

UNITED STATES PATENT OFFICE.

FRANCIS W. MATTHES, OF ISLINGTON, ENGLAND.

IMPROVEMENT IN MODES OF PREPARING PAPER OR OTHER SMOOTH SURFACES SO THAT THE PREPARED SURFACE MAY BE EASILY EMBOSSED.

Specification forming part of Letters Patent No. **212,030**, dated February 4, 1879; application filed January 9, 1879.

To all whom it may concern:

Be it known that I, FRANCIS WILLIAM MATTHES, of Liverpool Road, Islington, in the county of Middlesex, England, have invented an Improved Mode of Preparing Paper or other Smooth Surfaces so that the Prepared Surface may be Easily Embossed, of which the following is a specification:

The object of this invention is so to prepare paper or other smooth surfaces that a beautiful and realistic appearance may be given to any design that may be sketched or drawn upon it, the sketch or design as it is produced by the hand of the artist becoming embossed or made to stand in strong relief against the ground of the paper or other smooth surface.

To this end I prepare a thick paste, which is composed of, say, half an ounce of rice-starch, to which is added sufficient cold water to give it the requisite amount of consistency. This thick paste is then diluted by the addition of boiling water until the mass is sufficiently reduced to admit of its being spread on a smooth surface by a soft brush or by any other suitable means. The thin paste thus produced is then applied to the smooth surface that it is desired to emboss, care being taken that the whole of the smooth surface be covered by the paste.

A piece of Chinese rice-paper is then placed on the smooth surface that has been covered with the paste, and the whole may then be subjected to slight pressure to cause the rice-paper to adhere to the pasted smooth surface. The surface thus prepared should then be left

to dry, and finally put into a press or passed between smoothing-rollers, in order to give the desired smoothness of surface to the rice-paper.

If desired, the smooth surface to which the rice-paper is applied may be prepared with a design of any suitable character, so that all the artist will have to do will be to follow the outline of the prepared design, (which is clearly visible through the rice-paper,) and the surface of the rice-paper operated upon by the artist's brush will be found to stand out in bold relief from the ground of the smooth surface, thus producing a very natural and pleasing effect.

It is evident that surfaces thus prepared are specially applicable for Christmas and New Year's cards, valentines, and ornamental or embossed surfaces of all kinds.

Having now explained the nature of the said invention, and the manner of carrying it into effect, I wish it to be understood that I claim—

The mode of preparing smooth surfaces with a combination of starch and rice-paper, whereby the prepared surface may be readily embossed, substantially as hereinbefore described.

Dated the 23d day of December, 1878.

F. W. MATTHES.

Witnesses:

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