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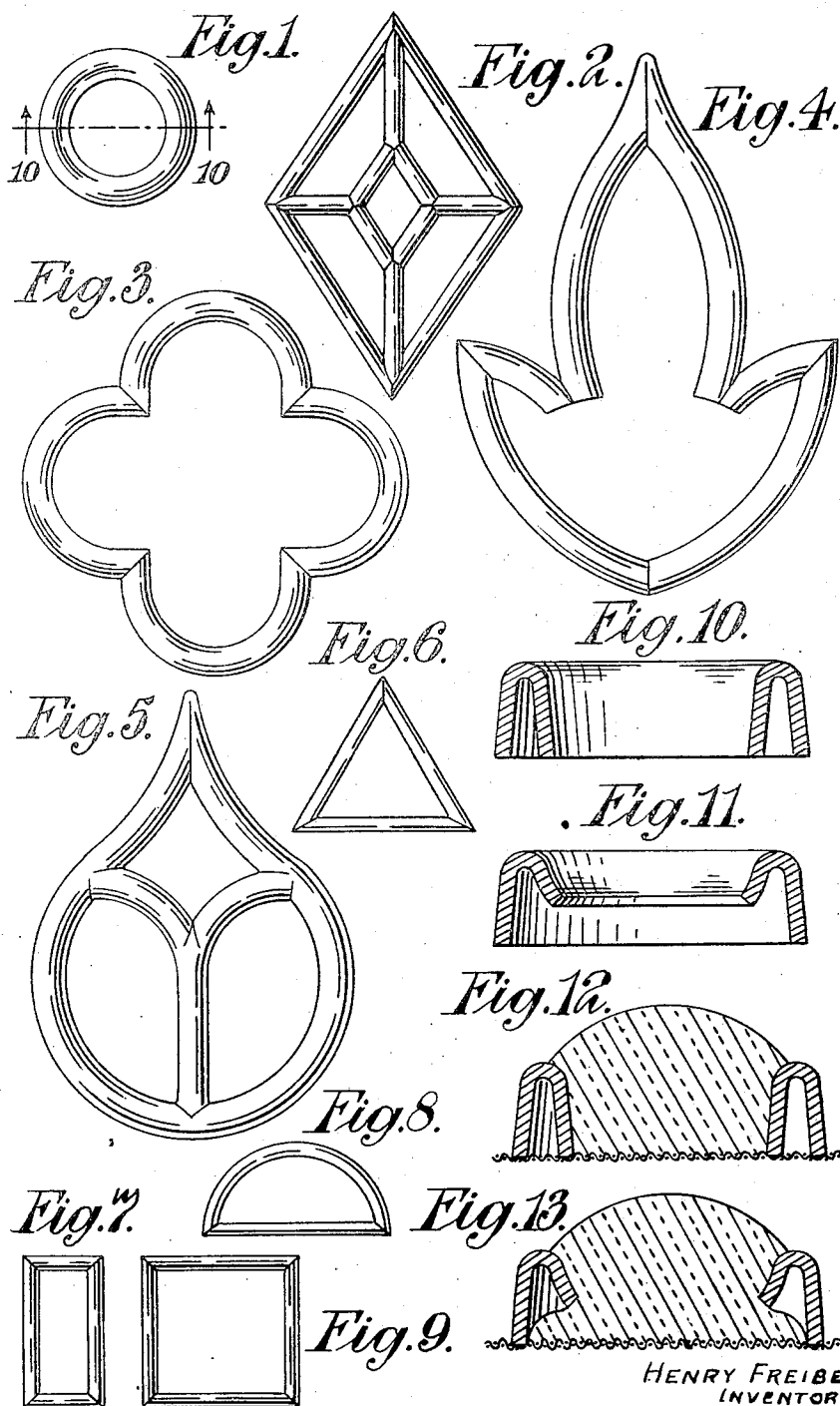
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2,370,028

MANUFACTURE OF FABRICS AND THE LIKE WITH BEADED OR SIMILAR DECORATION

Filed March 14, 1944

2 Sheets-Sheet 1



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Fig. 14.

