UNITED STATES PATENT OFFICE.

AMOS WILDER, OF AUGUSTA, MAINE.

IMPROVEMENT IN THE MANUFACTURE OF OIL-CLOTH.

Specification forming part of Letters Patent No. 153,648, dated July 28, 1874; application filed July 23, 1874.

CASE A.

To all whom it may concern:

Be it known that I, Amos Wilder, of Augusta, in the county of Kennebec and State of Maine, have invented certain new and useful Improvements in Oil-Cloth, of which the

following is a specification:

My invention relates to a new and improved oil-cloth for covering floors and for other similar purposes; and it consists in breaking up, clouding, or otherwise marking the surface of the "brush-coat" with fine lines, which may be regular or irregular, as may be desired, or parallel, or at right angles, or otherwise crossed or arranged, after said brush-coat has been applied to the cloth, and before the figures or designs are printed upon the same, for the purpose of giving to said brush-coat an ornamental and finished appearance, so that portions of it may be left exposed after the designs are printed upon the cloth, which will harmonize with and equal the said designs in appearance, and form a portion of the whole design of the finished article, and thus save the time and expense of covering the whole face of the cloth with printed designs.

It has heretofore been customary, in the manufacture of oil-cloth, to cover the brushcoat entirely with printed designs, or to leave but very limited portions of the brush-coat exposed. As previously prepared, the brushcoat has presented an unbroken and unfinished appearance, which rendered it unfit to be exposed to any great extent through the printed designs. In preparing the cloth, as heretofore practiced, the fabric (which usually consists of "burlaps" or "Hessians" imported for the purpose) is first thoroughly sized with a sizing of glue, or glue and flour, or its equivalent, and then coated with paint, either by machinery or by hand. The first coat of paint is sometimes composed of "water-paints"—that is, glue dissolved in water and mixed with whiting, clay, ocher, &c.—in order to give the cloth greater stiffness, and this paint may be applied to both sides of the cloth, if desired. After this a coating of oilpaint is applied to each side of the cloth. This paint usually consists of linseed - oil,

naphtha or turpentine, and ground slate, whiting, ocher, or other cheap coloring material. The cloth thus coated forms the cloth known in the market as "four-coat goods." This last coating upon the side of which the designs are to be printed is called the brushcoat, and has heretofore been entirely covered with the printed designs, or nearly so. The opposite side or back of the cloth is generally painted of a darker color than the brush-coat. In higher grades of cloth an additional coating of paint is applied to each side of the cloth before the brush-coat and backing are applied, forming what is known as "six-coat" cloth. After the brush-coat and backing have been properly applied the figures or designs are printed in proper colors upon the face of the brush-coat by means of blocks or otherwise, so as to cover, or nearly cover, its entire surface. The cloth is then submitted to a high temperature in a bake-house, or any other suitable drying-apartment, for one or two weeks, so as to harden the paint, after which the cloth is ready for the market.

In carrying out my invention, I prepare the cloth in the same manner as above stated, forming the brush-coat and backing in the usual way. I then break up, cloud, or mark the surface of the brush-coat with fine lines, which may be regular or irregular, as may be desired, or parallel, or otherwise crossed or arranged. This I do by means of a knife with a serrated edge, or other suitable instrument, while the cloth is passing through the machine, which marks or raises the soft paint into lines or ridges. This gives a highly ornamental or finished appearance to the brushcoat, and renders it fit to be exposed to any desired extent through the printed designs which are afterward applied to it.

In order to render the brush-coat still more ornamental in appearance, I sometimes form said brush-coat of a different color from the body-coat below it, and when marked as above the body paint will show through the same, giving it a beautiful and pleasing effect. The

figures or designs are applied or printed on the brush-coat by means of blocks or otherwise, leaving any desired extent of said brushcoat exposed, and the cloth is finished by bak-

ing in the ordinary manner.

By thus ornamenting the brush-coat so as to render it fit to form a large portion of the finished design, it will be evident that a great portion of the expense of printing, both in labor and material, will be saved.

What I claim as new, and desire to secure

by Letters Patent, is—

1. As a new article of manufacture, an oilcloth have an exposed ornamental brush-coat forming a large portion of the design of the

finished article, substantially as and for the purposes herein described.

2. Oil-cloth having the brush-coat broken, clouded, or marked by lines, and printed with designs in various colors, leaving a portion of the brush-coat exposed, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I

have hereunto set my hand.

AMOS WILDER.

Witnesses:

JAMES L. NORRIS, GEO. W. CUSHING, Jr.