June 5, 1934. L. GOEDTLER 1,961,348

MANUFACTURE OF PHOTOGRAPHIC PRINTING FABRIC

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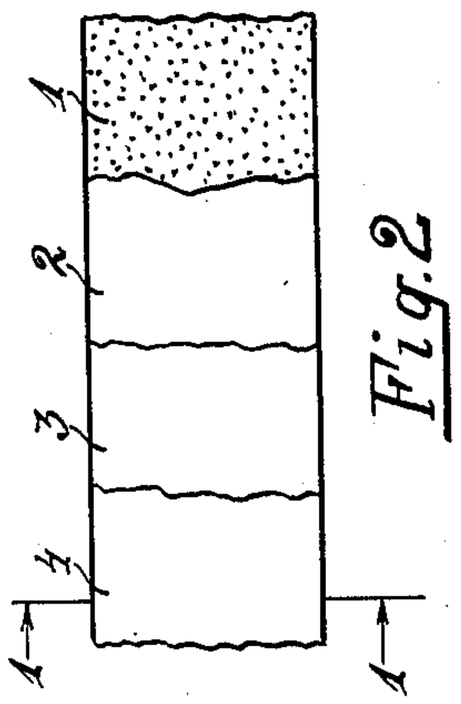

Fig. 2

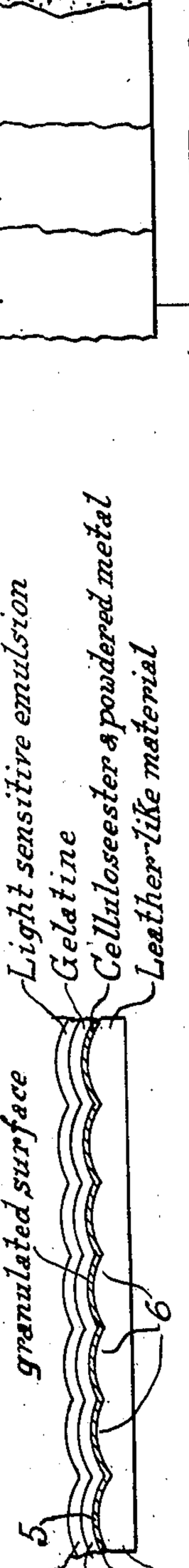

Fig. 1

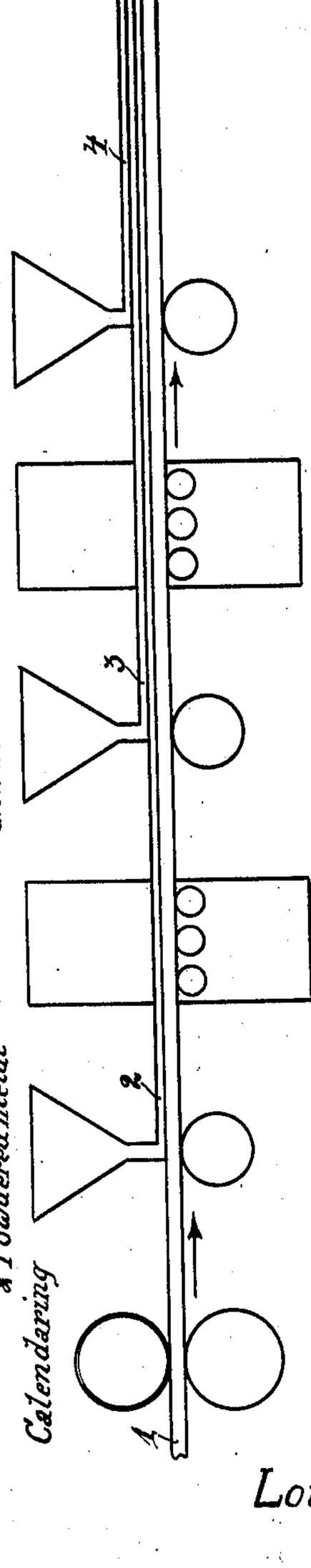

Fig. 3

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MANUFACTURE OF PHOTOGRAPHIC PRINTING FABRIC

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3 Claims. (Cl. 95—8)

This invention relates to improvements in the manufacture of photographic printing fabrics, more particularly to the preparation of a novel and improved support or backing for light-sensitive emulsions.

