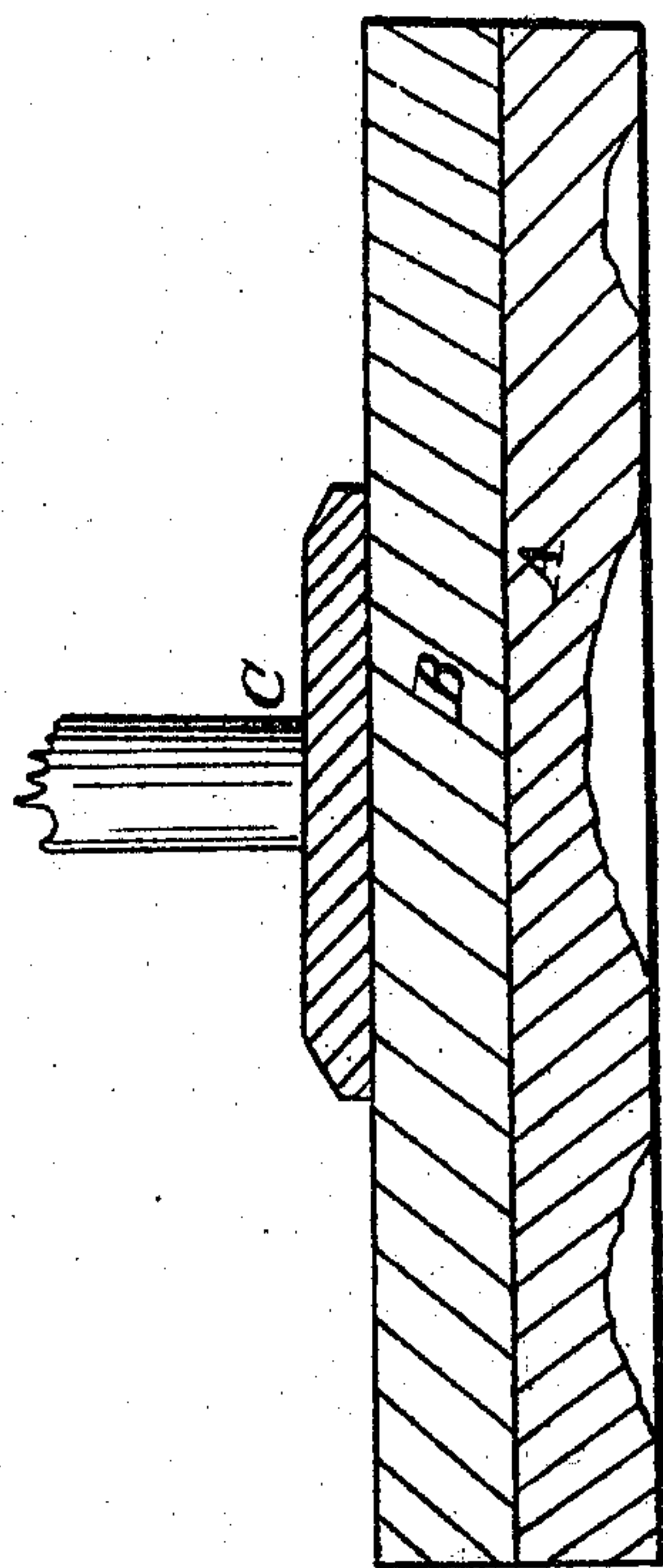


Lewis Murr,
Printing and Embossing Cloth,
Nº 75.957. *Patented Mar. 24. 1868.*



Witnesses:

Jacob Henry
Louis Bivona

Inventor:

Lewis Murr
By Niedersheim & Co.
Attys.

United States Patent Office.

LEWIS MURR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO JOSEPH METZ AND BERNARD METZ, OF SAME PLACE.

Letters Patent No. 75,957, dated March 24, 1868.

MODE OF PRINTING AND EMBOSSING CLOTH.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, LEWIS MURR, of city and county of Philadelphia, and State of Pennsylvania, have invented a new useful Mode of Printing and Embossing Cloth and other fabrics; and I do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable others skilled in the art to which the invention appertains to fully understand and use the same, reference being had to the accompanying drawings.

My invention consists in a novel mode of printing and embossing ornamentalions on fabrics by the use of an engraved plate applied directly to the cloth, and a heated metallic plate interposed between the engraved plate and the press, as hereinafter described.

Hitherto the art of printing and embossing figures and designs on fabrics has demanded consecutive or separate operations. The ordinary stencil is often employed, and the figures or patterns filled in afterwards. The colors have been piled up or laid on thickly, so as to project the figures, and present the appearance of raised work. This mode is defective, since the colors are brittle, and liable to crack, and, every time the figure comes in contact with any object, a portion thereof is broken off, and soon the ornamentation is destroyed, and the fabric laid bare again.

In carrying out my invention, I first engrave an ordinary brass plate, A, with sunk or depressed figures, such as flowers, fruit, animals, or whatever designs or representations I desire, and charge or feed them through-out with various colors, according to taste. This plate is applied directly to the top of the cloth or fabric, the colors being in a wet state. An iron plate, B, is then heated to a certain degree, and laid on the top or back of the engraved plate, and the whole is placed under a press, C, of certain power. This iron plate is extremely necessary in my process.

If the engraved plates were heated, they would not only burn or scorch the fabric, but the fine lines become rough, as well as the whole surface of the engravings. The color will immediately dry, and be useless for the purpose intended. Therefore it is extremely necessary to apply first a cold plate with wet colors to the cloth. The hot iron plate being applied to the engraved plate, the heat will slowly be diffused through the latter plate while the cloth and the two plates are under pressure.

The color is gradually absorbed by the fabric as it enters or is forced into the depressions or engraved portions of the plate, and then it dries with a uniform and elastic finish; and so perfect is the drying that each ornamentation appears to be homogeneous from the surface to the back of the fabric, and, therefore, the parts thus ornamented present the appearance of fine velvet, or ordinary worsted, embroidered, or raised work.

The engravings for each pattern or design are made on one plate, but the various colors are applied thereto, respectively, on the same plate.

I am aware that fabric has been ornamented in colors, but not simultaneously printed and embossed at one operation by the process herein specified.

My invention can be applied to any fabric, and in the ornamentation of table-covers, piano-covers, skirts, slippers, ladies' cloaks, and the like.

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

The printing and embossing of cloth or other fabric at one operation, by the employment of an engraved plate, applied directly to such fabric, and a heated plate, applied to the engraved plate, substantially as and for the purpose set forth.

To the above I have signed my name, this fourteenth day of February, 1868.

LEWIS MURR.

Witnesses:

WM. A. WIEDERSHEIM,

B. METZ.