

## JOSEPH B. BATCHELDER, OF BOSTON, MASSACHUSETTS.#

Letters Patent No. 89,274, dated April 27, 1869.

## IMPROVEMENT IN SURFACING FABRICS WITH BRONZE OR METALLIC POWDERS.

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, Joseph B. Batchelder, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improvement in Surfacing with Bronze or Metal Powders; and I do hereby declare that the following is a description of my invention, sufficient to enable those skilled in the art to practise it.

My invention relates to surfacing semi-flexible material, like enamelled card-board, paper, &c., with gold or with bronze or metallic powders, with reference to the production of smooth, glistening surfaces, in contradistinction to the powdery or dull surfaces now made by application of such bronze or metallic powders.

In practising my improvement, I first cover the surface, or portions of surface to be metallized, with size, then rub, over the sized surface, the bronze or metallic powder, which adheres to the size, and, finally, calender the metallized surface between calender-rolls, and it is in this last step in the process that my invention consists.

Heretofore, in gilding or imparting a metallic lustre to card-board, &c., by application of bronze or metallic powders, it has been customary to simply apply the powder to the sized surfaces with a cloth, and then dry the surface, without further manipulation, and the metallized surface has an unburnished appearance, or a surface in which the metal appears as if powdered upon it, and not as if it were laid on in leaf-form, smoothed out. But, by my improvement, the powdery particles are flattened and merged by the pressure of the calender or burnishing-roll, so that a surface is imparted that resembles highly-burnished or polished metal, and the surface so produced is more enduring, by reason of the condensation and union of the particles.

I claim the improvement in surfacing with metal or bronze powders substantially as described.

J. B. BATCHELDER.

Witnesses:

J. B. CROSBY, FRANCIS GOULD.

"Assor to himself & S. C. Fratt of the same place.