## United States Patent Office.

ELLA M. FREELEY, OF NEW YORK, N. Y.

## ARTIFICIAL RUSSIAN LEATHER.

SPECIFICATION forming part of Letters Patent No. 285,475, dated September 25, 1883.

Application filed July 11, 1883. (Specimens.)

To all whom it may concern:

Be it known that I, ELLA MARY FREELEY, a citizen of the United States, residing at the city of New York, in the county of New York, and State of New York, have invented certain new and useful Improvements in Artificial Leather; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Heretofore, as is well-known, artificial leather has been usually made of textile fabric coated with vulcanized rubber, and has been known in the trade as "rubber cloth." Sometimes it is made of textile fabric coated with varnish, and bears the name of "enamel cloth." It has also been made of paper-pulp coated with varnish, and is then known as "leatherette." The appearance of leather in all these cases is imparted to the artificial compound by giving it the grain of real leather. The article, however, when partly composed of vulcanized rubber, has an unpleasant odor when subjected to a high temperature. When made of paper-pulp and varnish, it does not long retain the color given to it by dyeing. In all these artificial leathers the coating cracks and peels off during wear, and none of them are pliable like real leather. If a cut is made in the material, it is liable to split its entire length. The appearance or odor of Russian leather, moreover, has never been given to artificial leather.

The object of my invention is to obviate these defects in ordinary artificial leather by producing an improved article which will have the appearance and peculiar odor of Russian leather, which will be sufficiently pliable for all purposes, which will retain the

outside coating and dye in ordinary wear, and which will not be liable to tear unless much strength be exerted in the effort. To accomplish this purpose I take the ordinary imitation leathers, which are well-known articles 45 of commerce, and easily obtained, and steep the same in a solution made of fifty pounds of bark of oak, fifty pounds of bark of hemlock, fifty pounds of bark of sumac, one pound of bark of willow, and nine hundred 50 gallons of water. While the material is yet damp I smear it on the outer or leather side with a solution made of a large table-spoonful of Russian jachten extract dissolved in a pint of alcohol and half a pint of ether. This 55 renders it pliable and gives it the odor of Russian leather. It is then rolled up into bundles with the outer or leather side in and laid away to dry. When it has thoroughly dried, it is ready for use.

What I claim as new, and desire to secure

by Letters Patent, is—

As an improved article of manufacture, artificial Russian leather made of the ordinary artificial leather or rubber cloth, of enamel 65 cloth, or of leatherette steeped in a solution of bark of oak, bark of hemlock, bark of sumac, bark of willow, and water in the proportions and in the manner specified, and smeared with a solution of Russian jachten extract, 70 alcohol, and ether in the proportions and in the manner specified, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal in the presence of two subscrib- 75

ing witnesses.

ELLA MARY FREELEY. [L. s.] Witnesses:

D. R. GARNISS.

E. Louis Akin.