

UNITED STATES PATENT OFFICE.

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TWO-TONE DOUBLE-PIECE DYE GOODS AND METHOD OF MAKING SAME.

1,376,569.

Specification of Letters Patent.

Patented May 3, 1921.

No Drawing.

Application filed May 18, 1920. Serial No. 382,362.

To all whom it may concern:

Be it known that I, HENRY NOLL, a citizen of the United States, and a resident of Queens, Queens county, New York, have invented a new and useful Improvement in Two-Tone Double-Piece Dye Goods and Methods of Making Same, of which the following is a full, clear, and exact description.

My invention relates to improvements in the manufacture of two-tone double piece dye goods, and so far I have carried out my invention in the manufacture of ribbons, and more particularly the manufacture of two-tone double satin piece dye ribbons. The most general way of making these two-tone ribbons is the ordinary skein dye process in which the stock or silk is dyed in the skein, then woven into ribbon form, and finally finished. These goods are made from thrown two thread organzine or expensive silk. My invention is intended to obviate the expense entailed in the ordinary skein dye process of manufacture, and to produce an equally desirable article from the raw silk, only part of which is dyed.

In carrying out my process, the ribbon is made from raw silk single thread unthrown part of which silk is dyed with fast dye which is a color resisting dye, and is rather new in the trade. This form of dye, however, is a known product, and dyes the silk so that it will resist other dyes subsequently applied. In my improved process I take the raw silk, part of which is dyed as stated, and the balance of which is undyed, and the dyed and undyed raw silk are then woven by well known standard machinery so that the dyed stock colored with the fast color resisting dye will appear on one surface, and the undyed stock will appear on the other side of the ribbon. The ribbon is then boiled off to get rid of the gum in the stock, and then dyed in the usual way so as to produce the desired shade on the uncolored side of the goods or ribbon. This will not affect the side which has been dyed with the fast color-resisting dye, so that the resulting product is a double-tone ribbon having one side of the tone or color of the previously dyed raw stock—that is the stock which has been dyed in the skein—and the other side the color of the last dye. The goods can

then be finished as usual to give it the desired surface effect.

The piece of goods made up and dyed as described can be produced in a variety of tone effects with better economy than by the usual skein dyed processes. In the manufacture of the ordinary skein dyed stock, the yarn or thread used in the production of this stock has to go through numerous processes which involve expense; whereas in the manufacture of my improved goods, especially in ribbon form from the raw silk, these processes are dispensed with, and with resultant economy.

From the description given it will be seen that the process is very simple, and one skilled in the art will understand readily how to weave, dye, and finish the ribbon, as the weaving machinery is standard, and the dyeing can be carried out as usual, except for the differences noted.

I claim:—

1. The herein described process of producing two-tone double dye satin piece goods, which consists in first dyeing a part of the raw silk with a fast color-resisting dye, weaving the thus dyed silk with raw undyed silk so that the colored silk will appear on one surface of the goods and the raw silk on the opposite surface, and then dyeing the uncolored surface.

2. The improved process of manufacturing two-tone double satin piece dye goods, which consists in weaving the goods from undyed raw silk and raw silk dyed with a fast color resisting dye, so that the dyed silk will appear on one surface of the woven goods and the undyed on the other surface, then boiling off the goods to eliminate the gum, and then dyeing the previously undyed surface of the goods.

3. The herein described process of making two-tone double satin piece dye goods, which consists in weaving the goods from undyed raw silk and raw silk dyed with a fast color-resisting dye so that the dyed silk will appear on one surface of the goods and the undyed silk on the second surface of the goods, next eliminating the gum from the woven product, and finally dyeing the second surface of the goods.

4. The herein described process of mak-

ing two-tone double satin piece dye goods, which consists in weaving the goods from undyed raw silk and raw silk dyed with a fast color-resisting dye, so that the dyed
5 silk will appear on the first surface of the goods, and the undyed silk on the second surface of the goods, then eliminating the

gum from the woven fabric, then dyeing the second surface of the goods, and finally finishing the piece.

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Witnesses:

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CHAS. LESTER.