

# UNITED STATES PATENT OFFICE.

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## METHOD FOR THE MANUFACTURE OF PRINTED TABLE-CLOTHS.

No. 862,352.

Specification of Letters Patent.

Patented Aug. 6, 1907.

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To all whom it may concern:

Be it known that I, MICHAEL SEITZ, whose post-office address is No. 13 Äussere Laufergasse, Nuremberg, Bavaria, in the Empire of Germany, have invented a certain new and useful Method for the Manufacture of Printed Table-Cloths; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a method for the manufacture of printed table-cloths.

Printing on table-cloths, which is more particularly effected for advertising purposes, has not hitherto been carried out in a satisfactory manner owing to the absence of means for producing a perfectly "fast" or washable impression which is at the same time sufficiently sharp to allow of its being distinctly read under all essential conditions. The various kinds of ink available for the purpose were restricted by the fact that caustic ink, though washable, must be avoided owing to the injury which it inflicts on the cloth. It is not practicable to weave the text into the cloth, as is done in the case of ordinary patterns, since the nature of the text varies for different requirements. Embroidering and other fancy-work is of course out of the question in view of the fact that table-cloths, for the purpose indicated, must be produced in large quantities.

According to the present invention washable, distinct and thoroughly durable impressions are produced by first printing on the cloth with a special kind of ink or color, and then subjecting the cloth to the action of moderate dry heat at a temperature not greater than 70° C. The heating of the cloth is for the purpose of rendering the ink or color soft, so that it becomes intimately combined with the fabric.

The ink used consists of a quick drying material, preferably stiff polishing varnish, a binding agent, preferably melted colophony, pig's fat, a preserving substance, preferably tar and the requisite addition of pulverized coloring matter, the latter being selected according to the color desired. The printing is effected in a press, on an undressed cloth.

I am aware that it has been a matter of common knowledge in the art to which this invention relates

to employ a printing means containing a quick drying varnish, "hogs' fat and coloring material and to fix the printing color by steaming the printed fabric, but a printing means containing merely the above mentioned ingredients is not sufficiently lasting enough for adhering under the strong wear in washing the printed fabric. In the invention as above described the colophony affords a binding substance and the tar affords a preserving substance. The adhesive action of the colophony binds the ingredients of the printing mass together, and the printing mass to the threads of the fabric, while the tar makes the fabric water tight and protects against rotting. The subsequent heating cannot be effected by the known means of steaming because this would not suffice to melt the printing mass. The printed fabrics therefore are exposed to dry heat in order to effect the saturation of the threads of the fabric, with the printing mass, the said fabric for the printing purpose being undressed.

The process is specifically carried out as follows: The design is etched in a known manner on lithographer's stone, or zinc and the color is rolled in; then after the printing has been done in the usual manner in the printing press, the printed fabric is exposed to dry heat up to 70° C. The color mass is thereby caused to melt and to penetrate into the threads of the fabric because the latter is not dressed.

The process is especially adapted for printing table cloths, towels and like fabric which are often laundered.

The method of printing described is only suitable for woven cloth, since oil-cloths and the like are either not sufficiently durable or not adapted to receive washable impressions of any kind.

What I claim and desire to secure by Letters Patent, is:

A method for the production of printed table cloths consisting in printing undressed woven fabric with ink consisting of pulverized varnish, melted colophony, pig's fat, tar and pulverized coloring matter and in subjecting the fabric thus printed to the action of dry heat up to 70° C. In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL SEITZ.

Witnesses.

ALEX WIELE,  
ANDREAS HIERLEIN.