Sept. 4, 1928. 1,683,282

G. C. ASHLEY

METHOD OF DECORATING TRANSPARENT SURFACES

Filed July 5, 1927

Fig. 1.

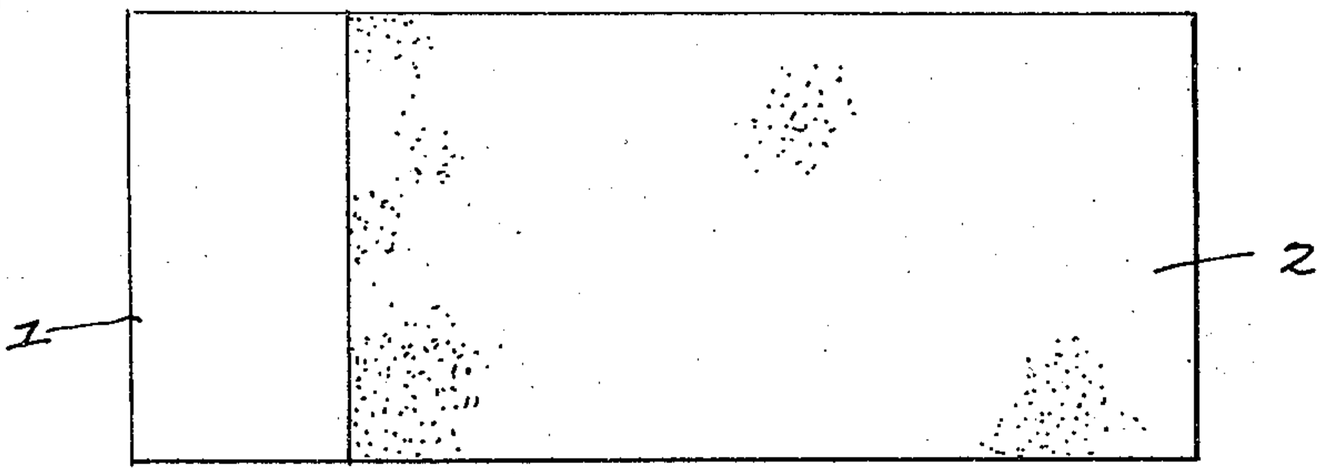


Fig. 2.

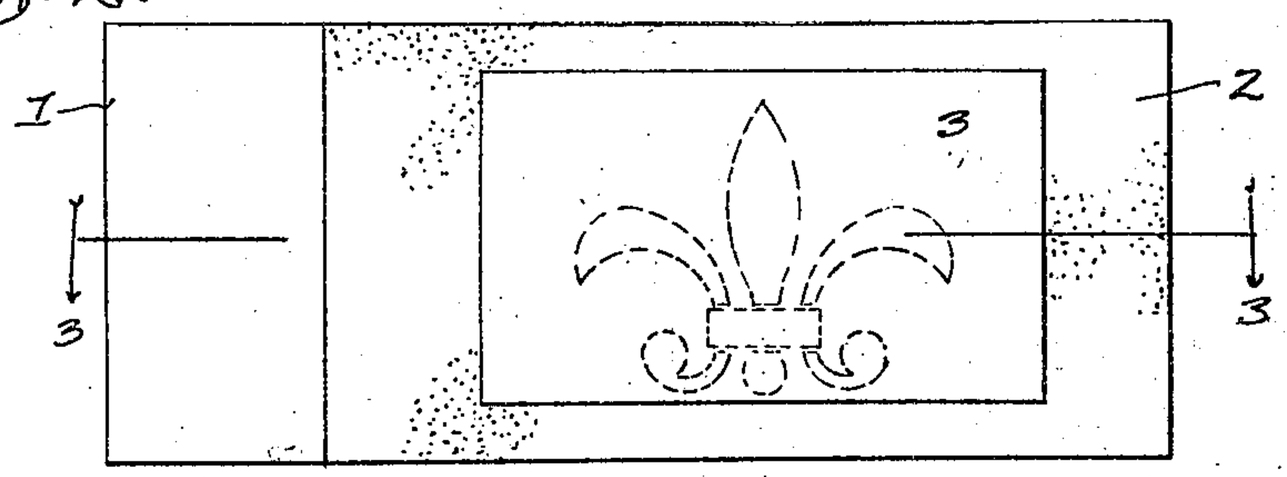


Fig. 3.

