

United States Patent Office.

EDWARD JOHN SCOTT, OF GLASGOW, GREAT BRITAIN.

Letters Patent No. 90,312, dated May 18, 1869.

IMPROVED PROCESS OF ORNAMENTING 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, EDWARD JOHN SCOTT, of Glasgow, in the county of Lanark, Kingdom of Great Britain and Ireland, have invented an Improvement in Ornamenting Boots and Shoes; and I hereby declare the following to be a full, clear, and exact description of the same.

My said invention has for its object the ornamenting of boots and shoes in such a way, as, while presenting an appearance similar to but more effective than that produced by ornamental stitching, to be much more economically produced, and capable of being easily renovated.

Prior to my invention, the ornamentation of boots on "patent" or enamelled leather was effected by stitching by hand, or with the sewing-machine, the process being termed "flourishing;" and

My invention consists in imitating and superseding this process by printing with enamel or japan varnish on the patent or enamelled leather. Simple as this idea may appear, many and great difficulties have been met with in reducing it to practice, and it was only after persevering and constant application for upwards of seven months that satisfactory results were ultimately arrived at.

And in order to enable others skilled in the art to make and use my invention, I proceed to particularly describe the processes I employ.

As the condition of the enamelled or japanned leather is of considerable importance, care must be taken, in preparing the leather for japanning, that the grease and oil used for "stuffing" or softening it, is spread evenly over the surface, and is used in as small a quantity as will suffice for the purpose.

The japanned leather is carefully rubbed with a wash-leather, wet with turpentine, or, as it is sometimes termed, spirits of turpentine, and polished with a dry wash-leather immediately before printing.

The blocks for printing are, by preference, made with pieces of copper, producing small uniform oblong marks in imitation of stitches, but round dots and continuous lines may also be used with a very similar effect.

The ornamental devices are, in some cases, produced by printing with two or more blocks in different colors; and colored patches may be first printed, and have dotted work subsequently added over or around them, in imitation of patches of colored cloth or leather fixed by stitching.

In printing, the blocks may be applied by hand, or by any convenient kind of printing-press.

The pigment used for printing the devices is composed of forty parts by weight of copal varnish, such as is usually employed in making japan, twenty parts raw refined linseed-oil, and forty parts of coloring-matter, finely ground in raw refined linseed-oil.

The varnish and oil are put in a well-stoppered bottle, and frequently shaken for three or four days before adding the coloring-matter, and the mixture is also frequently shaken afterwards, exposure to the air being always prevented, as much as possible, by keeping the bottle stopped.

What is taken out for use does not remain in proper condition for more than four hours.

In some cases the varnish may be colored or embellished after printing, by applying gold-leaf, bronze-powder, or dust-colors before it is dry.

When printed, the leather is kept in an oven or drying-room, at a temperature of 110° to 120° Fahrenheit, for about six hours; it is then subjected to a temperature of about 100° for about twelve hours; and finally, to a temperature of about 75° for about twenty-four hours. The drying-chambers are arranged so that the air in them is continually changing.

When a second printing is to be applied, the leather, with the first printing on it thoroughly dried, as last hereinbefore described, is, by preference, afterwards subjected to a temperature of about 60° for about twelve hours before applying the second printing.

It is obvious that a great variety of elaborate devices may be produced in this manner, much more perfectly and cheaply than by stitching.

The brilliancy of the colors can also at any time be renovated by washing, whereas when ornamental stitching is once soiled it cannot be properly cleaned; moreover, the leather is much injured by the needle-perforations.

Having thus particularly described my said invention, and the manner in which the same is to be performed, I have to state that what I desire to be secured by Letters Patent, is—

The ornamenting of boots and shoes by printing with varnish-colors in imitation of stitched work, substantially as hereinbefore described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

E. J. SCOTT.

Witnesses:

EDMUND HUNT,
ALEX. R. TEMPLETON.