

United States Patent Office.

ALFRED PARAF, OF NEW YORK, N. Y.

Letters Patent No. 81,815, dated September 1, 1868.

IMPROVED WATER-PROOF CLOTH.

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

Improvements in the Manufacture of Water-Proof Textile Fabrics, by ALFRED PARAF, now residing in the city, county, and State of New York.

My invention consists in the production of any kind of water-proof textile fabrics, by applying on it a combination of gluten, (vegetable albumen,) and a mineral resin, (Grahamite, for instance,) dissolved in a neutral solvent.

I will now describe the proportions and ingredients I use, as well as the manner by which I prepare the water-proof compound, which I intend to form the first part of this patent.

I introduce one hundred pounds of English true benzole in an open steam-jacket pan, then add to it fifteen pounds Grahamite, ground in fine powder, then three pounds wheat flour, and two pounds Para India rubber, previously cut in small pieces.

I put the steam on for about a quarter of an hour, then cover the vessel up, and allow the mixture to remain in contact from six to eight days, but every now and then I stir the mixture up.

After six or eight days the mixture is ready for use, but before using it I add to the before-named quantity two pounds of well-boiled linseed-oil. This mixture, applied on every kind of textile fabrics, will make it entirely water-proof. It is necessary to keep the mixture in well-closed vessels.

I am going to describe now the exact manner by which I apply the above mixture on every kind of textile fabric, which will form the second part of the present patent.

If I want to have the coating water-proof on both sides of the cloth, I use the common padding-machine used everywhere for starching bleached or printed cloth. If I want the water-proof coating only on one side of the cloth, I use a common printing-machine as used in calico-print works, but substitute, to the copper roller used usually, a circular brush, which is immersed half way in the color-box containing the water-proof mixture. In both cases, after sufficient mixture has been put on the cloth to fill up all the holes of the cloth, I dry the goods over regular drying-cans, (as used in the finishing of bleached or printed cloth,) then calender through a common calender, heated to about 120° Fahrenheit. After passing the water-proof cloth two or three times through the calender, the operation is at an end.

The proportions and materials of the mixture or compound which I have described above are those which have been used by me with success, but I do not limit my invention either to the precise materials or proportions thereof which I have described, as these may be varied as circumstances render expedient.

I claim—

1. As a new article of manufacture, the water-proof mixture, compounded and prepared substantially as before set forth.

2. The manufacture of water-proof fabrics, by applying the water-proof mixture before described upon textile fabrics, substantially in the manner before set forth.

ALFRED PARAF.

Witnesses:

N. B. GRAHAM,
THO. G. WEST.