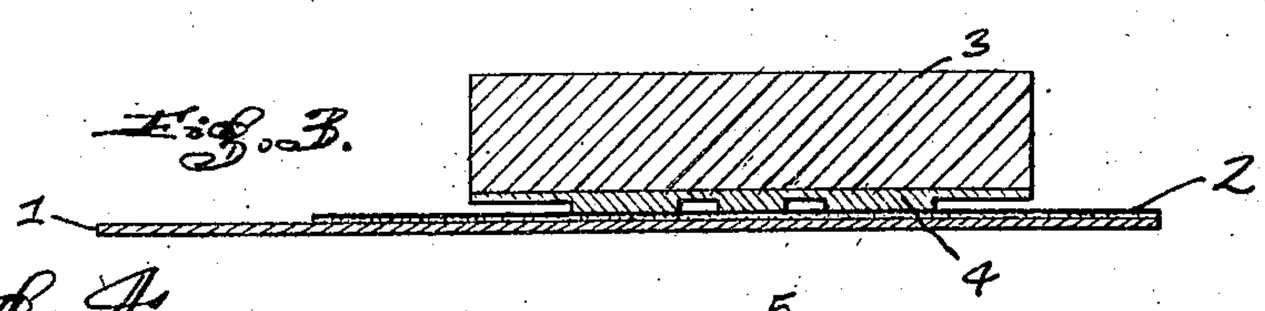


Fig. 4.

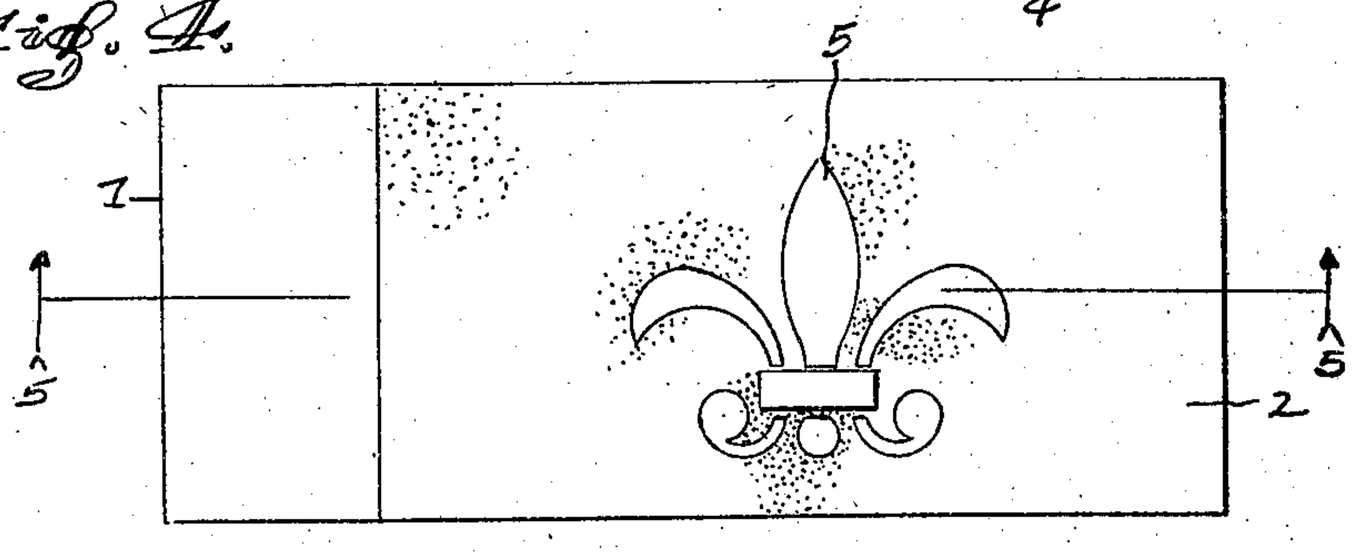
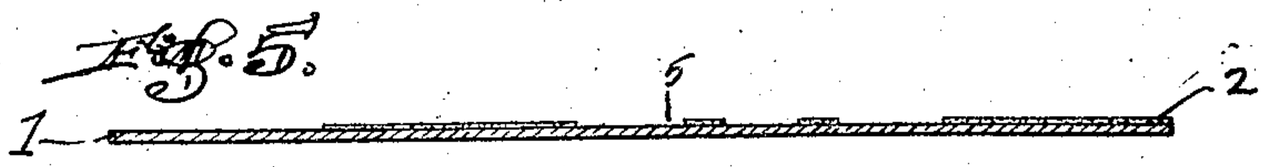


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE C. ASHLEY, OF SAN FRANCISCO, CALIFORNIA.

