UNITED STATES PATENT OFFICE.

WALTHER FRITZSCHE, OF CREFELD-BOCKUM, GERMANY.

METHOD OF TREATING PAPER IN THE PREPARATION OF IMITATION STAINED GLASS.

1,010,038. Specification of Letters Patent. Patented Nov. 28, 1911.

No Drawing. Application filed May 19, 1910. Serial No. 562,324.

To all whom it may concern:

Be it known that I, WALTHER FRITZSCHE, a subject of the German Emperor, and resident of Crefeld-Bockum, Germany, have invented certain new and useful Improvements in Methods of Treating Paper in the Preparation of Imitation Stained Glass, of which the following is a specification.

Imitation stained glass has hitherto been produced in such a way that printed or blank, white or colored tissue paper was coated on both sides with a transparent varnish, whereby the tissue paper received a glass-like transparency.

The improved method forming the subject matter of the present invention is to impart to the imitation stained glass, besides the glass-like transparency, also the light refracting effect of the stained glass. For this purpose, it has hitherto been proposed first to stamp the paper, then to fill the deepened places of the stamping by varnish, and finally to provide the other side with a uniformly strong varnish coating. As known, the effect of the stained glass rests upon the fact that to one smooth surface of said glass another surface is opposed, which shows a design in elevations and depressions, whereby the light is refracted in a particular way and the embossed design brought out. To obtain this effect in imitation stained glass, the paper to be treated is, after being coated on one side with a first varnish layer, provided on a stamping machine with embossings and then on the other side varnished for a second time, the varnish to be employed, which must be rather thick, being by a smoothening tool partly brushed away from the surface and into the embossings, whereby the relief of the paper produced by the stamping on this side is filled and at the same time the paper receives a smooth surface required for sticking the same on glass. The one-sided varnishing of the paper before the stamping is necessary because the very thin tissue paper, if it were stamped before the varnishing, would lose part of its relief when first varnished and thereby the intended effect could not be obtained at all or only imperfectly. Besides, the varnish would also at the first painting set thicker into the deepenings of the one side of the previously-stamped paper and thereby again compensate wholly or partly the intended effect of the unequal thickness of the second varnish layer. Also the single or multiple varnishing of the still unvarnished side of the one-sided varnished and stamped paper, without employment of a smoothening tool, would fill the deepenings of the stamping but imperfectly and therefore not suffice for obtaining the intended purpose, since the light refracting effect of the pressed glass is only obtained by the different thickness of the glass layer, that is by a smooth back side being opposed to the embossed side of the glass, as besides the hollow spots of the embossings would, upon sticking the paper on the glass tile or sash, be partly depressed and thereby the stamping effects again destroyed, and the perfectly smooth surface, necessary for a smooth and wholly blisterless sticking of the paper on the glass, would not be present.

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

Method of treating paper in the preparation of imitation stained glass, consisting in first coating tissue paper on one side with a uniformly thick varnish, then embossing it, coating the opposite side of the paper, and finally filling in the embossings therein and smoothening them over, for the purpose set forth.

In testimony whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

WALTHER FRITZSCHE.

Witnesses:

HENRY ANENFLIEG,

ELISE KALBUSCH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."