

UNITED STATES PATENT OFFICE.

CARL AUGUST SITZLER, OF KITZINGEN, BAVARIA, ASSIGNOR OF ONE-HALF
HIS RIGHT TO CHARLES THEODORE MEYER, OF JERSEY CITY, N. J.

IMPROVEMENT IN FELTED OIL-CLOTHS.

Specification forming part of Letters Patent No. **172,348**, dated January 18, 1876; application filed
October 21, 1875.

To all whom it may concern:

Be it known that I, CARL AUGUST SITZLER, of Kitzingen, Bavaria, but at present residing at Elizabethport, in the county of Union and State of New Jersey, have invented a new and Improved Felted Oil-Cloth, of which the following is a specification:

This invention relates to a new manner of treating felted fabrics to render them useful as floor-cloths.

The invention consists in treating felted fabric with gum-catechu and bichromate of potassa, and with oil-paint in the manner herein-after specified, to produce a durable and water-proof oil-cloth.

To produce the felted fabric, I use, by preference, forty parts of bamboo fiber, twenty parts of cotton fiber, and forty parts of calf's hair, or the same ingredients in nearly the proportions named. In place of the cotton-fiber wool can be used, when a softer fabric is desired; or wool and cotton may be used together, in place of cotton or wool alone. The calf's hair is added to bind and hold the fibrous matter together, and to produce, therefore, a very strong fabric. After the substances above enumerated have been selected and mixed in about the proportions specified, they are felted together by any of the known means or processes of felting, or treated like paper-pulp when a more compact fabric is required.

The above-described or any other felted fab-

ric is thereupon treated as follows, to render it water-proof, and adapt it for use as a floor-cloth. It is first steeped in a solution of gum-catechu in water, said solution containing also a small proportion of bichromate of potassa, in the proportion of about two ounces of the latter ingredient to ten pounds of the gum. Dissolved glue may or may not be added to the solution, to serve as a sizing. After steeping, the felted fabric is dried, and thereupon covered on both sides with oil-color of suitable kind. It may then be printed on one side in the same manner in which oil-cloths are usually printed.

Felted fabric thus treated will be water-proof, invariably flexible, and very durable. It will better retain the color than the brittle oil-cloths now in use, and will not be injured by water.

I claim as my invention—

The within-described process of manufacturing felted oil-cloths by forming a felted fabric, and waterproofing the same by a treatment with a solution of gum-catechu and bichromate of potassa, and drying and finally painting it on both sides, substantially as described.

CARL AUGUST SITZLER.

Witnesses:

ERNEST C. WEBB,
A. WEEDNER.