

No. 638,819.

Patented Dec. 12, 1899.

T. F. STIMPSON.  
METHOD OF PRINTING FABRICS.

(Application filed Apr. 23, 1898.)

(No Model.)

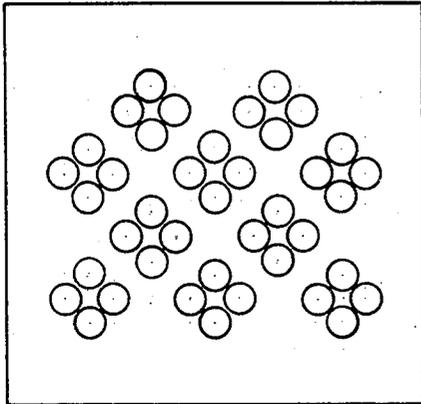


FIG. 2.

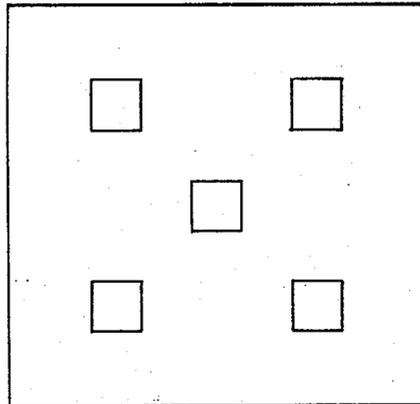


FIG. 1.

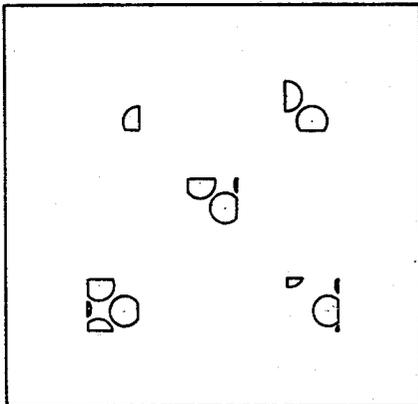


FIG. 3.

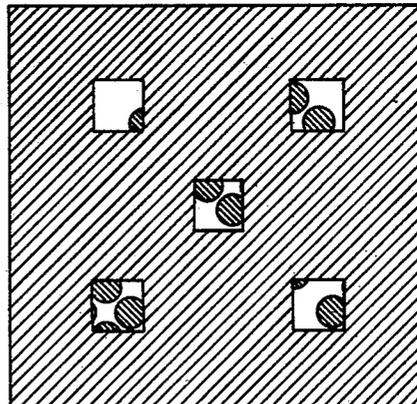


FIG. 4.

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## METHOD OF PRINTING FABRICS.

SPECIFICATION forming part of Letters Patent No. 638,819, dated December 12, 1899.

Application filed April 23, 1898. Serial No. 678,658. (No specimens.)

*To all whom it may concern:*

Be it known that I, THOMAS F. STIMPSON, of the city and county of Providence and State of Rhode Island, have invented a certain new and useful Method of Printing Fabrics; and I do hereby declare the following specification, taken in connection with the accompanying drawings, forming a part of the same, to be a full, clear, and exact description thereof.

10 The object of the invention is to produce by printing certain peculiar effects; and to that end it consists in printing a color-pattern upon the fabric and obliterating said pattern by removing or preventing the development of varying portions of the color-figures, so that only varying fragments of said color-pattern will appear upon the finished fabric. This may be accomplished by printing a bright-color pattern upon the fabric and printing with a resist or a discharge a pattern the figures of which do not register with the figures of the color-pattern, but overlap said figures in an irregular and varying manner. When a resist is used, the fabric is first printed with a pattern in resist and then with a color-pattern the figures of which do not register with the figures of the resist-pattern, but overlap said figures of the resist-pattern in an irregular and varying manner.

30 The color-pattern may be printed by applying a color or colors to the fabric, or said pattern may be printed by applying a liquor or liquors to the fabric, which liquor or liquors will develop a color or colors in the subsequent treatment of the fabric. In case the color-pattern is printed by the application of color then those portions of the color-figures which fall upon the resist will be removed in the subsequent treatment of the fabric or will be decomposed by the chemical action of the resist and only those portions of the color-figures which did not fall upon the resist will appear upon the finished fabric. In case the color-pattern is printed by the application of color-developing liquor then the color will not be developed where the liquor falls upon the resist, but will be developed only where the liquor does not strike the resist.