Many fabrics and other materials in sheet form are already known, possessing the appearance of artificial leather. Said materials are generally prepared by applying upon a foundation such, for example, as a cotton fabric, a coating of nitrocellulose, colouring materials, powdered metals or other ingredients.

In the accompanying diagrammatic drawing forming part hereof, Figure 1 represents a fragment of a photographic printing fabric made according to the present invention and embodying the essential features thereof, the view being taken as a section on line 1—1 of Figure 2.

Figure 2 is a plan view of a length of such photographic printing fabric wherein portions of various coatings are removed to reveal those beneath.

Figure 3 diagrammatically represents the steps of manufacture followed in practising the invention to produce the present fabric.

The same reference indicia refer to the same parts or features throughout the views.

I have ascertained that under certain conditions materials of the class described may be used as effective and satisfactory supports or backings for light-sensitive emulsions.

Referring now again to the drawing, according to my invention, I prefer to use for this purpose a material whereof the foundation consists of a fabric 1, grained or shagreened as at 5, and having thereupon a respectively grained or shagreened superficial coating 2 of a cellulose ester and of powdered metal.

By this means, I obtain a support or backing for light-sensitive emulsions, furnishing a particularly effective background for the image imprinted thereupon and adapted greatly to enhance the depth and relief effect of the same.

Until now, it has generally been necessary to prepare a support or backing of the class described before coating the same with a light-sensitive emulsion, for the reason that the cellulose ester wherewith the support is coated fails to bind uniformly with the emulsion and the latter may flake or peel away from said cellulose-ester after having become dry.

I have found however that a light-sensitive emulsion may be applied safely and uniformly upon the coating 2 of cellulose ester and powdered metal and be caused to adhere securely thereto by adopting the method commonly used in the manufacture of photographic films and applying to said coating of cellulose ester and powdered metal a thin layer 3 of dissolved or liquefied gelatine in the form, for example, of a cold solution of gelatine in glacial acetic acid and acetone, said layer of dissolved or liquefied gelatine then constituting a substratum for the light-sensitive emulsion, after having become dry. When this gelatine substratum 3 is dry, the light sensitive emulsion 4 may be applied and dried. By this means, the light-sensitive emulsion may be caused to adhere firmly and uniformly to the cellulose-coated surface of the material used as a foundation therefor. In order further to enhance the beauty of the finished photograph I may select superficial grainings or shagreens of varying degrees of coarseness according to the particular effect which I wish to secure, and produce said superficial markings by any suitable means, e. g. by pressing the foundation fabric, or by calendering same through suitably impressed rollers or the like.

The grained or shagreened form of the foundation fabric is made evident in an exaggerated manner at 6 in Figure 1, where it is also obvious that all the coatings, including the light sensitive emulsion, quite closely follow the form of the granulated or grained surface of the foundation fabric.

The process of manufacturing a support for light-sensitive emulsions according to my invention has considerable practical advantages over those proposed hitherto in that it eliminates the need for any preliminary preparation or treatment of the surface of the backing, and renders superfluous the use of any lacquers or varnishes.

Furthermore, it provides a suitably metallized surface to which the light-sensitive emulsion adheres uniformly, without tending to peel or flake from the same after drying.

I claim:

1. In combination in a photographic printing fabric, a foundation having a granulated leather-like surface, a coat of powdered metal in admixture with a cellulose ester upon said granulated surface, a film of gelatine upon said coat of powdered metal and cellulose ester, and a light-sensitive emulsion covering said coat and film.

2. In combination in a photographic printing fabric, a foundation of fabric having the appearance of leather, the surface of said fabric being shagreened, a compounded coating of a cellulose ester and of powdered metal upon said shagreened surface, a layer of gelatin upon said coating of

cellulose and powdered metal, and a film of light-sensitive emulsion covering said coating and layer.

3. In combination in a photographic printing fabric, a foundation of leather-like material having a granulated surface, a coating of powdered metal in admixture with a cellulose ester upon said granulated surface, a film of gelatine dissolved in glacial acetic acid and acetone upon said coating, and a layer of light sensitive emulsion evenly applied upon said film, the exposed surface of said layer of emulsion following the granulations on said foundation.

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