United States Patent Office.

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METHOD OF EMBROIDERING.

SPECIFICATION forming part of Letters Patent No. 776,265, dated November 29, 1904.

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To all whom it may concern:

Be it known that I, August Schnauder, a subject of the Emperor of Germany, residing at 12 Lützow street, Plauen, Vogtland, Germany, have invented certain new and useful Improvements in Methods of Embroidering, of which the following is a full, clear, and exact specification, such as will enable others skilled in the art to which it appertains to 10 make and use the same.

In the manufacture of embroideries it has been customary to produce the design for the embroidering upon the fabric with the aid of stencil-plates by using colors containing resin. 15 This was obtained in two different ways—first, by the so-called "dust-printing" process, where the dry resinous colors are brought upon the fabrics by means of rubbing the color-dust through the stencils and then by fastening the 20 colors by steaming the fabrics or by sprinkling alcohol or other solvents over the designs, and, secondly, by the so-called "wet-printing" process, according to which the respective colors are mixed with melted paraffin or with 25 rape-seed oil and then applied with the aid of a brush. The admixture of paraffin to the color was indispensable, as it rendered the latter consistent, not running out, and thus being fit for printing. Of these two well-known 30 methods the former has the disadvantage of a larger consumption of dye material and of being injurious to the health of the workmen on account of the fine dust of the colors.

In embroidering the articles in question it. 35 could not be avoided that the workman, especially if he works at finer articles, frequently misses the design, so that upon examination of the ready-made pieces many had to be laid aside owing to the lines of print still visible 40 on them, or the articles had to be once more subjected to bleaching, whereupon an additional finishing of the fabrics became necessary. The present invention is destined to remove these defects, and in order to obtain a fabric with a plain design with colors standing well and not permeating the colors are mixed with kaolin, china-clay, hydrate of alumina, baryta, green earth, or similar substances capable of absorbing oils and, by pref-50 erence, only such dyes or dye compounds are applied for dyeing which can be quickly and

permanently decolored by a chemical treatment easily appliable and in no way damageable to the texture. Such compounds are, for instance, iodic starch, chromic starch, the alka-55 line salts of the phenylic line, protoxid of chromium, oxid of iron, &c. After the fabric has been designed with a color which is produced by grinding and mixing the color with kaolin, iodic starch, and oil for blue, respectively, 60 with kaolin, oxid of iron, and oil for yellow the embroidering is produced in the ordinary way and the ready-made pieces are examined, whereupon the imperfections—that is, the color-lines still visible, caused by missing the 65 design in embroidering—are touched with a solvent appropriate to permanently removing the color without damaging the texture.

For removing the blue design obtained by iodin, for instance, solvents of sulfid of so- 7° dium, sodium bisulfid, potassium sulfid, or similar compounds of oxidizing properties can be applied, converting the iodin contained in the iodin starch into a combination which no more colors the starch.

For removing the yellow printing color a solvent of citricpyrotartaric or oxalic acid is used, whereby uncolored iron salts are formed.

The invention proves in so far of great advantage, as there will be no more inferior 80 articles among the ready-made goods and inasmuch as the finished specimens require neither an additional bleaching nor a finishing impairing the quality; also any loss of time is thus avoided.

Having thus described my invention, what I claim is—

The method of embroidering, consisting in first stamping the design with an easily-eradicable ink, then making the embroidery on 9° said pattern and afterward eradicating those portions of the design which are still visible because not covered by the embroidery by means of an ink-eradicator appropriate to take out the particular ink used to make the de- 95 sign.

In witness whereof I have hereunto set my hand in presence of two witnesses.

AUGUST SCHNAUDER.

Witnesses:

F. STEPHAN, S. P. WARNER.