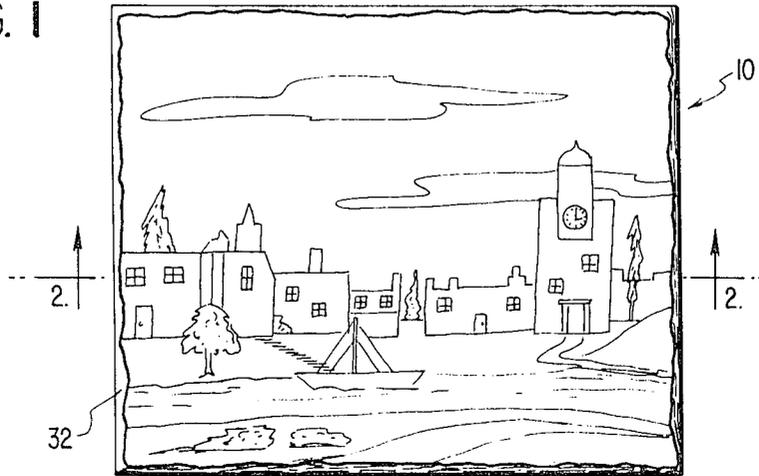
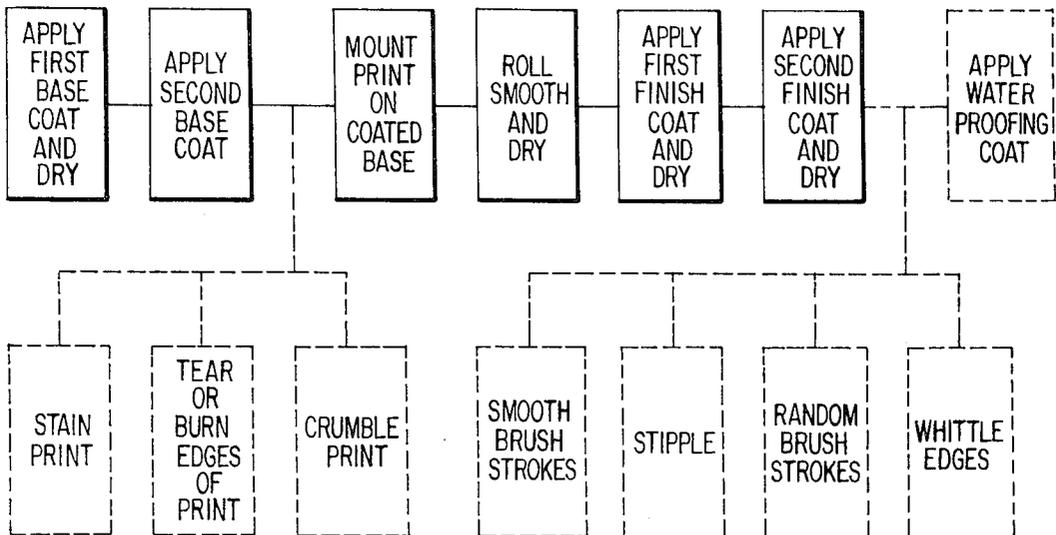
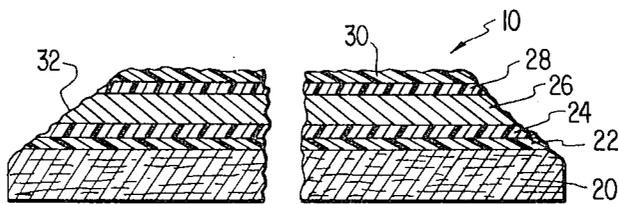


FIG. 2



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FIG. 3

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METHOD OF PRODUCING LAMINATED DECORATIVE OBJECTS

This invention relates to a process for mounting and laminating prints or the like to a supporting base and providing them with an oil painting appearance by means of a synthetic resin emulsion latex prepared by emulsion polymerization and to the resulting products.

"Decoupage" is an old French art form wherein prints, clippings, or other similar items are cut to any desired size or shape, pasted onto the surface of a base element and finished with a large number of coats of varnish to provide an antique or three-dimensional appearance frequently simulating an oil painting. The type of varnish, and the great number of coats used, to a great extent determine the quality and appearance of the finished product.

Each coat of varnish must be totally dry before applying the next coat, and so it may be days, weeks, or even months before a finished product is obtained. Additionally, with many types of varnish additional heat must be applied to achieve proper drying. Various additives and fillers may be included in the varnish to provide special effects. These might include small amounts of gravel, coloring matter, or anything else the artist's skill or imagination will suggest.

