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METHOD FOR THE ELECTROLYTIC PRODUCTION OF EMBOSSED FOILS OF GOLD OR OTHER METAL OR OF DIFFERENT METALS

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1 Claim. (Cl. 91—68)

For the electrolytic production of a leaf of gold or other metal or of different metals it has been proposed in an American patent application Serial No. 470,254, filed by Karl Wirth and assigned to the Diamond Decorative Leaf Company of Stapleton, New York to detach the thin metal layer, which had been deposited on a highly polished metal band, by applying acetated cellulose ester in liquid state on to the metal layer and let it dry thereon to form a solid film, whereupon the metal layer is pulled off the metal band together with this film. The pulling off of the metal deposit as gold or other metal leaf succeeds, but if it is desired to use this leaf as an embossing foil, it is necessary to paint a backing layer onto the side of the leaf which has been in touch with the highly polished metal supporting band and is therefore also highly polished. During the embossing this highly polished side of the leaf is directed towards the article to be embossed, whereas the rough and dull surface of the embossing foil produced by the electrolytic depositing is turned outwards. As the embossing consequently will likewise appear dull, a foil thus produced is scarcely suitable for embossing.

The invention has for its object, whilst employing a similar pulling off process, the production of an embossing foil obtained electrolytically, the highly polished side of which is turned outwards during the embossing.

The first stage of the method of producing the new embossing foil consists in employing as pull off film a film made of a soluble backing mass, such as gelatine or shellac, which, after having dried, becomes adhesive under the hot embossing die.

The second stage consists in providing the

pulled off leaf with a film for embossing on its highly polished side which has been in contact with the metal supporting band, this film being produced by applying liquid cellulose from which film the leaf portions detach in known manner, which are subjected to pressure with the hot die.

The third stage consists in dissolving and removing the pull off film which is slightly too thick for the embossing to such an extent that only the usual thin backing layer remains of this film which, as it becomes adhesive during the embossing, is sufficient for sticking on the embossing detached from the embossing film.

As during the embossing the highly polished side is turned outwards and the dull side is turned towards the embossed article, the object of obtaining cheaply a true embossing foil for very highly polished and sharp edged embossings is attained by the combination of these three measures.

I claim:—

A method for producing an embossing foil of gold or other metals, consisting in electrolytically depositing the metal on a highly polished metal supporting band, in applying in liquid state a film of backing substance, such as gelatine, shellac, on to the deposited metal on the band, allowing said film to dry, stripping said film with said deposited metal from said band, applying on to the highly polished side of the pulled off leaf, which has been in contact with the metal supporting band, a film of cellulose in liquid state, and in partly dissolving and removing the pull off film consisting of backing substance so that only a thin backing remains.

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