

UNITED STATES PATENT OFFICE.

FRIEDRICH ALBERT LANDGRAF, OF CHEMNITZ, GERMANY.

PROCESS OF FINISHING FABRICS.

SPECIFICATION forming part of Letters Patent No. 494,759, dated April 4, 1893.

Application filed November 16, 1892. Serial No. 462,211. (No specimens.)

To all whom it may concern:

Be it known that I, FRIEDRICH ALBERT LANDGRAF, a subject of the Emperor of Germany, residing at Chemnitz, in the German Empire, have invented a new and useful Improvement in Processes of Finishing Fabrics; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in the process or system of finishing fabrics to produce a surface resembling Swedish leather and consists in the novel features hereinafter fully described and my said invention is fully disclosed in the following description and claims.

In processes heretofore employed for treating fabrics so as to produce a suede finish, the nap or downy surface has been too long, and it is one of the objects of my invention to overcome this difficulty and produce a mat surface which will perfectly resemble suede leather. The piece of textile fabric to be dressed is combed on both sides and the nap raised, or roughened up. This step is effected conveniently by a cylinder carding machine having a twenty eight needle wide carding band. Care should be taken that the fabric while operated upon by the carding machine shall be tightly stretched and held at such a distance above the carding devices that the meshes of the material will not be torn but simply the nap raised. When this has been done the piece of goods is fulled for from three to four hours in a suitable cylinder fulling machine. The fulling liquor consists of a hot solution of tallow-olive soap in water. After fulling, the piece of fabric is rinsed in clean cold water and then dried in a centrifugal drying machine. After drying, the roughing up of the nap on both sides is repeated and the piece of goods is then dyed the desired color. When the fabric has been colored the piece is again stretched, dried, and both sides are most carefully combed or roughened until the desired soft fuzzy nap is produced. Finally the fab-

ric is stretched to dry and while stretched is again moistened one or more times on the back with clean water, preferably by means of a sponge, care being taken that the water is not used in sufficient quantity to come through the surface on the right side. The fabric is then found to resemble suede leather perfectly. This fabric is especially desirable for the manufacture of gloves and similar articles, but may be used for other purposes.

What I claim, and desire to secure by Letters Patent, is—

1. The process of treating fabrics hereinbefore set forth which consists in the following steps, raising the nap before fulling, fulling the fabric completely, drying it, again raising the nap and finally moistening the back with water, substantially as described.

2. The process of treating fabrics hereinbefore set forth, which consists in the following steps, raising the nap before fulling, fulling the fabric completely, drying it, again raising the nap, dyeing the fabric, again raising the nap and finally moistening the back with water, substantially as described.

3. The process of treating fabrics hereinbefore set forth which consists in raising the nap on both sides fulling the fabric in a hot aqueous solution of tallow-olive soap, drying it, again raising the nap on both sides, dyeing the fabric, drying it, raising the nap on both sides, and finally moistening it on the back with clean cold water, substantially as described.

4. The process of treating fabrics hereinbefore set forth which consists in raising the nap on both sides, fulling the fabric, then rinsing it, then drying it, then dyeing it the desired color, then stretching it and again raising the nap on both sides, then stretching it to dry and finally moistening it on the back with clean water, substantially as described.

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

FRIEDRICH ALBERT LANDGRAF,

Witnesses:

R. E. JAHN,

E. A. FRAISSINET.