This art form, "decoupage," provides means for decorating boxes, trays, room dividers or screens, lampshades, or antique oil paintinglike pictures for framing. The many disadvantages associated with "decoupage" are immediately obvious. The first step, that of pasting the picture to the background is often messy and does not result in a smooth product. Further, the paste must be completely dry before applying any varnish if a water base paste is used, because water would seriously affect the varnish and, therefore, would also affect the final finish. Most varnishes are slow drying and so from 8-24 hours must be allowed between varnish coats. The best results in "decoupage" are obtained through the use of a large number of coats of varnish, so, it will be seen, that extreme patience is required of the artist for high quality in the final product.

Considering the foregoing, it is a primary object of this invention to provide methods for making a decorative object which are free from the foregoing and other such disadvantages. Further, this invention contemplates the provision of techniques for quickly and easily mounting any relatively thin elements such as prints, clippings, etc., to a base element and laminating the same with a surface finish simulating an oil painting and similar to the finish obtained with the more time-consuming and tedious "decoupage" procedures.

Additionally, it is an important object of this invention to provide methods for mounting a picture or other similar item having aesthetic or decorative value to a base and laminating the same to obtain both protection and a simulated antique or oil painting appearance.

These and other objects are accomplished broadly by applying a synthetic resin emulsion latex prepared by emulsion polymerization and more particularly a plasticized polyvinyl acetate emulsion latex to the surface of a chosen base element, placing a picture, clipping, or other similar item upon the thus coated base material while the latex is still wet, allowing the latex to dry and finally applying one or more finishing coatings of the latex to the surface of the picture or other element laminated to the base.

Other and further objects of this invention will be readily recognized by reference to the following specification and the appended drawing wherein;

FIG. 1 is a plan view of the general appearance of a product of this invention;

FIG. 2 is, on a greatly enlarged scale, a cross section through FIG. 1, which shows the strata in an exemplary sample of the finished product, partly broken away for illustrative convenience; and

FIG. 3 is a flow diagram of the steps involved in an exemplary method according to this invention, with possible alternative steps being shown in dotted lines.

Like reference characters refer to like parts throughout the several views of the drawing.

A variety of materials may be used as the base element upon which the print or other similar object will be mounted. Exemplary of these materials, but by no means limiting, are metal, wood, fabric, cardboard, leather, plastic, glass, plaster, fiber composition board and any of the foregoing materials with dried paint thereon. A self-sustaining base is utilized in order to provide support for the picture or like object. The base element may be merely a sheet of any of the foregoing materials or may include a portion of a wall or other such element or an article of commerce such as a lamp shade, a screen, etc.

Any suitable item may be mounted upon the base element by the method of this invention, the most exemplary of which are pictures or prints produced by any method such as engraving, printing or any such techniques known in the art, etching, pencil drawing or photography. It is to be understood that the word "print" as used herein denotes any of the above or clippings, as from a newspaper, or a plurality of such objects in any shape, size, or arrangement.

The latex emulsion may be used according to this invention as a sealer for a porous surface base element, as an adhesive to adhere the print to the base element and as the final or finishing coat which provides protection and a three-dimensional or oil painting effect. This material is easy to apply and dries quickly, generally in from 15 to 20 minutes with the preferred composition set forth hereinafter. This material also provides a high gloss finish as well as a protective coat without damaging any of the elements used.

Referring now to the drawings:

FIG. 1 shows a picture or product 10 produced according to the method of this invention and suitable for framing. In the cross-sectional view of FIG. 2 the base element 20 is illustrated as a fiber composition board of the type known as "Masonite," this material forming a highly useful base to be used with the method hereof. Upon this base element 20 is shown an initial coat 22 of the latex emulsion which serves to seal the pores of the base element 20. Then a second coating 24 of this latex emulsion is provided to cement or adhere the print or prints 26 to the coated base element 20. Finally, a first finishing coating 28 of the latex emulsion is shown immediately over the print 26 serving to seal and further laminate the same to the base element 20. An additional finishing coating 30 of the latex emulsion may be used which possesses an irregular surface thereby providing a three-dimensional or oil painting effect.

In FIG. 3 the operative steps in making the product of FIGS. 1 and 2 are shown. The first or sealing coating of plasticized polyvinyl acetate latex emulsion prepared by emulsion polymerization is applied to the base and permitted to dry. Then the second or adhesive coating of the latex emulsion is applied and the picture is immediately placed thereon. A small wooden roller or similar object may then be used to smooth the print onto the base element and eliminate any air bubbles. When the adhesive coating is dry a first finishing coating of the latex emulsion is applied over the print and allowed to dry before applying additional finishing coats of the latex emulsion which are also allowed to dry. All the steps may be performed at room temperature.