METHOD OF DECORATING TRANSPARENT SURFACES.

Application filed July 5, 1927. Serial No. 203,372.

This invention relates particularly to a method of decorating parchments, parchment papers, and other transparent sheet materials.

An object of the invention is to provide a mechanical molding process by which transparent surfaces may be ornamentally decorated to achieve highly efficient results, comparable to hand work.

A further object of the invention consists in applying an adhesive coating to a transparent sheet of material, removing a portion of said coating to leave a predetermined design in the coating remaining on the sheet, and then coloring the said coating and sheet to give a colored effect to both the design and sheet, when the same is placed in range of an illuminating medium.

Other objects and advantages will appear as this description progresses.

In this specification and the annexed drawings, the invention is illustrated in the form considered to be the best, but it is to be understood that the invention is not limited to such form, because it may be embodied in other forms, and it is also to be understood that in and by the claims following the description, it is desired to cover the invention in whatsoever form it may be embodied.

In the accompanying one sheet of drawings.

Fig. 1 represents a sheet of transparent material, having an adhesive coating painted thereon.

Fig. 2 is a plan view of a sheet of transparent material painted with an adhesive coating, and having an impression die arranged face downward on the painted part thereof.

Fig. 3 is a section taken through Fig. 2, on the line 3—3.

Fig. 4 is a plan view of a sheet of transparent material painted with an adhesive coating, from which an impression die has removed a predetermined part of the said coating from the sheet.

Fig. 5 is a cross-section taken through Fig. 4, on the line 5—5.

The present invention relates to a process of decorating and otherwise ornamenting sheets of transparent material, in a manner to permit the same to be used in obtaining fanciful and esthetic effects, when used for lamp shades and in front of other illuminated objects.

The drawings submitted herewith do not adequately depict, nor would it be possible to fully illustrate a true conception of the product, and the process for obtaining the product, as practiced according to my invention. The drawings are merely illustrative of the different steps necessary to practice my invention, and are submitted to aid in making clear the manner in which my process is practiced.

In detail the construction illustrated in the drawings comprises a sheet of transparent material 1, such as parchment, parchment paper, fabric, wood veneer, or any other equivalent material, possessed of a surface texture possessing absorbent properties to a greater or lesser degree. The sheet 1 would be shaped in any desired manner according to the use the same might be put to. One surface of the sheet would be painted with an adhesive coating 2, preferably that of a lead or zinc base paint mixed with linseed oil or other oil capable of supporting the base in a liquid condition. The paint would be applied directly on to the surface of the said sheet, without said sheet receiving any preliminary treatment, or the process might be modified to the extent that the surface of the material to be decorated would be first impregnated with linseed or other suitable oil. After the application of the oil onto the sheet, the same would be allowed to dry, and after drying, the said surface would be painted with the adhesive coating 2. The adhesive coating would be painted onto the treated or untreated sheets of material, so that a coating of substantial thickness would cover the surface of the said sheet. The adhesive coating would be allowed to dry for a few moments after its application, to permit the oil in the said coating to partially permeate the surface on which it would be applied. My experiments have determined that two to ten minutes is a sufficient period of time to allow the coating to set before placing an impression die 3, cut face down, directly onto said coating. Pressure would be applied to the back of the die 3, to force the die face 4 downwardly through the adhesive coating 2, and into contact with the surface of the sheet material 1. The pressure applied to the die 3 would squeeze the coating 2 out and away from the projecting parts of the die and into the cavities and cuts thereof. After the application of the pressure to the die 3

for a predetermined period of time, the die 3 would be lifted away from the coating 2 and by its removal, the die face 4 would carry away the coating material squeezed into the cavities and cuts together with a certain amount of coating adhering to the face of the die. The pressure applied to the die 3 would not cause any of the coating to be forced into the surface of the sheet material 1 but would squeeze the said coating 2 away from the points of pressure into the adjacent portions of the die face on which no pressure had been exerted. A relatively small proportion of the coating would remain between the die face 4 and sheet material 1 and adhere to the die face, to move away therewith and to leave the surface of the said material 1 to which pressure was applied, practically free of the coating 2. The removal of the die 3 would leave a design 5 formed in the coating, the base of which would be the surface of the sheet material 1. The coating material with the design impression 5 recorded therein would be allowed to dry and harden, to form transparent portions in the sheet on the parts thereof from which the coating 2 has been removed, while the remainder of the said sheet would be opaque and impervious to light.

