Anited States Patent Pffice.

LOUIS MONTIER, OF NEW YORK, N. Y.

Letters Patent No. 73,991, dated February 4, 1868.

IMPROVED ARTIFICIAL LEATHER.

The Schedule referred to in these Petters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Louis Montier, of the city, county, and State of New York, have invented a new and improved Water-Proof Artificial Leather; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

This invention relates to a new imitation-leather, which is as strong and durable and as clastic as the best natural leather. It can be coated with a certain composition, and treated so as to be completely water-proof.

The shavings of the skins, which are a refuse of the ordinary tanning-process, are steeped in a mixture of two parts of rye flour with one part of rice flour and one-twentieth part of glue. After having been immersed in this mixture for about one-half hour, the shavings are successively taken out, and are placed into a flat form, so as to form a layer therein of about three-eighths of an inch. Before inserting the scraps of leather into the aforesaid form, the bottom of the latter should be covered with a piece of flannel or felt, upon which the largest pieces of the latter are first placed; the others are then placed in as they come, and are then again covered by larger pieces, the whole being again covered with flannel, felt, or other suitable material. The frame or form is then removed, and the contents tightly pressed, to discharge the superfluous glue. The material is then gradually pressed by a weight, which may be as heavy as two million pounds; then it is dried in a room, which is warmed to about 60° Fahrenheit, and, when dry, it is passed between cylinders, to make it of equal thickness throughout.

The leather thus produced is very strong, and similar in appearance to the natural leather. The flannel is removed before the material is exposed to drying.

To make the leather water-proof, it is steeped for half an hour in a bath, which is heated to about 65° Fahrenheit, and which is composed of the following ingredients: Tar and essence of turpentine, or other hydrocarbon liquid, in equal parts. Five per cent. of caoutchouc, cut into small pieces, is then added to the mixture, and the whole is placed into a suitable vessel and boiled over a fire until the caoutchouc is completely dissolved. After the leather has been steeped for one-half hour in this mixture, the leather is taken out and dried. When completely dried, a coat of copal-varnish is applied to both sides of the leather, and finally a coat of powdered plumbago is sieved over the varnish. When the powder has been absorbed by the varnish, the leather is once more passed through the rollers, when it is ready for use. It can be bent and cut into any suitable shape.

I claim as new, and desire to secure by Letters Patent-

- 1. The process, herein shown and described, of combining the refuse shavings of leather to make artificial leather.
- 2. Water-proof artificial leather, when made and coated, substantially in the manner and with the ingredients herein described and set forth.

L. MONTIER.

Witnesses:

WM. F. McNamara, A. V. Briesen.