In the event the products of this invention are used in such a manner that they may be damaged by spilled liquids, a coat of clear varnish or other waterproofing material may be applied for protection. Short periods of exposure to water, however, will not affect the polyvinyl acetate finish.

Various additional effects may be achieved with the final product in a simple and efficient manner as shown in dotted lines in FIG. 3. For instance, black coffee or tea may be wiped over the face of the picture before mounting in order to achieve a darkened antiqued effect. Also, to produce an aged effect the edges of the picture may be torn or singed before mounting. Additionally, after the picture is mounted, coated, and dried the edges may be whittled at a shallow angle as shown at 32 with a razor blade to provide an antique effect and the edges may then be finished with a coat of gilt paint if desired.

To achieve a brush stroke effect or oil painting appearance the final finish coat of latex may be brushed randomly in all directions while it is still wet or, for a smoother effect, the final coat may be brushed evenly in one direction only. If the brush is dabbed up and down on the still wet final finish coat a stippled effect will be achieved. An even more striking three-dimensional effect may be obtained by applying an additional final coat of the latex emulsion in great excess, following the outstanding areas of the print.

The latex emulsion utilized in the method of this invention is prepared by known methods of emulsion polymerization. Various well known latex emulsions may be utilized. Homo and copolymers of vinyl esters, acrylate and methacrylate esters, maleic acid, maleic anhydride, and maleic acid esters are found particularly effective. Such materials, for example, may include vinyl acetate homopolymers and copolymers of the same with ethyl and butyl acrylates and methacrylates as well as dibutyl maleate. The preferred material comprises about 92.5 percent by weight of an approximately 55 percent nonvolatile polyvinyl acetate aqueous latex including conventional stabilizers with about 7.5 percent of dibutyl phthalate or other conventional plasticizers. Since techniques for forming latex emulsions and the properties of such materials are well known it is not believed necessary to provide further detail in this regard herein.

Accordingly, it will be seen that there is herein provided techniques for simply, and easily, producing decorative products which satisfy all of the objects set forth hereinabove, and others, including many advantages of great practical utility and commercial importance. As pointed out hereinabove, many embodiments may be made of the instant inventive concept, and many modifications may be made of the embodiments shown and described. Therefore, all matter herein is to be interpreted merely as illustrative of certain of the applications of this concept.

Accordingly, What is claimed is:

1. A method of producing a picture having an oil painting appearance from a print comprising:

- a. coating one surface of a base element with a synthetic resin latex prepared by emulsion polymerization;
- b. placing at least one print having a desired design on one face thereof, said one face forming the front of said print, on said coating with the rear of said print in contact with said coating while said coating is still wet;
- c. smoothing said print to remove any air bubbles caught between said rear of said print and said base element;
- d. permitting said coating to dry whereby said print is adhered to said base element;

- e. applying at least one finishing coating or said latex to said one face of said print; and,
- f. permitting said finishing coating to dry.

2. The method of claim 1 wherein said base element is selected from the group consisting of metal, wood, fabric, cardboard, leather, plastic, glass, plaster, and fiber composition board.

3. The method of claim 2 wherein said base element is a fiber composition board.

4. The method of claim 1 wherein said latex is selected from the group consisting of homopolymers and copolymers of vinyl esters, acrylate and methacrylate esters, maleic acid, maleic anhydride, and maleic acid esters.

5. The method of claim 4 wherein said latex is a vinyl acetate resin emulsion.

6. The method of claim 5 wherein said latex is approximately a 55 percent nonvolatile polyvinyl acetate latex emulsion containing about 7.5 parts of dibutyl phthalate for each 100 parts of emulsion.

7. The method of claim 1 further including the step of applying a coating of waterproof material after step (f).

8. The method of claim 1 wherein said base element is porous, further including the step of applying an initial coating of said latex to said base element and permitting the same to dry prior to step (a).

9. The method of claim 1 further including the step of applying a plurality of finishing coatings of said latex.

10. The method of claim 1 wherein said print is crumbled prior to step (b).

11. The method of claim 1 further including the step of trimming the edges of said print and said base element at a slight angle with respect to the plane of said print after step (f).

12. The method of claim 1 further including the step of singeing the edges of said print prior to step (b).

13. The method of claim 1 further including the step of treating said print with a material selected from the group consisting of black coffee and tea prior to step (b) to provide a darkened antique effect.

14. The method of claim 1 further including the step of stippling the final finish coating with a paint brush after step (e) and prior to step (f).

15. The method of claim 1 further including the step of stroking the final finishing coating with a paint brush in a variety of directions after step (e) and prior to step (f).

16. The method of claim 1 further including the step of applying at least one relatively thick coating of said latex to outstanding areas of said print after step (f).

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