H. E. ROBSON.

PROCESS OF PRODUCING MOTTLED DECORATIVE EFFECTS ON VARIOUS SURFACES.

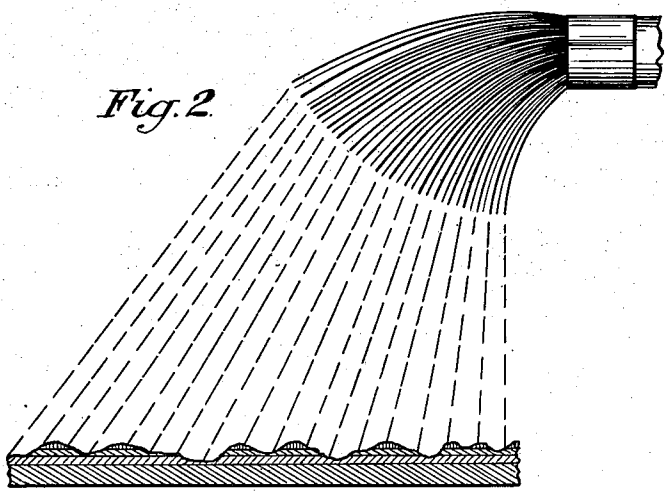
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1,413,429. Patented Apr. 18, 1922.

Fig. 1.



Fig. 2.



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WITNESS:

UNITED STATES PATENT OFFICE.

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Application filed January 14, 1919. Serial No. 271,106.

(GRANTED UNDER THE PROVISIONS OF THE ACT OF MARCH 3, 1921, 41 STAT. L., 1313.)

To all whom it may concern:

Be it known that I, HERBERT E. ROBSON, subject of the King of England, residing at East Prahran, Melbourne, Victoria, Australia, have invented new and useful Improvements in Processes of Producing Mottled Decorative Effects on Various Surfaces, (for which I have been granted Australian Patent 3,819 of 1917,) of which the following is a specification.

The object of my invention is the provision of an improved process by the practice of which a highly attractive mottled or marble-like effect may be produced on surfaces of various descriptions.

In the accompanying drawings, forming part hereof:—

Figure 1 is a view illustrative of a surface produced by the practice of my process.

Figure 2 is a view showing in section an article having the maximum number of coatings in accordance with my invention, and also showing means for projecting spirit solvent toward said article.

The invention resides primarily in applying to the surface a spirit stain or dye—i. e., a stain or dye consisting of coloring matter mixed with a solvent such as methylated spirit, in the color or colors desired, this applied color being then sprayed with methylated spirit with the result that it is caused to run wherever the solvent encounters it. This creates a series of irregular openings or spots in the color stain and imparts to the surface a mottled appearance of a highly attractive character.

In practicing my invention on transparent surfaces, the mottled effect to be viewed through transparent material, the color or colors are applied to the reverse side thereof. On the opaque material of vases and like vessels it will be obvious that the color must be applied to the outer or exposed side. Where a surface to be treated is of absorbent character such as wood, composite board or the like, it is necessary to first apply a coating of varnish, paint, enamel or other similar substance to prevent absorption of the stain. This is not essential in the case of non-absorbent surfaces such as glass, metal or china, but even in such cases I prefer to apply a primary coating of the character stated.

In applying the invention to the reverse side of the transparent material I preferably apply thereto a primary coating of gelatine, gum or very clear varnish (a thin solution of gum tragacanth being particularly suitable). When this has dried the spirit stain of the desired color is laid on top of it with a soft brush, sponge or the like. This stain dries almost immediately. It is then sprayed with methylated spirits preferably by sharply vibrating a brush saturated with the spirit so that the atoms fly off on to the stain, causing the same to run wherever the spirit comes into contact with it. This causes the stain to disappear from parts of the surface and to concentrate or thicken in other parts thereby creating a series of irregular openings or spots, the size and disposition of which may be varied by the distance the operator stands from the surface when spraying.

