

# UNITED STATES PATENT OFFICE.

DAVID JAMIESON, OF LEWISTON, MAINE.

## PROCESS OF DYEING BLACK.

SPECIFICATION forming part of Letters Patent No. 305,312, dated September 16, 1884.

Application filed December 29, 1883. (No specimens.)

*To all whom it may concern:*

Be it known that I, DAVID JAMIESON, a subject of Great Britain, who has made oath of his intention to be become a citizen of the United States, resident of Lewiston, county of Androscoggin, and State of Maine, have invented an Improvement in the Process of Dyeing; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same.

The object of my invention is to secure fast colors in black, drab, or slate in the dyeing of cotton, linen, jute, or silk. In order to secure this object I first dye the goods an indigo-blue by any well-known process, preferably with the cold lime and coperas vat. The indigo-blue used should be of good quality in order to secure a fast color. After the goods have been dyed in indigo-blue I dip them into a solution of cutch or gambier, adding blue-stone as a mordant to firmly fix the color upon the fiber to be dyed. When the goods have been properly worked in this solution, they are passed through a solution of bichromate of potash, after which they are washed in clear water, and the result will be fast colors in black, drab, or slate, according to the depth of the blue and brown dyes as combined in the fabric.

By treating the light shades of each color, blue and brown, according to my process, fast colors in drab or slate are secured of any desired shade. The fast black is the result of the process when the deep shade of indigo-

blue and cutch-brown are used in the manner described.

While I prefer to dye the goods an indigo-blue and then follow by dyeing cutch-brown, it is apparent that the reverse of this—that is, first dye in brown and then in blue—will accomplish substantially the same object.

I do not claim the use of an indigo-bath or the use of catechu and sulphate of copper, when said dyes are used as preliminary steps for securing black colors by the subsequent use of logwood or sumac. My process consists of dyeing in catechu and sulphate of copper goods previously dyed in indigo-blue, or the reverse of this, dyeing in indigo-blue goods previously dyed in catechu and sulphate of copper, as hereinbefore described.

What I claim as my invention, and for which I desire to secure Letters Patent of the United States, is—

The process of dyeing cotton, linen, jute, or silk, whereby fast colors are secured in black, drab, or slate shades, consisting of the separate and successive steps of dyeing in indigo-blue and in a solution of cutch or gambier, the two latter separately or combined, said solution having sulphate of copper or blue-stone mixed therein, followed by passing the goods so treated through a solution of chromate of potash, substantially as set forth and described.

DAVID JAMIESON.

Witnesses:

J. P. WENTWORTH,  
RICHARD RILEY.