

(Specimens.)

D. N. MELVIN.

MANUFACTURE OF FLOOR OIL CLOTHS.

No. 330,254.

Patented Nov. 10, 1885.

FIG. 1

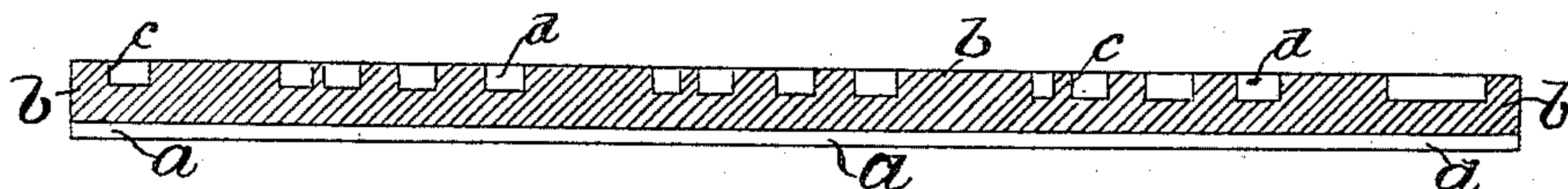
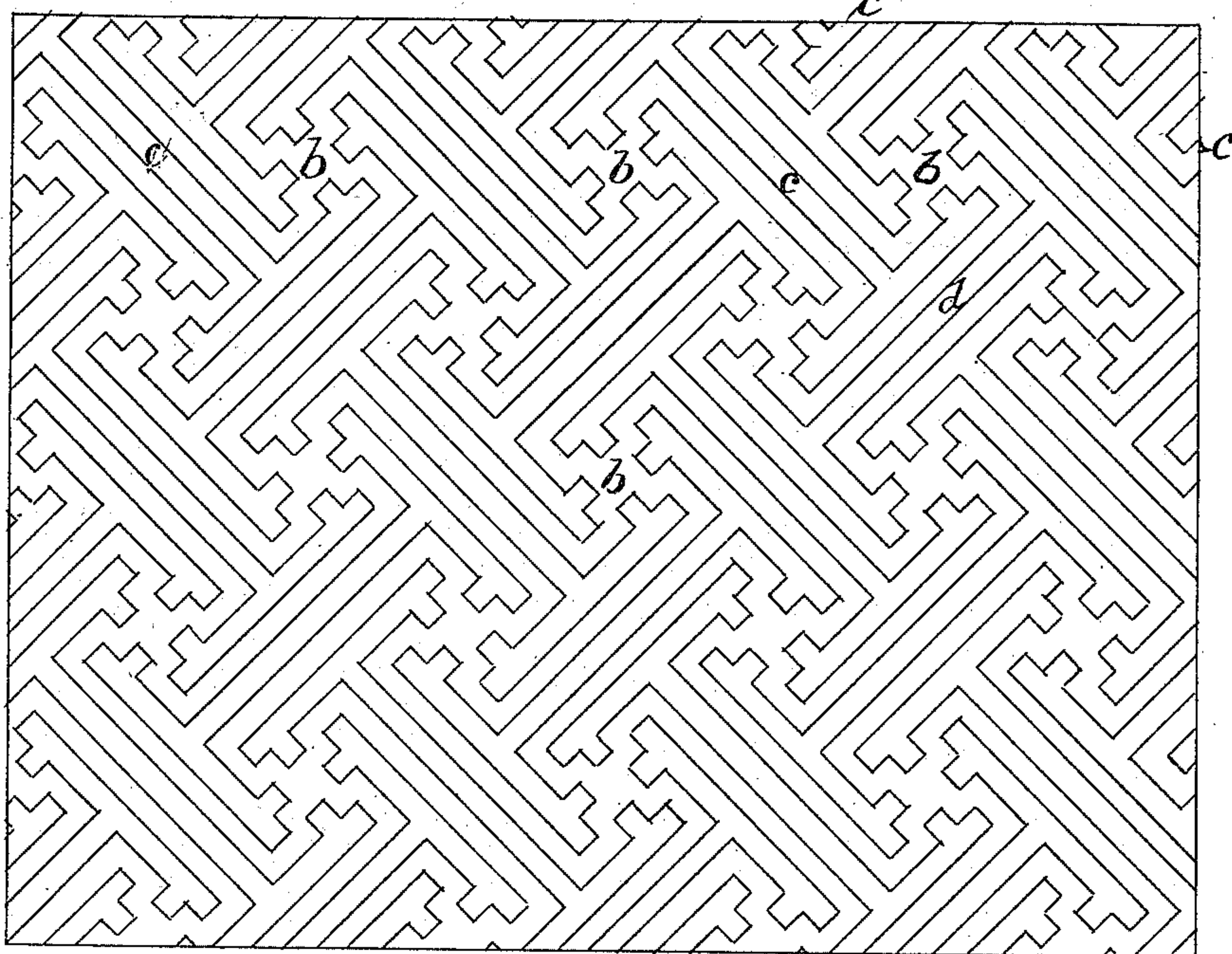


