

# UNITED STATES PATENT OFFICE.

VICTOR VON ALPENBURG AND LOUISE VON ALPENBURG, OF WEST HOBOKEN,  
NEW JERSEY.

PROCESS OF MAKING PREPARED SHEETS FROM CORES OF PALM-TREES.

No. 917,516.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed August 27, 1908. Serial No. 450,551. (Specimens.)

*To all whom it may concern:*

Be it known that we, VICTOR VON ALPENBURG and LOUISE VON ALPENBURG, citizens of the United States of America, residing at West Hoboken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Processes of Making Prepared Sheets from the Cores of Palm-Trees, of which the following is a specification.

This invention relates to an improved process of making prepared sheets from the cores of palm trees and more especially from the cores of the Chinese palm tree known by the botanical name of *Aralia papyrifera*, which sheets are to be used for medical and surgical purposes in the treatment of wounds, and other applications, the sheets forming a membrane of soft and velvety texture which exerts a cooling and refreshing action on the wounds. They are also to be used in the form of face-masks or bandages for the treatment of the skin of the face, hands, neck and other exposed parts for removing wrinkles and restoring the skin to a healthy condition and also for other uses in the arts; and the invention consists of a process of making prepared sheets from the cores of palm-trees, which consists of the following steps: subjecting the thin layers or shavings obtained from the core of the palm trees to the action of a preserving and softening solution then expressing the surplus solution, then treating the sheets with a suitable size, and finally drying the same.

In carrying out our improved process of making prepared sheets from the cores of the palm trees, the thin layers or shavings which are obtained from the core of the same are first subjected to the action of a tanning and softening solution which is prepared as follows: 24 gallons of soft distilled water are boiled and one quart of olive oil added to it. The mixture is then permitted to cool, after which it is screened. To the solution are then added: 3 lbs. of potassium carbonate, 2 lbs. of powdered white alum, 1 lb. of ordinary salt,  $\frac{1}{2}$  lb. of potassium nitrate,  $\frac{1}{2}$  lb. of tannic acid dissolved in hot water, and boiled for three hours. The solution is then permitted to cool, after which it is screened through a clean cloth. Twenty pounds of pure glycerin and three gallons of methyl alcohol are then added to this solution. The

layers are immersed in the solution for about twenty-four hours, until they are thoroughly saturated. The sheets are then squeezed for removing the surplus solution.

In place of combining the tanning solution with the glycerin and methyl alcohol into one solution, the sheets may first be subjected to the action of the tannic acid solution for about twenty-four hours, then subjected to pressure so as to squeeze out the surplus solution, and then subjected to the softening solution composed of glycerin and methyl alcohol. A preservative effect is obtained by the action of the tannic acid and the salts referred to, while at the same time a softening is obtained by the oil and glycerin. The layers or sheets are then removed from the solution and subjected to a size composed of a thin solution of glue or gelatin, or glycerin and some tannic acid. The sheets are again subjected to pressure so as to squeeze out the superfluous solution, and then dried. The thus treated sheets give a velvety, cooling and refreshing feeling to the skin and can be used in one or more layers as non-irritating sheets for the treatment of wounds, etc. The sheets may be prepared with antiseptic and remedial substances, by which an effective healing and preserving influence is exerted on the skin and parts of the body to be treated.

The prepared sheets can be used directly, without medicating them, as a covering for open wounds, as they exert by their soft and velvety surface a cooling and soothing action on the wounds. When medicated and applied to the skin for removing wrinkles, the sheets open the pores of the skin and facilitate thereby the entering of the absorbed medicaments in a slow and non-irritating manner. The cellular structure of the sheets enables them to absorb antiseptic and healing substances up to complete saturation.

The prepared sheets obtained by the process described can also be used for making artificial flowers, imparting a very natural and permanently pleasing effect by the close imitation of nature due to the velvety character of the sheets and by the facility with which they can be dyed with suitable colors. The prepared sheets can also be used for other applications in the arts such as for instance: for photographic purposes, printed articles, water color-pictures, and other uses.



Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. The process herein described of making  
5 prepared sheets from the core of palm-trees, which consists of the following steps, subjecting the sheets obtained from the core of the palm-trees first to the action of a preservative solution containing tannic acid, then to  
10 a softening solution containing glycerin, then applying a size to the sheets, and lastly drying the same.
2. The process herein described of treating sheets made from the core of palm-trees,  
15 which consists in subjecting the sheets first to the action of a preservative solution containing tannic acid, then to the action of a softening solution containing glycerin, next removing the surplus solution from the sheets  
20 by pressure, then treating the sheets with a size, and lastly drying the same.
3. The process herein described of making prepared sheets from the cores of palm-trees, which consists in subjecting the sheets first  
25 to the action of a preservative solution containing tannic acid, pressing the sheets for removing the surplus solution, then subjecting them to the softening action of a solution

containing glycerin, then pressing them for removing the surplus solution, next sizing 30 the sheets, and finally drying the same.

4. The process herein described of making prepared sheets from the cores of palm-trees, which consists in saturating the same with a preservative solution containing tannic acid 35 and preserving salts, then subjecting the sheets to the action of a softening solution containing glycerin and methyl alcohol, then removing the surplus solution by pressure, next sizing the sheets, and lastly drying the 40 same.

5. As a new article of manufacture, sheets prepared from the core of the palm-tree known as *Aralia papyrifera*, prepared with a preservative solution containing tannic acid 45 and preserving salts, and a softening solution containing glycerin, and a size.

In testimony, that we claim the foregoing as our invention, we have signed our names in presence of two subscribing witnesses.

VICTOR VON ALPENBURG.  
LOUISE VON ALPENBURG.

Witnesses:

PAUL GOEPEL,  
HENRY J. SUHRBIER.