

UNITED STATES PATENT OFFICE.

ALFRED MORRIS POSENER, OF LONDON, AND FREDERICK WILLIAM CLERKE,
OF TOTTENHAM, ENGLAND, ASSIGNORS TO THE "N. L." SYNDICATE,
LIMITED, OF COUNTY OF MIDDLESEX, ENGLAND.

PROCESS OF MAKING WATERPROOF FABRIC AND PRODUCT THEREOF.

SPECIFICATION forming part of Letters Patent No. 680,733, dated August 20, 1901.

Application filed September 13, 1900. Serial No. 29,959. (No specimens.)

To all whom it may concern:

Be it known that we, ALFRED MORRIS POSENER, merchant, residing at Finsbury House, Blomfield street, London, and FREDERICK WILLIAM CLERKE, residing at 21 Willoughby Lane, Park, Tottenham, in the county of Middlesex, England, subjects of the Queen of Great Britain, have invented a new and useful Process of Making Waterproof Fabric and the Product Thereof, of which the following is a specification.

We start with a fabric or base, preferably of canvas woven from jute fiber. This fabric we treat with the following compositions:

(A) Three pounds of coloring material and one-fourth pound of Irish moss. The coloring material which we prefer consists of one and one-half pounds of whiting, one pound of ocher, and one-half pound of Venetian red. The Irish moss is dissolved by boiling in five quarts of water, the solution being then strained and the coloring material added thereto and thoroughly incorporated therewith.

(B) One and three-quarters pounds of boiled oil, (or equivalent oil or substance,) one-quarter pound of resin, and two and one-quarter pounds of coloring material, consisting of the same ingredients mixed in the same proportions as in mixture A, driers of the usual kind, such as turpentine, and usual proportions being added.

The weights above given are sufficient for treating two pounds of the canvas fabric or base. This base is then dipped in or brushed with the mixture A at a temperature of about 90° Fahrenheit. It is then thoroughly dried, which would take from one to two days with the aid of artificial heat or about four days if left to dry naturally. It is then passed between rollers or through a press to solidify it and make the surface thereof uniform. One of the sides of the base is then brushed with the mixture B, not heated, and it is again dried. This will take about one day with the aid of artificial heat or about four days if left to dry naturally. The other side is then treated with the mixture B in the same way and is dried. Both surfaces are then moistened with water and smoothed

down while wet by means of pumice-stone. The upper side is then again brushed with the mixture B and allowed to dry, which will take one or two days with the aid of artificial heat or nine or ten days if left to dry naturally. The other side is then similarly treated. Both sides are again moistened and rubbed down with pumice-stone while wet. It is then dried and treated with a third composition, which is as follows:

(C) Two pounds of boiled oil and two and one-quarter pounds of coloring material consisting of the same ingredients mixed in the same proportions as in mixture A, driers of the usual kind, such as turpentine, and the usual proportions being added. Both sides are then brushed with a very thin film of the mixture C without any final polishing. The finished material is then allowed to remain until thoroughly dried and seasoned, which will take from one to four days with the aid of artificial heat or nine to ten days if left to dry naturally.

The surface may be printed with any desired design in the usual way. The aqueous mixture A forms a flexible covering upon the canvas base, while part of the oil in the mixture B, which is applied thereto after the mixture A has dried upon the canvas base, becomes absorbed by the flexible covering formed by the drying of the mixture A, so that the outer layers become firmly adherent to and part of the inner layer, which in turn is firmly adherent to the canvas base.

It is obvious that other coloring-matters may be used instead of ocher and Venetian red.

By the above-mentioned process a material is produced which is an excellent substitute for linoleum as a floor-covering and which may also be used for the inner soles of boots and shoes and for many other purposes to which leather is commonly applied.

Having thus described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

1. The process of making waterproof fabric, which consists in subjecting a suitable base to the action of an aqueous mixture, drying the same, subjecting said dried base to

the action of an oily mixture, drying the same and finally polishing the product, substantially as described.

5 2. The process of making waterproof fabric, which consists in subjecting a canvas base to the action of an aqueous mixture containing coloring materials and Irish moss, drying said base, subjecting it to the action of a mixture containing oil, resin, coloring-matter
10 and a drier, drying said material, and finally polishing said material, substantially as described.

15 3. The process of making waterproof fabric, which consists in subjecting a suitable base to the action of an aqueous mixture containing coloring-matter and Irish moss in the proportions specified, drying the same, repeatedly subjecting the dried base to the action of a composition containing boiled oil,
20 resin, coloring-matter and a drier combined in the proportions specified, drying said base

after each application of said second mixture, moistening and polishing said base, treating said base with the thin mixture containing oil, coloring-matter and a drier mixed in the proportions specified, and finally drying said base, substantially as described. 25

4. As a new article of manufacture, a waterproof fabric obtained by subjecting a suitable canvas base to the action of an aqueous mixture containing coloring-matter and Irish moss, and afterward to the action of a mixture containing boiled oil, resin, coloring-matter and a drier, substantially as described. 30

In testimony whereof we have affixed our signatures in the presence of two witnesses. 35

ALFRED MORRIS POSENER.

FREDERICK WILLIAM CLERKE.

Witnesses:

EDMUND EDWARDS,

ARTHUR E. EDWARDS.