

UNITED STATES PATENT OFFICE.

ANDRÉ BLANCHON AND AUGUSTIN ALLEGRET, OF LYONS, FRANCE.

PROCESS OF PRINTING INDIGO.

SPECIFICATION forming part of Letters Patent No. 522,042, dated June 26, 1894.

Application filed April 10, 1894. Serial No. 507,038. (No specimens.)

To all whom it may concern:

Be it known that we, ANDRÉ BLANCHON and AUGUSTIN ALLEGRET, citizens of the Republic of France, residing in Lyons, in said Republic of France, have invented certain new and useful Improvements in Processes of Printing Refined Indigo Directly on Textile Fabrics or Yarns, of which the following is a specification.

This invention relates to an improved process of printing with refined indigo directly on textile fabrics or twisted yarns.

Instead of employing the reduced indigo for printing as it has been done heretofore, we use the refined or crude insoluble indigo and mix it with a suitable insoluble thickening substance such as white starch or algesin. The indigo is then reduced on the fiber itself by means of a reducing bath, after which it is again oxidized in the usual manner.

Our process is carried out in the following manner: The refined or crude indigo is pulverized and then mixed with a solution of water and white starch, which has first been boiled to a suitable consistency. The quantity of indigo suspended depends upon the shade which it is desirable to produce. The printing of the fabrics or yarns is then accomplished by any known process. After this is done, the fabrics are passed through a reducing bath, composed for instance, of a solution of hydrosulfite of lime which is prepared in

the usual manner, the concentration of which varying according to the more or less intense shade that is desired to be obtained or according to the nature of the fabric. The bath is retained in its proper strength until the complete reduction of the indigo deposited is completed. The fabrics are then subjected to the oxidizing action of the air or otherwise, so as to take off the greenish color, after which the thickening substance is washed out and the fabric treated by the usual well-known operations.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The process herein-described of printing with indigo on textile fabrics or yarns, which consists in mixing refined or crude indigo with a solution of a thickening substance in water, printing the fabrics or yarns with this mixture, passing the same through a reducing bath for reducing the indigo deposited on the fabrics or yarns, and reoxidizing the indigo in the usual manner, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

ANDRÉ BLANCHON.
AUGUSTIN ALLEGRET.

Witnesses:

THOS. N. BROWNE,
CHARLES H. DAY.