

DAVID McKELLAR, OF LOWELL, MASSACHUSETTS.

Letters Patent No. 87,350, dated March 2, 1869.

IMPROVED COMPOSITION FOR PRINTING DESIGNS ON BOOTS AND SHOES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DAVID MCKELLAR, of Lowell, in the county of Middlesex, and State of Massachusetts, have invented and produced a new Composition of Matter for Enamelled Printing of any Design for the Toes and Heels of Boots and Shoes, imitating embroidery or sewing on the same; and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention or production consists in a new composition of matter, for enamelled printing of any color or design, imitating embroidery and sewing, on the toes and heels of boots and shoes, this composition consisting of the following ingredients, viz, paint, bronze, and coach-varnish, as hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its several

parts, and how prepared and compounded.

The paint used, which may be of any color desired, is of the finest quality and grade manufactured, in order to produce the best effect, which is mixed to the proper and desired thickness by the use of the best coach-varnish. When properly mixed, the required quantity of bronze is added, which is thoroughly mixed with the paint. The composition is then ready for use.

The blocks used for printing are made as follows: The figure or design desired is first transferred to the block, then pins are driven into the same, following the design, and, when complete, they are filed off true and even with each other, these pins making the figure or design. Or the design or figure itself may be engraved on the block, as the operator chooses, the last method described being the best for the finest work.

For using the composition for hand-printing, a sufficient quantity is laid on to some smooth surface with a common camel's-hair brush. Then the block, with its design raised or sunken on or in the surface of the same, is placed on the place previously prepared. It is then removed, the required quantity of the composition adhering to the design on the block. The block is then placed on the skin to be printed, and the required pressure given to the same. It is then removed, and another coating supplied to the block, as before described, and so on until the whole skin is figured over.

The skin is then laid aside, in a dry and clean room, and allowed to dry from four to six hours, after which it is removed to an oven or dry-house, where it is subjected to heat of not less than 150° nor over 200° Fahrenheit, from twenty-four to forty-eight hours, when it is removed, ready to be cut into different shapes and sizes, for the toes and heels of boots and shoes.

The bronze in the composition, when white paint is used, gives the design, when printed, a pearl-like appearance, and also, when paint of any color is used, gives the body to the composition, and serves to adhere or stick the same firmly to the surface of the skin, as I have found, by experimenting, that the composition seems to impregnate the fibres of the skin.

The varnish gives life and gloss to the figure or de-

sign printed.

The proportion of the above composition is ten per cent. of bronze, forty per cent. of paint, of any color, and fifty per cent. of coach-varnish, although these pro-

portions may be varied to suit the user.

With my improved composition, I am enabled to imitate embroidery or sewing, of any design or figure, either of silk or thread, and of any color desired, and printing the same on the skin to be used for the toes and heels of boots and shoes, without injuring the surface of the skin, or the skin itself, in the least, rendering them more durable, cheaper, a far more perfect design or figure, and neater in every respect.

What I claim as my invention and production, and

desire to secure by Letters Patent, is-

The composition, composed of coach-varnish, paint, and bronze-powders, in the proportions herein specified, or thereabouts, for printing designs on the toes and heels of boots and shoes, as herein set forth.

DAVID McKELLAR.

Witnesses:

WILLIAM W. GLADWIN, GEO. E. PEVEY.