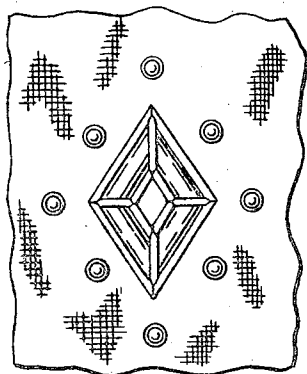


Fig. 15.

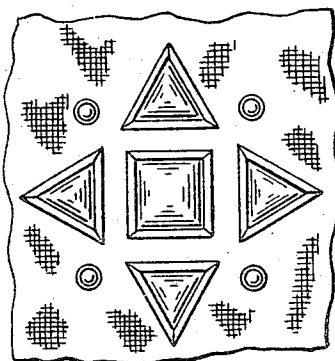


Fig. 16.

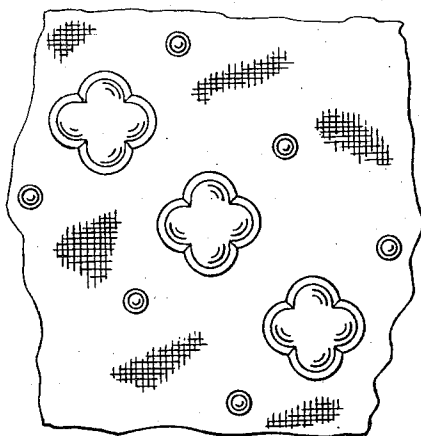
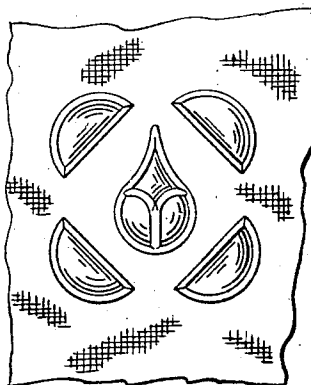


Fig. 17.



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UNITED STATES PATENT OFFICE

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MANUFACTURE OF FABRICS AND THE LIKE
WITH BEADED OR SIMILAR DECORATIONHenry Freiberg, London, England, assignor of
one-half to Samuel Freiberg, London, EnglandApplication March 14, 1944, Serial No. 526,456
In Great Britain May 18, 1943

4 Claims. (Cl. 41—34)

This invention is for improvements in or relating to the manufacture of ornamented fabrics and the like with beaded or similar decoration. The term "fabric or the like" as used in this specification includes textile or knitted fabrics of silk, rayon, cotton, wool or mixtures of fibres, or any fibrous materials used in dress-making, or leather, artificial leather, wood, paper, or cardboard and in short any material which has a fibrous structure and which can be obtained in sheet form.

It is an object of the present invention to achieve decorative effects by the employment of settings, as hereinafter defined, to receive a liquid or pasty natural or synthetic resinous composition which is thereafter allowed or caused to set.

By the term "setting" as used in this specification is meant a device which while encircling the resinous composition is open not only upon the side facing away from the surface on which it lies but also upon the side which faces the said surface.

According to the present invention a process for decorating the surface of a fabric or the like comprises applying to the fabric surface a setting, as hereinbefore defined, and applying in the setting a liquid or pasty resinous composition which is allowed or caused to set so that the setting and its resinous inset are firmly secured to the surface of the fabric or the like at least in part by the adhesion of the resinous composition which reaches the surface through the setting.

The resinous composition may have a basis of synthetic resin, for example a basis of urea-formaldehyde resin. It will, however, be understood that any type of resinous material may be employed which can be brought into the liquid or pasty condition and which will set to the solid state under conditions which do not affect deleteriously the setting or the material to which it is applied.

Among the materials of which the setting may be made may be mentioned metal (e. g. in the form of sheet, tube or wire), synthetic resin, glass, wood or stiffened textile fabric.

The resinous composition may be mixed with pigments, dyes, fillers and/or a hardening agent for the resin and may be applied for example by means of a piping bag or other apparatus employed in the decorative icing of cakes.

In carrying the invention into effect the setting is laid upon the surface of the fabric or the like to be decorated and the liquid or semi-liquid resinous composition is introduced into the

setting and allowed or caused to set to a hard mass, for example by heating the fabric.

