

(No Model.)

E. SIRON.
DECORATION FOR TEXTILE FABRICS.

No. 570,612.

Patented Nov. 3, 1896.

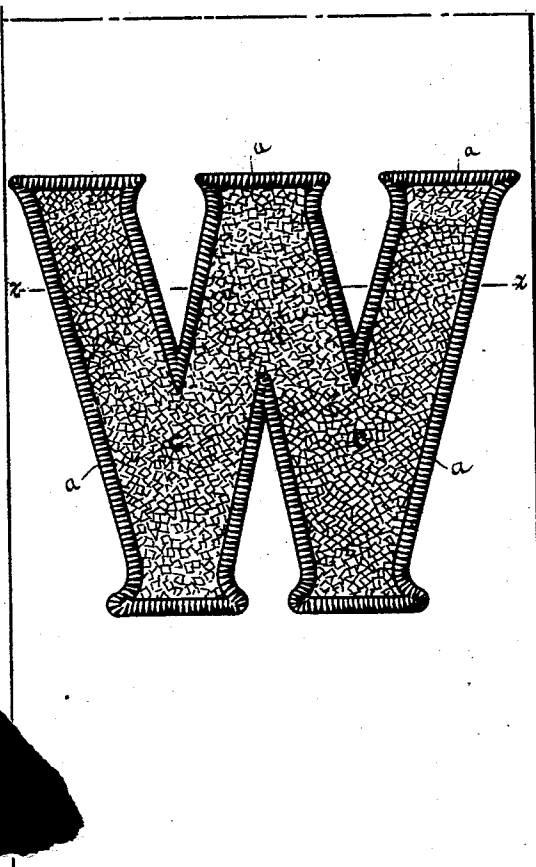


Fig. 1.

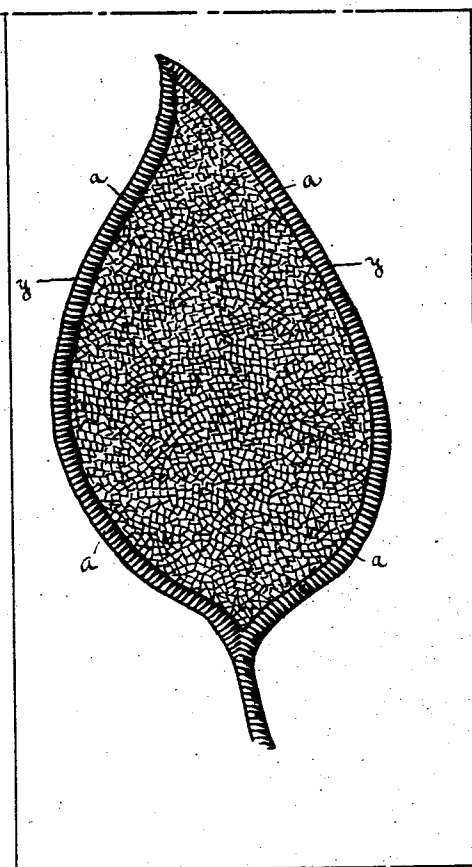


Fig. 3.



Fig. 2.

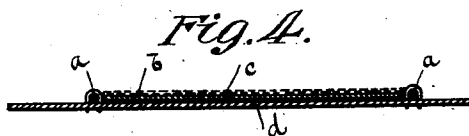


Fig. 4.

WITNESSES:

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ERNEST SIRON, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO THOMAS COOPER BYRNES, OF SAME PLACE.

DECORATION FOR TEXTILE FABRICS.

SPECIFICATION forming part of Letters Patent No. 570,612, dated November 3, 1896.

Application filed December 9, 1895. Serial No. 571,524. (No specimens.)

To all whom it may concern:

Be it known that I, ERNEST SIRON, a citizen of the Republic of France, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Decorations for Textile Fabrics, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of an ornamentation containing my invention. Fig. 2 is a sectional view of the same, taken on the line *x x*. Fig. 3 is a modification or varied form of the application of my invention; Fig. 4, a sectional view of Fig. 3 on line *y y*.