If it is desired to apply more than one color to the surface the color that is to predominate is first applied with a cloth, sponge or soft hair brush. This first coat of stain immediately dries and with a rag, sponge or brush the other color or colors are successively dabbed on to the first color in selected positions according to the judgment of the operator. These color stains are then allowed to dry and the whole admixture is sprayed with methylated spirit as before described causing the colors to run or merge into each other and giving a multi-colored mottled appearance to the surface. If the glass thus treated is to be left in a transparent condition, the sole remaining operation is to apply a protective coating of clear varnish or the like on top of the colors. If, however, it is not necessary or desirable that the object should be transparent, a background of gold or silver or other suitably colored paint is applied on top of the stains. This background, when viewed from the obverse side of the glass or the like, shows through the openings or spots in the stain formed by the atomized spirit and further enhances the ornamental and rich appearance of the product. In this latter example I may, if desired, also apply an additional coating of suitable air drying or other suitable varnish on the background to protect the same,

In applying the process to non-absorbent surfaces such as metal, china and the like, or to the outer or obverse side of glass articles, such as vases and ornaments a coating of gum or the like or of suitably colored paint or enamel is preferably, though not necessarily, first applied. When this is dry the spirit stain or stains are applied to it and sprayed with the solvent spirit as before described. A final coating of transparent varnish or the like applied to the dried stain completes the process.

When the surface to be ornamented is absorbent it is essential before applying the color stains to first coat the surface with one or more coatings of a filler or primer such as hard drying paint or enamel or a gum to prevent absorption of the stain. After such coating has thoroughly dried it is, when deemed expedient rubbed or otherwise smoothed, after which the stain or stains are applied, the predominant color being put on first and the other colors applied to it as before described. When the color stains have dried they are sprayed with the spirit as before described the resultant mottled ornamental effect being enhanced and protected by the final application of a varnish or like transparent covering.

Should it be desired to produce a highly polished surface on furniture of various descriptions, a solution of thin gum and borax is applied for protective purpose over the dried and mottled stains. When this gum solution is thoroughly dry, a polishing mixture of shellac and methylated spirits is applied to it and the surface can then be highly polished in the usual manner.

The color or colors applied in accordance with my invention are capable of withstanding heat such as that employed in an enameller's stove, and therefore parts of bedsteads, metal-ware and other objects may be baked after the practice of the process thereon thus enabling me to employ artificial heat for drying and hardening purposes if so desired. Manifestly by the practice of the invention walls, dados, friezes, margins and the like may be matched with wall papers, carpets, hangings and furnishings of apartments giving pleasing effects in one or many colors and in dull or bright hues, quite unobtainable by the ordinary painting and graining processes at present employed.

Having described my invention what I claim is:

1. The process of producing mottled decorative effects on surfaces, which consists in applying to a surface a spirit stain in the desired color, and then sprinkling on said stain a solvent.

2. The process of producing mottled decorative effects on surfaces, which consists in applying to a surface a spirit stain in the desired color, and then sprinkling methylated spirit on said stain.

3. The process of producing mottled decorative effects on surfaces, which consists in applying to a surface a spirit stain in one color, applying an additional color or colors of said stain in selected positions on the first color, and then sprinkling on said stains a solvent.

4. The process of producing mottled decorative effects on surfaces, which consists in applying to a surface a spirit stain in one color, applying an additional color or colors of said stain in selected positions on the first color, and then sprinkling methylated spirit on said stains.

5. The process of producing mottled decorative effects on surfaces, which consists in coating a surface with a non-absorbent base, applying to the base a spirit stain in the desired color, and then sprinkling on the stain a solvent.

6. The process of producing mottled decorative effects on transparent surfaces, which consists in applying to a transparent surface a spirit stain in one color, then sprinkling on said stain a solvent, and applying over the dried stain a background, whereby said background will be visible through the openings formed by the solvent in the stain.

7. The process of producing mottled decorative effects on transparent surfaces, which consists in applying to a transparent surface a spirit stain in one color then sprinkling on said stain a solvent, and applying a transparent protective coating over the stain.

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