The setting may be so designed that the point of adhesion between the resin and the surface to which the setting is applied is as close as possible to the outer edge of the setting in order to minimise the tendency of the ornament to be torn from the fabric by the catching of its outer edges. In order that this result may be achieved any down-turned inner edges of the setting preferably terminates above the surface of the fabric when the setting is in position thereon so that the liquid or pasty resinous composition can pass under the inner edges to form contact with the setting and the fabric at the inner edge of the outer wall of the setting.

In order to increase the adhesion between the ornament and the fabric or the like a hole or holes may be punched through the fabric in the area to receive the inset (or in at least one of the areas where the setting comprises more than one area) in order that the resinous composition may pass through the fabric to form a rivet-like attachment.

The setting may be provided on its inner surface or on at least one of its inner surfaces with means constituting an attachment to the resinous inset in order that effective adhesion may be secured between the setting and the resinous inset on the one hand and between the setting and the surface of the fabric on the other.

Following is a description by way of example and with reference to the accompanying drawings of methods carrying the invention into effect.

In the drawings,

Figures 1 to 9 show in plan and on an enlarged scale various forms of setting and Figure 10 shows in section the setting of Figure 1 made of sheet metal, for example, of stamping quality sheet brass.

Figure 11 shows an alternative section for a setting, e. g. of the form shown in Figure 1.

Figures 12 and 13 show the setting of Figures 10 and 11 in place upon a fabric surface and filled with the decorative resinous composition.

Figures 14, 15, 16 and 17 show examples of pieces of fabric having decoration applied to them in accordance with the present invention.

From Figures 11 and 13 it will be seen that the setting is so formed that when liquid or pasty resinous composition is placed in the setting it flows under the inner edges of the setting towards the periphery of the setting so as to make contact with the fabric at that point and thus

to ensure the close adherence of the setting to the fabric.

The setting is laid on the fabric to be decorated and there is applied within the setting, for example by means of a piping bag or other apparatus such as is employed in the decorative icing of cakes a resinous composition having a basis of urea-formaldehyde syrup and containing for example 10% by weight of pigment and an appropriate hardener the nature and proportion of which is such that the resin is hardened within, say, an hour under the conditions employed. The viscosity of the composition is such that it can be readily formed into droplets which do not flow very readily after application to the setting. After the resinous composition has been introduced into the setting the fabric is heated in an oven, for example at a temperature of 120° F. until the resin has thoroughly hardened. The time of heating may be varied according to the size of the insets, the nature of the resin and the hardener employed.

When the resin has thoroughly hardened the decorated fabric is ready for immediate use and may be washed or cleaned without risk of harming the decoration.

It will be understood that each setting may be formed to accommodate either one or more than one resinous inset and that when it contains more than one, at least one such inset shall secure the setting to the surface to be decorated.

It will be further understood that in certain cases the attachment of the decoration to the surface of the fabric or the like may be assisted by other means, e. g. by means of a pin or pins embedded in the resinous inset or by forming part of or attached to the setting.

I claim:

1. A process for decorating a fibrous surface which process comprises applying to the said surface a setting possessing at least one

throughway to the said surface, making at least one hole through the fibrous surface within one of the areas covered by a throughway in the setting, filling the throughways of the said setting with a viscous liquid comprising a hardenable resinous composition and causing the composition to harden to secure the setting and its resinous inset to the fibrous surface, partly by adherence of the resinous composition to the fibrous surface and partly by the passage of resinous composition through the hole or holes in the fibrous surface.

2. A process for decorating a fibrous surface which process comprises applying to the said surface a setting provided with a pin for attaching it to the said surface and possessing at least one throughway to the said surface, filling the throughways of said setting with a viscous liquid comprising a hardenable resinous composition and causing the composition to harden to secure the setting and its resinous inset to the fibrous surface, at least in part, by the adherence of the resinous composition to the fibrous surface within the boundaries of the setting.

3. A fibrous surface decorated with a setting having at least one throughway to the said surface, the outer end of the throughway being filled with a hardened decorative resinous composition which extends and adheres to the said fibrous surface.

4. A surface decoration on a fabric which decoration comprises a pressed setting of a material selected from the group consisting of metal, synthetic resin, glass, wood and stiffened textile fabric, the said setting having at least one throughway to the fabric surface which throughway contains a hardened decorative resinous composition which extends to and adheres to the surface of the fabric.

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