UNITED STATES PATENT OFFICE.

FRITZ PASTOR, OF KREFELD, GERMANY.

METHOD OF FIGURING VELVET.

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To all whom it may concern:

Be it known that I, FRITZ PASTOR, silk and velvet finisher, a subject of the King of Prussia, German Emperor, and resident of Krefeld, in the Province of the Rhine, in the Kingdom of Prussia, German Empire, have invented an Improved and useful Method of Figuring Velvet, of which the following is a specification.

This invention is based, first, on the fact that some vegetable and animal threads are more or less heat-proof than other vegetable and animal threads; second, on the cognizance that this behavior of the material, of which the threads consist, may be usefully employed for figuring velvet of the kind, in which the threads forming the pile are less heatproof than the threads forming the ground-fabric. This is the case particularly with velvet, in which the pile-threads consist of cotton and the weft- and the warp-threads consist of silk.

In carrying my invention into practice, I heat the velvet on its back-side at those portions where it shall become figured on its front-side. This heating is effected by embossed plates or rollers, the embossed portions showing the figuring which shall be produced on the front-side or upper surface of the velvet. The degree of heat of said plates or rollers and the time of their action on the velvet-fabric are such that the cotton-pile which is less heatproof than the silken ground-fabric is rendered friable at those portions or places that are subjected to the influence of the hot plates or rollers. By thus making the pile-portions at the back-side of the velvet friable, these portions are, in fact, practically destroyed, that is to say, they have no more the power to hold in place the corresponding portions of the pile on the surface proper of the velvet, which is proved by the fact, that these portions may easily be removed from that surface by means of a brush. There becomes thus visible at these portions the upper surface of the ground-fabric, and these portions of the silken ground-fabric represent the figuring to be produced.

The before-described process may be accelerated by providing the velvet by any of the known dressing or finishing methods with appropriate means. I have found that by thus preparing the velvet, the cotton pile-threads become more easily friable and can more easily be removed after the heating.

Having now described my invention, what I desire to secure by a patent of the United States is:

1. The method of figuring velvet of the kind in which the material of the pile is less heatproof than is the material of the ground-fabric, consisting in heating the velvet on its back-side at those portions where it shall become figured on its front side so as to render friable the respective portions of the material of the pile and making them thereby removable, and removing said pile-portions.

2. The method of figuring velvet of a kind in which the threads forming the pile are less heatproof than are the threads forming the ground-fabric, consisting in heating the velvet on its rear surface at those places where it shall show figures on its front-surface, said heating being such as to render the respective portions of the pile-threads friable and making them thereby capable of being removed, and removing said portions of the pile-threads.

3. The method of figuring velvet of the kind in which the material of the threads forming the pile is less heatproof than is the material of the threads forming the ground-fabric, consisting in heating on the under side of the velvet parts of such extent and contours as correspond to the figures to be formed on the upper side of the velvet, rendering the pile-threads at those parts friable by this heating, and removing the friable pile-threads from the upper side of the velvet.

4. The method of figuring velvet in which the pile consists of cotton and the ground-fabric of silk, consisting in heating the velvet on its back-side at those portions where it shall become figured on its front-side so as to render friable the cotton-thread portions exposed to the heat and making them thereby removable from the upper side of the velvet, and removing said cotton-thread portions.

5. The method of figuring velvet, consisting in providing the velvet by a dressing or finishing method with appropriate means, heating the thus prepared velvet on its rear-

surface at those places where it shall show figures on its front-surface, said heating being such as to render the respective portions of the pile-threads friable and making them thereby capable of being removed, and removing the said portions of the pile-threads.

In testimony whereof I affix my signature in presence of two witnesses.

FRITZ PASTOR.

Witnesses:
GEORG VON BECKERATH,
THEO. LEUSCH.