

# UNITED STATES PATENT OFFICE.

EMILIO CABIATI, OF MILAN, ITALY.

## PROCESS OF DYEING WITH INDIGO.

SPECIFICATION forming part of Letters Patent No. 559,163, dated April 28, 1896.

Application filed August 14, 1895. Serial No. 559,260. (No specimens.)

*To all whom it may concern:*

Be it known that I, EMILIO CABIATI, a subject of the King of Italy, residing at Milan, in the Kingdom of Italy, have invented certain new and useful Improvements in the Process of Economizing Indigo in the Operation of Indigo-Dyeing, of which the following is a specification.

This invention has for its object to produce a great saving in indigo in the process of dyeing fabrics with indigo, which fabrics may have printed patterns produced by resisting colors or acid colors without in any way impairing the blue metallic luster which is produced by dyeing in a pure indigo-bath. At the same time a very uniform velvety body is obtained.

The invention can be applied on cotton, linen, or hemp fabrics and for, first, plain-dyed fabrics; second, fabrics printed with resisting colors, and, third, fabrics printed with acid colors.

First. For fabrics to be dyed plain blue anilin-black is printed, in the shape of a fine net, on one or both faces, and then the fabric is dyed in the indigo-bath.

Second. For fabrics having figures printed on in resisting colors the patterns are printed in the usual manner, and then by means of a printing-press a fine network of anilin-black is printed on one or both faces, and the fabric is then dyed in the indigo-bath in the usual manner.

Third. For fabrics having the pattern produced in acid colors the fabric is first dyed plain blue, then the acid colors are printed on, and then a fine network is printed with anilin-black on one or both faces, and the colors are finally fixed or developed accordingly as the acid colors are produced from albumin by the acid-bath process or by steaming, (Mather & Platt.)

In place of anilin-black other coloring substances may be used which are cheaper than indigo, but just as fast—for example, “coeruleine.”

The network-pattern can be changed according to the nature of the fabric and replaced by other suitable figures.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The improvement in the art of dyeing with indigo, for the purpose of economizing in indigo, which consists in printing a fine network in anilin-black on the fabric before or after treatment in the indigo-bath, substantially as herein set forth.

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

EMILIO CABIATI.

Witnesses:

GAETANO GULLI,  
GIUS. DAVI.