The object of my invention is to devise means and a process whereby there may be applied to textile fabrics in an economical, durable, attractive, and convenient manner metals or their equivalents in such manner as to produce metallic effects in combination with embroidery. I attain these objects as follows:

I first embroider upon the textile fabric to be ornamented, such as velvet, satin, plush, felt, or the like, an outline of the figure or particular part of a figure to which I design to convey a metallic effect of a certain kind. Any form of stitching, or of embroidery-stitch, might be applied to make this marginal embroidery, provided the same is sufficiently substantial and sufficiently elevated to constitute in effect a raised wall or ridge along the outline of my design, as shown at *a a*, Fig. 2. I prefer to apply this outline embroidery by the well-known Bonnaz embroidery-machines, which overstretch to the surface of the cloth a superimposed cord; but other applications of the said machine, so as to produce a braiding-stitch or any other having the requisites referred to, might be equally employed without departing from my invention.

Having thus constructed an outline inclosure or wall having the form of the desired design, as shown at *a a* in the drawings, I next proceed to apply my metallic or equivalent effect as follows: I prepare a composition consisting of finely-divided particles, each having a brilliant metallic surface, which I combine with each other and with the surface of the cloth or fabric by mixing with a trans-

parent cement, preferably flexible, such as, for instance, a rubber cement where great flexibility is required, or in other cases any animal cement of sufficient transparency and tenacity, as, for instance, chromated glue, though where the surfaces to be treated therewith are of limited area this flexibility is not so material.

This composition of lustrous particles and cement may be produced in various ways, but, for instance, I prefer where a silver metallic effect is to be produced to take chemically-pure pulverized tin, the particles of which are substantially globular, and then to flatten these particles by beating them, or in any other convenient way. I next apply to the surface of the material to be ornamented in the position thereon in which the metallic effect is desired a layer or coating *b* of the aforesaid cement in a liquid or semi-liquid condition, and while the same remains in such condition I fill it with the aforesaid flattened metallic particles, taking pains to completely fill and cover the cement, so that the mixture will present on the surface substantially nothing but the metallic particles. As the cement hardens, these particles *c* will be permanently retained thereon and thereby, and also secured firmly to the cloth or fabric. In this way extremely novel and beautiful effects can be produced, since the marginal walls or inclosures may be made of such colors and designs as may suit the fancy, and the interior spaces filled with various-colored metallic particles or their equivalents in an infinite variety of color and ornamentation.

The ornamental effects produced by my invention as aforesaid may be applied to an infinite variety of uses; but they are perhaps particularly applicable to show-windows or other conspicuous places, as, for instance, upon corset show-busts and the like.

Other metals than tin may, of course, be employed and treated in the manner that I have suggested, such, for instance, as bronze-powder, and even gold-leaf, aluminium, and silver-leaf may be so applied. These latter might be applied without pulverizing and flattening, as suggested, though I much prefer the latter, as it enhances greatly the brilliancy of the effect.

In applying my invention to fabrics of loose texture, or having a very rough nap or surface, I find it preferably to apply in the first instance to the surface of the fabric a preliminary coat of varnish *d*, to fill up the interstices, so as to avoid unnecessary consumption of the cement or glue and metallic particles. Such varnish may be prepared in any well-known way, though I prefer a solution of gum-shellac and alcohol in the proportion of about one part of shellac to ten parts of alcohol.

What I claim as new, and desire to secure by Letters Patent, is the following, viz:

15 1. As an article of manufacture, a fabric having stitched thereto a continuous raised outline of a design, substantially all of the inclosed surfaces of which are covered with metal cemented to such fabric, substantially
20 as and for the purposes described.

2. The method of ornamenting textile fabrics, which consists in stitching thereon a continuous raised outline or inclosure of a desired design, flowing over the inclosed surfaces, cement in a plastic condition, and, before such cement hardens, introducing into the same metallic particles, substantially as and for the purposes described.

3. The method of ornamenting textile fabrics, which consists in stitching thereon a continuous raised outline or inclosure of a desired design, flowing over the entire inclosed surfaces, cement in a plastic condition, and, before such cement hardens, applying to the same, metal, substantially as and for the purposes described.

ERNEST SIRON.

Witnesses:

THOS. COOPER BYRNES,
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