After drying for a sufficient length of time the adhesive coating would become solid and firm, to permit the surface thereof to be colored with suitable paint and finished in any manner desired. The face of the sheet 1 and the coating 2 would, when colored by the same paint, assume different hues when dried, due to the differences in the absorbing properties of the coating 2 and of the sheet material 1.

The practice of the process could be further modified by treating the sheet material 1 with a colored paint, and allowing it to thoroughly dry before applying the adhesive coating 2, and recording the die impression 5 thereon. The matter of applying color before the starting of the process, or after the completion of the process, is immaterial so long as colors are ultimately used in the practice of the process. While the use of colors in connection with the process has been mentioned, it is to be understood the adhesive coating itself might be suitably colored and that this practice would be clearly within the purview of the invention.

Having thus described this invention, what I claim and desire to secure by Letters Patent is:—

1. The method of decorating transparent materials comprising, painting a surface of transparent material with an adhesive coating forming a design in said adhesive coating by forcing a portion of the coating within a predetermined area sideways and removing the remainder of the coating within said area.

2. The method of decorating transparent materials comprising, painting a surface of transparent material with an adhesive coating; impressing a die onto said adhesive coating; thereby squeezing a portion of said coating out and away from the projecting parts of the die and into cavities and cuts thereof and lifting said die to remove a predetermined portion of the coating from said surface.

3. The method of decorating transparent materials comprising, painting a surface of transparent material with an adhesive coating; forming a design in said adhesive coating by forcing a portion of the coating within a predetermined area sideways and removing the remaining portion of the coating within said area; and coloring the surface from which the adhesive coating has been removed.

4. The method of decorating transparent materials comprising, painting a surface of transparent material with an adhesive coating; impressing a die onto said adhesive coating; lifting said die to remove a predetermined portion of the coating from said surface; and coloring the surface from which the adhesive coating has been removed.

5. The method of decorating a sheet of parchment and parchment paper comprising, treating said sheet with oil; painting a surface of said sheet with an adhesive coating; and removing a predetermined portion of the coating from said sheet to form a design.

6. The method of decorating a sheet of parchment and parchment paper comprising, treating said sheet with oil; painting a surface of said sheet with an adhesive coating; impressing a die onto said adhesive coating; and lifting said die to remove a predetermined portion of the coating from said sheet.

7. The method of decorating a sheet of parchment and parchment paper comprising, treating said sheet with oil; painting a surface of said sheet with an adhesive coating; removing a predetermined portion of the coating from said sheet to form a design; and coloring the sheet from which the adhesive coating has been removed.

8. The method of decorating a sheet of parchment and parchment paper comprising, treating said sheet with oil; painting a surface of said sheet with an adhesive coating; and removing a predetermined portion of the coating from said sheet to form a design; impressing a die onto said adhesive coating; lifting said die to remove a predetermined portion of the coating from said sheet; and coloring the sheet from which the adhesive coating has been removed.

9. The method of decorating transparent materials comprising, painting a surface of transparent material with an adhesive coating; allowing said coating to harden; placing a die onto said adhesive coating; im-

pressing said die onto said coating and forcing said coating into said surface; and lifting said die to remove a predetermined portion of the coating from said surface.

10. The method of decorating a sheet of parchment and parchment paper comprising, treating said sheet with oil; painting a surface of said sheet with an adhesive coating; allowing said coating to harden; placing a die onto said adhesive coating; impressing said die onto said coating and forcing said coating into said sheet; and lifting said die to remove a predetermined portion of the coating from said sheet.

11. The method of decorating transparent materials comprising, painting a surface of transparent material with an adhesive coating; allowing said coating to harden; placing a die onto said adhesive coating; impressing said die onto said coating and forcing said coating into said surface; lifting said die to remove a predetermined portion of the coating from said surface; and coloring the surface from which the adhesive coating has been removed.

12. The method of decorating a sheet of parchment and parchment paper comprising, treating said sheet with oil; painting a surface of said sheet with an adhesive coating; allowing said coating to harden; placing a die onto said adhesive coating; impressing said die onto said coating and forcing said coating into said sheet; lifting said die to remove a predetermined portion of the coating from said sheet; and coloring the sheet from which the adhesive coating has been removed.

In testimony whereof, I have hereunto set my hand at San Francisco, California, this 31st day of March, 1927.

GEORGE C. ASHLEY.