

No. 621,731.

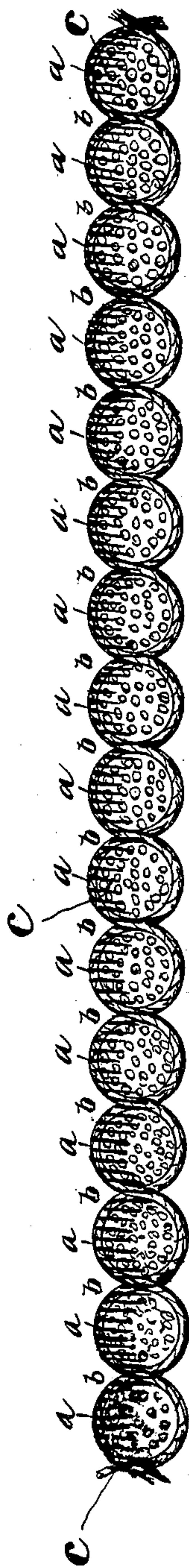
Patented Mar. 21, 1899.

R. P. WINTERS.

PROCESS OF REPRODUCING TAPESTRY PAINTINGS.

(Application filed Sept. 13, 1897.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT P. WINTERS, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE WINTERS COMPANY, OF SAME PLACE.

PROCESS OF REPRODUCING TAPESTRY-PAINTINGS.

SPECIFICATION forming part of Letters Patent No. 621,731, dated March 21, 1899.

Application filed September 13, 1897. Serial No. 651,533. (No specimens.)

To all whom it may concern:

Be it known that I, ROBERT P. WINTERS, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Processes of Reproducing Tapestry-Paintings, of which the following is a specification.

My invention relates to the process of reproducing pictures or paintings upon ribbed fabrics generally known as "tapestry."

In carrying out my invention I have sought to reproduce all of the effects of hand-painting on ribbed fabrics, called "tapestry," mechanically, and this I accomplish as follows: The ribbed fabric or tapestry is first treated with a filler applied in the form of a liquid, which filler has a physical affinity for the colors to be employed and with little or no chemical effect thereon, and it also has the quality of drying into the fabric, so as to become a part thereof, or of evaporating out of the same after the picture has been reproduced, the last quality being preferable. When the fabric is thus treated, the picture or painting is reproduced thereon by planographic printing, preferably from stones or plates properly treated and by the employment of colors which have an affinity for the surface from which the printing is done, as well as for the filler with which the fabric is treated. The function effected by the use of planographic surfaces is to allow the colors to flow into the fiber of the fabric and into the ridges and valleys thereof during the time the picture is being printed without embossing it. These colors are usually applied separately and by successive operations and while the fabric is still wet and softened by the filler or filling compound.

A more detailed description of my improved process is as follows: I take the ordinary tapestry or ribbed fabric, which is used as the ground for tapestry-painting. To this I apply a filler which has an affinity for the colors to be employed. The colors which I preferably employ are of a greasy nature, such as are generally used in the lithographic process, having an affinity for the lithographic stone. I therefore employ a filler which has an affinity for the greasy colors or paints of this

character. For this purpose it is desirable, as before stated, that the filler have the quality not only of absorbing and conveying the colors for which it has affinity, but also should have the quality of drying into the fabric or evaporating out of the same, leaving the colors in the fabric with their true values and with little or no chemical change, and the most successful filler which I so far have employed is paraffin-oil, thinned slightly with kerosene or coal-oil. I have found also that linseed-oil, castor-oil, and similar substances can be employed with more or less perfect results, the heavier substances generally producing better results when they are thinned by the addition of kerosene or some other thin or volatile reducing liquid.

In applying the filler I preferably employ a stone or plate of the same characteristics as those from which the printing is done, except in this instance the plate is perfectly plain and the filler is applied to the entire surface thereof. This stone or plate is put into a press in the ordinary manner and the fabric run through until it has taken up a sufficient quantity of the filler to be well saturated therewith. By this process the filler is applied evenly and uniformly to the fabric, and the exact condition desirable may be attained by a greater or less number of impressions upon the press. After the application of the filler and while the fabric is still wet and pliable it is treated successively to the color-plates, and by reason of the soft and pliable condition of the fabric and the affinity which the filler has for the colors used the colors are readily absorbed by the fabric and pass into the valleys as well as onto the ridges of the cloth, and thus produce in all the minuteness of detail the effects produced by hand-painting with the colors and washes employed in this branch of the art.

The drawing which I furnish herewith is intended to illustrate the characteristics of the fabric and of the printing thereon. In the drawing *a* represents the ridges and *b* the valleys. The heavy shade-lines *c* are intended to indicate the colors which are absorbed or conveyed by the filler into the interstices of the fabric.

Where a number of colors are employed

and therefore a number of successive impressions are required, it may be desirable to make a second or even a third application of the filler, which can be done in the manner first described—that is, by passing the fabric through a press with the filler-plate at any stage of the operation, the filler thus applied having little or no effect on the color already applied, it being essential, however, to the process that the fabric should be properly saturated by the filler before and during the process of reproducing or transferring the colors to the fabric.

When stones are employed for applying the colors, the process is substantially the same as the ordinary lithographic process now in use, except that the colors as applied to the plates are of a less consistency and are preferably thinned by a substance similar to that which is employed for the filler or filling compound. After the colors are properly applied the fabric containing the picture is hung up to dry. The filler leaves the colors and also preferably the fabric by simply evaporating out of the same. A portion of the filler, however, when the heavier substances—such as castor - oil, linseed - oil, and similar substances—are employed will dry into the fabric and become a part thereof, and may be in this condition more or less combined with the colors which are also absorbed by and dry into the fabric. In either case, however, there is intended to be and in fact is no change of consequence in the colors which arises from the use of the filler.

By following out carefully the process thus described I have found it possible to reproduce mechanically upon tapestry pictures which have all the characteristics of hand-painted tapestry.

While the lithographic stone is preferable in carrying out the process, it is possible to use metallic plates when the surfaces are treated in a manner known in the art, so as to have affinity for the colors employed.

Having thus described my invention, I claim—

1. The process of producing artistic effects on tapestry which consists in treating the tapestry fabric to a filler having physical but with little or no chemical affinity for the colors to be employed and applying said colors to said fabric while wet by impressions from planographic surfaces, substantially as and for the purpose specified.

2. The process of producing artistic effects on ribbed fabrics or tapestries which consists in treating said fabric to an application of a filler having a physical but with little or no chemical affinity for the colors and applying said colors to said fabric by impressions from plates having an affinity for the colors, substantially as specified.

3. The process of producing artistic effects on ribbed fabric or tapestry, which consists in treating such fabric by a filler of paraffin-oil and kerosene, of employing colors having a physical but with little or no chemical affinity for the filler, applying said colors to planographic surfaces having an affinity for the colors and making impressions between the flat surfaces and the fabric while the same is wet with the filler, substantially as specified.

In testimony whereof I have hereunto set my hand this 3d day of September, A. D. 1897.

ROBERT P. WINTERS.

Witnesses:

CHAS. I. WELCH,
JNO. T. GREEN.