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ORNAMENTATION OF CELLULOID

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The present invention relates to a method for producing all kinds of patterns, ornaments, figures and the like on celluloid or similar material, as for instance cellon, cellite, by using any suitable kind of paper as intermediate carrier, coated with an adhesive soluble in water.

If it is desired to provide celluloid directly with such patterns, for instance, by printing thereon a pattern, considerable difficulties are encountered. The print will dry only with difficulty and badly adhere to the material and finally it is not possible to obtain an accurate register of the various colors printed upon each other. Besides, it is possible only to print single sheets, and during further handling of the patterns the latter will easily be damaged.

The method according to the invention will also permit the printing on rolls with lacquers of nitro-cellulose or other solutions of cellulose derivatives, and it is possible to utilize an exact lithographic and any other print or other process for the production of patterns, while a perfect adhesion is obtained without special subsequent treatment of the material thus decorated and without impairing in any way the capability of further treating the material.

The process is carried out in the following manner:

A band or sheet of paper, having a smooth surface is provided with a coating soluble in water, for example gum arabic, which substance can be removed so completely that the surfaces of the material to be ornamented, celluloid or the like, coming into contact therewith, will in no way be injuriously affected.

The process is continued in such a manner that upon this soluble coating the desired patterns are directly applied in any suitable manner, by printing, painting and so on; or another layer or film of transparent material, celluloid or a similar material is applied to the soluble coating and finally the patterns or ornaments are put on. In this instance there are three layers, to wit, the paper, a soluble coating and on the top thereof a layer of celluloid or the like.

For producing the patterns proper, preferably lacquers of nitro-cellulose or other solutions of cellulose derivatives with corresponding additions of paint may be used. But otherwise composed colors, as for instance oil-paints may be used, particularly in case to the soluble layer of the pattern a layer of celluloid is first applied. In order to avoid the rolling up of the sheets of paper, the latter may be provided on both sides with uniform layers.

The sheets or bands of paper thus prepared and bearing a pattern are now brought into contact with the material to be ornamented, for instance, celluloid or a similar material, in the presence of pressure and heat.

The best results are obtained, if the celluloid or a similar material is still in the freshly cut moist state of manufacture.

After the pressing operation the paper and the soluble substance on the latter is then treated with water in order to remove both perfectly.

The material thus provided with patterns or ornaments may then further be handled in the same manner as material having no patterns.

I claim:

1. A method of ornamenting celluloid and similar material which comprises, applying to a carrier of paper a soluble layer, applying to said soluble layer a pattern, applying the paper with the ornamented surface upon the material to be ornamented which material is in the moist stage of manufacture, subjecting the whole to pressure in the presence of heat and removing the soluble layer by means of water.

2. A method of ornamenting celluloid and similar material which comprises, applying to a carrier of paper a soluble layer, applying to said soluble layer a layer of transparent material and applying on the latter a pattern, placing the paper with the ornamented surface upon the material to be ornamented while said material is in the moist stage of manufacture, subjecting the whole to pressure in the presence of heat and removing the soluble layer by means of water.

3. A method of ornamenting celluloid and

similar materials which comprises applying to a carrier of paper a soluble layer, applying to said soluble layer, a layer of celluloid, placing a pattern upon said celluloid, placing the paper with the ornamented surface upon the material to be ornamented while said material is in the moist stage of manufacture, and subjecting the whole to pressure in the presence of heat and removing the soluble layer by means of water.

In testimony that I claim the foregoing as my invention, I have signed my name.

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