

UNITED STATES PATENT OFFICE

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VORM. FRIEDR. BAYER & CO., OF ELBERFELD, GERMANY, A CORPORATION OF
GERMANY.

PROCESS OF PRINTING

946,326.

Specification of Letters Patent.

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No Drawing.

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To all whom it may concern:

Be it known that I, EDMUND BOURCART, doctor of philosophy, chemist, citizen of the Swiss Republic, residing at Mülhausen, Alsace, German Empire, have invented a new and useful Process of Printing, of which the following is a specification.

When using chrome mordants, such as chromium acetate, chromium fluorid, chromium formate, chromium bisulfite, in the hitherto known methods of printing with mordant-dyeing coloring matters, it is necessary to employ a thickening acidulated with acetic acid. These acid thickeners cannot be used when it is desired to print colored resists under anilin black, as for this purpose the resists must contain alkaline agents. These alkaline agents, however, precipitate the mordant-dyeing coloring matters and thus render them useless for printing colored resists under anilin black.

I have now found that by the addition of glycerin, glucose, cane sugar or other polyvalent alcohols to such mordant-dyeing colors containing the chrome mordant, a mixture is obtained which is completely soluble in ammonia and that from such a solution the mordant-dyeing coloring matters are not precipitated. The solution of ammonia, polyvalent alcohols, chrome mordants and mordant-dyeing coloring matters can, therefore, be printed together with carbonate of lime, carbonate of magnesia, etc., which are usually employed as resists under anilin black and in this manner colored effects under anilin black can be obtained, which it was hitherto impossible to produce with mordant-dyeing coloring matters.

In order to carry out my invention, I may proceed as follows: Print upon uncolored goods: 8 parts of alizarin yellow GG in

paste, 8 parts of glycerin, 4 parts of ammonia 25 per cent., 40 parts of tragacanth thickening, 20 to 30 parts of powdered chalk, (CaCO_3), 10 to 15 parts of a solution of chromium acetate 20° Bé. Steam one hour, pad with a solution of anilin black and finish in the usual way. The tragacanth thickening employed in the above example is made by soaking 65 grms. of gum tragacanth in 1 liter of water and then boiling the liquid.

Having now described my invention and in what manner the same is to be performed, I declare that what I claim is:

1. The process for producing colored resists under anilin black with the aid of mordant-dyeing coloring matters, which process consists in printing upon the fiber the coloring matter with a chromium salt rendered soluble in ammonia by means of a polyvalent alcohol, an ammoniacal thickening and a suitable anilin black resist, steaming the printed fiber and finally treating it with anilin black, substantially as described.

2. The process for producing colored resists under anilin black with the aid of mordant-dyeing coloring matters, which process consists in printing upon the fiber the coloring matter with a chromium salt rendered soluble in ammonia by means of glycerin, an ammoniacal thickening and chalk, steaming the printed fiber and finally treating it with anilin black, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EDMUND BOURCART.

Witnesses:

GEO. GIFFORD,
EUGEN FRISCH.