50 When a discharge is used, the color-pattern is first printed, and then a pattern is printed with a discharge the figures of which do

not register with the figures of the color-pattern, but overlap said figures in a varying manner. The color of the color-pattern will be removed through the action of the discharge, and only those portions of the color-figures which are not struck by the discharge will appear upon the finished fabric.

The discharge or resist may be a white discharge or resist—that is to say, they may be of such a character that when the fabric is finished it will appear in its original color where the discharge or resist is applied, and only those portions of the color-pattern will appear that did not overlap the discharge or resist. A color discharge or resist may be used, in which case a color will appear upon the finished fabric where the discharge or resist is applied. The color of the discharge or resist may be the same as one of the colors in the color-pattern, in which case both the color-pattern and the discharge or resist pattern will be obliterated or destroyed and a new pattern formed in which neither of the printed patterns will appear. On the other hand, the discharge or resist color may be and preferably is of a different color from the colors in the color-pattern. In this case the resist or discharge pattern will appear upon the finished fabric, and the figures of said pattern will be colored in a varying manner by the fragments of the color-pattern which fall upon the figures of the resist or discharge pattern.

In case the color of the discharge or resist is a comparatively dark color the color-pattern may be obliterated by removing only a part of the color, as the color which is substituted for the color removed will prevent any of the color-pattern appearing where the color discharge or resist is applied.

Referring to the drawings, Figure 1 indicates a resist or discharge pattern; Fig. 2, a color-pattern, and Figs. 3 and 4 patterns produced by the use of the patterns in Figs. 1 and 2.

Supposing that a pattern similar to that indicated in Fig. 1 is printed in a resist—for instance, the squares indicating the portions of the fabric which are free from resist—and supposing the groups of circles indicated in Fig. 2 to be printed on the fabric in red, for instance, then by reason of the fact that the

groups of circles of Fig. 2 do not register with the squares of Fig. 1 varying portions of said circles will fall upon the different squares. When the fabric is finished, those portions  
 5 of the groups of circles which fall upon the resist will be removed or will not be developed, and only those portions of said circles which fall upon the squares will remain and the pattern shown in Fig. 3 will appear on the  
 10 fabric, the figures appearing in red. If a color or a color-developing liquor be mixed with the resist, then the portions of the groups of circles which fall upon the resist will be removed as before, but the color of the resist  
 15 will be substituted and the squares will appear upon a colored ground, and said squares will be colored in a varying manner by the portions of the groups of circles which fall on said squares, as indicated in Fig. 4.

20 Instead of using a resist to obliterate the color-pattern either a white or color discharge may be used, in which case the color-pattern will be printed first and then obliterated by the action of the discharge.

25 The patterns illustrated are very simple patterns; but it will be apparent from the foregoing that the effects may be greatly varied by using more complex or complicated patterns and that the variations in the effects  
 30 may be further increased by using a number of colors in the bright-color pattern.

It will be understood that the order in which the steps of the process are performed is immaterial. Thus the color-pattern may be printed  
 35 first, as when a discharge is used, or the color-pattern may be printed second, as in case a resist is used.

While it is preferred to print the patterns upon the finished fabric, it will be understood

that the patterns may be printed on the warp- 40 threads previous to weaving, if desired.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The method of printing fabrics which consists in printing a color-pattern and oblit- 45 erating said pattern by removing or preventing the development of irregularly-varying portions thereof to avoid repeats, substantially as described.

2. The method of printing fabrics which consists in printing a color-pattern, and oblit- 50 erating said pattern by printing a pattern in a resist or discharge, the figures of which do not register with the figures of the color-pattern, substantially as described. 55

3. The method of printing fabrics which consists in printing a color-pattern and oblit- erating said pattern by printing a pattern in a color resist or discharge, the figures of which do not register with the figures of the color- 60 pattern, substantially as described.

4. The method of printing fabrics which consists in printing a color-pattern and print- ing a ground-pattern in a resist or discharge, the figures of which ground-pattern do not 65 register with the figures of the color-pattern, substantially as described.

5. The method of printing fabrics which consists in printing a color-pattern and print- ing a ground-pattern in a color resist or dis- 70 charge, the figures of which do not register with the figures of the color-pattern, substantially as described.

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Witnesses:

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