FIG. 2



Witnesses.

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# UNITED STATES PATENT OFFICE.

DAVID NEILSON MELVIN, OF LINOLEUMVILLE, NEW YORK.

## MANUFACTURE OF FLOOR OIL-CLOTHS.

SPECIFICATION forming part of Letters Patent No. 330,254, dated November 10, 1885.

Application filed April 6, 1885. Serial No. 161,341. (Specimens.)

*To all whom it may concern:*

Be it known that I, DAVID NEILSON MELVIN, a subject of the Queen of Great Britain, residing at Linoleumville, in the county of Richmond and State of New York, have invented a new and useful Improvement in the Manufacture of Floor Oil-Cloths, more particularly applicable to those oil-cloths known as "Kampulicon," "Linoleum," "Corticine," "Lignum," and those included in Letters Patent granted to me January 31, 1882, No. 252,891, and which are generally formed of a semi-plastic material composed of pulverized cork or other similar elastic substance cemented together and spread into a sheet; and I do declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same.

Heretofore the pattern or design has been printed on the surface of floor oil-cloths with blocks or rollers having the desired pattern raised upon them in relief, the paints used being stiff, and of sufficient hardness, when dry, to resist the action of the feet in walking upon them; but being above the general level of the body or ground of the cloth, the paints are first exposed to abrasion, and shortly they become blurred and unsightly, long before the body of the cloth is materially affected by use.

The object of this invention is to insure protection to the pattern or design impressed upon floor oil-cloths from the wear and disfigurement incident to their use as floor-coverings. I accomplish this by impressing upon the face of the cloth indentations corresponding with the design to be shown on the face of the cloth, and into these said indentations paint is printed with blocks in the usual way, and when dried and finished the face of the cloth presents a uniformly flat surface for wear. The body of the cloth, being raised level with or very slightly above the painted portions, sustains the pressure of the foot, and both the body of the cloth and the painted portions wear equally, preserving the design intact until the cloth becomes worn out.

To carry my invention into effect I use a block or die made of metal, on which the whole of the design, including all the colors, is raised in relief to a height sufficient for my purpose. This in most cases is not more than

one-sixteenth of an inch. This block or die is made hollow, and supplied with steam by a flexible hose or other well-known means; or it may be heated in any other way, so as to keep it at a temperature of about 212° Fahrenheit. I then impress this die, when hot, upon the face of the floor-cloth by a press, and so indent the required design into the surface for a depth equal to the height of the relief on the die. The usual printing-blocks are then used to fill up these indentations with paint of the required colors to complete the pattern. The cloth is then dried in the usual way, and any desired finish may be given to the face. I do not specify any special machinery, and it is obvious that rollers may be used to indent and print in place of blocks; but I prefer to use the latter, as they can be constructed more conveniently.

In the accompanying drawings, Figure 1 is a section considerably enlarged of a piece of linoleum. Fig. 2 is a plan of the surface, showing the design or pattern.

The same letters refer to the same parts in both figures.

*a a* represent the canvas back on which the body *b b b* is spread. *c c c* are the indentations, and *d d d* the color or paint filling the indentations.

Having fully described my invention, what I consider as new, and desire to claim and secure by Letters Patent, is—

1. A floor oil-cloth in which the body substance of the cloth is level with or slightly raised above the surface of the printed design, substantially as described.

2. A floor oil-cloth with indentations on the surface filled with paint and constituting the pattern or design, as described.

3. A linoleum or other floor-covering of the same class having the colors of the pattern or design inlaid in an indented surface, substantially as and for the purpose described.

4. The process of indenting the pattern or design into floor oil-cloths before printing, and then filling the indentations with paint, as described.

DAVID NEILSON MELVIN.

Witnesses:

ALFRED Z. ROSS,  
JAMES H. WADE.