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MAURICE DIETRICH, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN COMPOSITIONS FOR ORNAMENTING SURFACES.

Specification forming part of Letters Patent No. 181,150, dated August 15, 1876; application filed January 8, 1876.

To all whom it may concern:

Be it known that I, MAURICE DIETRICH, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and valuable Improvement in Compositions for Ornamenting Surfaces; and I do hereby declare that the following is a full, clear, and exact description of the same.

The nature of my invention consists in a compound for ornamenting surfaces, as will

be hereinafter more fully set forth.

This invention may be used on cards or paper of any desired size and thickness, to be afterward used on boards or walls of houses; or it may be applied directly to such walls, or on any other article or surface it may be desirable to use them on.

A sizing is first prepared of the following ingredients, viz: one pound rice-flour and one pound Kingsford's starch, which are mixed with two gallons of water and boiled under a steam-pipe thoroughly, and then allowed to cool, after which are added four ounces alcohol, (ninety-five per cent.;) one-half ounce lard-oil; one-half ounce sperm-oil; one ounce white wax; one ounce white soap; one-half ounce alum.

The wax and soap may be boiled separately

in four ounces of pure water.

When all are thoroughly boiled the composition is allowed to get cold, and is then run through a series of brass sieves. The colors intended to be used are then separately ground in a composition-paint mill and mixed with water. The colors are then mixed up with the sizing above described until it attains the consistency desired for the groundwork of the card, and for sprinkling, each color being kept in a distinct vessel. A card of the desired quality is then taken, and one side painted with the mixture of the color which is required for the groundwork. The mixture of the other colors is then sprinkled on top of the ground, made as above described, one color at a time, with a large-bristle brush, which is dipped

into the vessel containing the color, and then gently shaken over the card.

To enamel these cards or other surfaces a mixture of one pound gum-arabic, one-half ounce sperm-oil, two ounces alcohol, (ninety-five per cent.,) one-fourth ounce alum, one ounce white wax, one ounce white soap, and one ounce rice-flour is made, and heated in a hot-water bath, and the card coated over with the mixture with a fine-bristle brush.

For additional coats, dammar or copal var-

nish and oil of turpentine are used.

Before enameling the cards, and after they are sprinkled, as described above, a card containing the different colors is placed with the colored side uppermost, and another card with only the groundwork painted on it is laid on top, and the two cards are then placed in a press and pressed together. The two cards are then formed without the enameling, which is placed on afterward. The cards are then again placed between steel plates and pressed, and afterward passed between iron rollers to give a better finish.

The cards may be frosted by sprinkling them with ground glass.

I do not confine myself to the particular proportions of the ingredients of the composition above described, as they may be varied according to the quality of work intended to be done.

What I claim as new, and desire to secure by Letters Patent, is—

The composition for ornamenting surfaces, consisting of rice-flour, starch, alcohol, lard-oil, sperm-oil, white wax, soap, alum, and a coloring-matter, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MAURICE DIETRICH.

Witnesses:

ALLEN H. GANGEWER, É. L. PERDRIAUX.