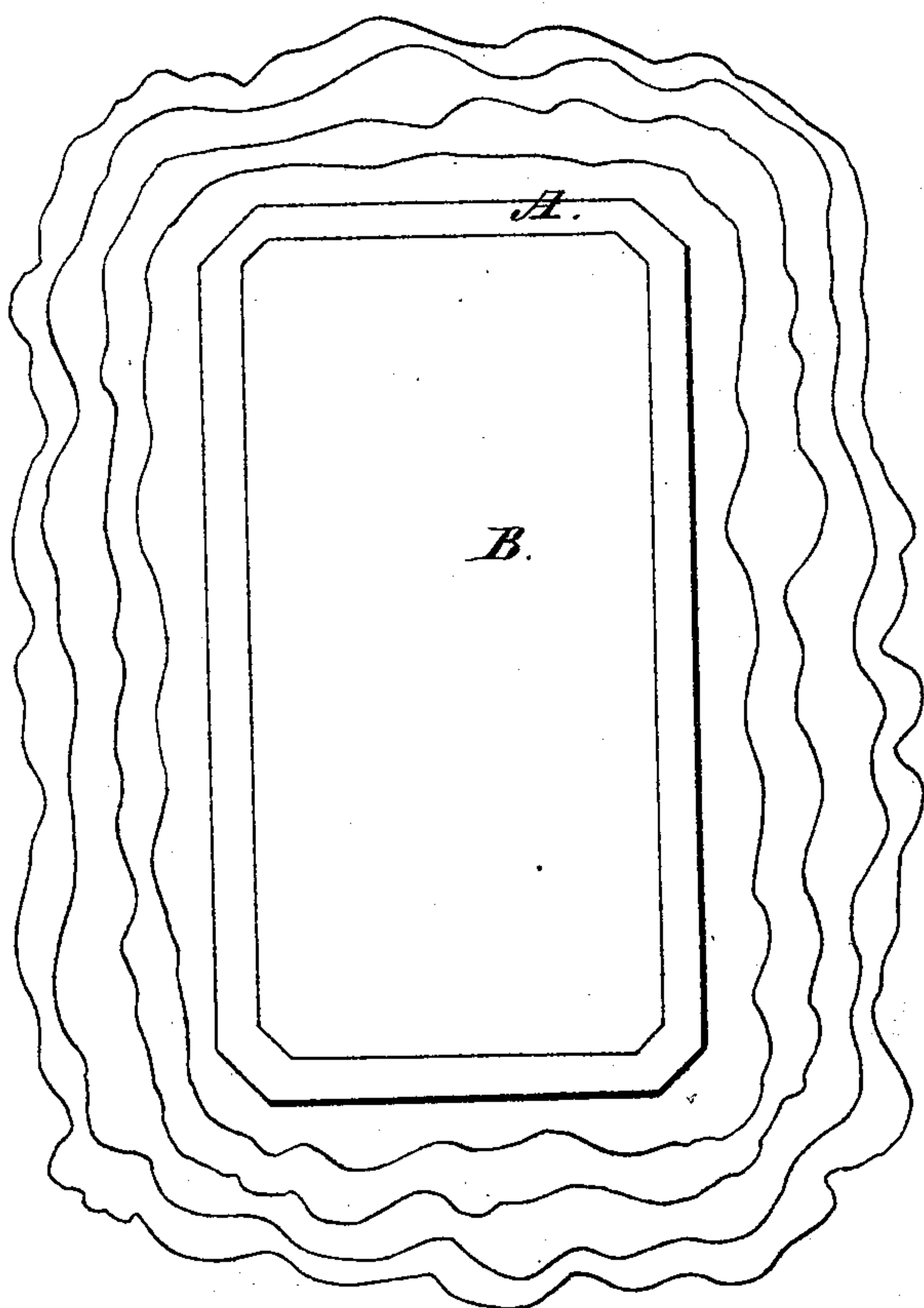


*J. Cartisser,*  
*Making Pottery,*  
*Nº 50,561, Patented Oct. 24, 1865.*



*Witnesses:*

*M. M. Livingston*  
*Gustave Dietrich*

*Inventor:*

*Joseph Cartisser*

# UNITED STATES PATENT OFFICE.

JOSEPH CARTISSER, OF NEW YORK, N. Y.

IMPROVED METHOD OF PREPARING THE SURFACE OF PORCELAIN OR POTTERY TO RECEIVE DESIGNS, &c.

Specification forming part of Letters Patent No. **50,561**, dated October 24, 1865; antedated October 14, 1865.

*To all whom it may concern:*

Be it known that I, JOSEPH CARTISSER, of No. 186 West Fourteenth Street, in the city, county, and State of New York, have invented a new and useful Improvement in Treating Pottery and Porcelain Ware; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to fully understand and use the same, reference being had to the accompanying drawing, forming a part of this specification.

The drawing, consisting of only one figure, represents a plate of fine pottery-ware treated according to my invention.

This invention consists in preparing the surface or surfaces of pottery-ware so as to form designs thereon and so that they will receive and retain delineations made by painting, drawing, and by the photographic art.

Frequent attempts have been made to discover or invent improvements in the mode or process of preparing fine pottery-ware—such, for instance, as porcelain—so that drawings and paintings could be made on its surface. Hitherto such ware has been prepared for these purposes and for receiving photographic pictures by grinding its surface with emery or other suitable substance. The best results obtained by this mode have been unsatisfactory, both on account of the comparatively rough surface left after the most careful manipulation in the grinding process and of the comparatively large expense attending the same. Artists find it difficult, if not quite impossible, to keep their preparations and coloring-matter on the said surfaces, because they are readily removed therefrom by rubbing, if only accidental.

I have endeavored to overcome the difficulties which have attended the application of paintings, drawings, and photographic pictures upon such ware, and to produce thereon a suitable surface or surfaces for receiving such pictures at a cheap cost.

The drawing shows a plate of white pottery-ware which has been treated by my process.

The letter B designates that part of the sur-

face of the plate which has been so treated, and the letter A designates that part which has not been so treated, the same being left as a border around the edges of the plate.

In applying and carrying out my invention I cover that part of the ware which is to be left in its natural condition by any preparation which will protect it from the action of the acid I employ, and I find that varnish answers for this purpose. I then apply dilute fluoric acid to that part of the surface of such ware—as, for instance, the part B, which is to be prepared for the use of the artist. The action of the acid is suffered to continue about five minutes, when it is removed and the surface is washed and the coating or covering on the part A is also removed. The ware is now ready for use. The surface which has been acted upon by the acid is found to have lost its gloss and to have acquired a dull appearance and a character of opacity, although it remains smooth to the touch. These conditions are found to be highly favorable for the artist.

I also by this same process produce designs and delineations upon such ware by protecting those parts of its surfaces which are not to be acted upon and exposing the rest to the action of the acid. Such delineations may be then colored or they may be left uncolored. Ware can thus be ornamented without any subsequent manipulation by the artist, and without any other treatment save that which is given by means of the acid, as aforesaid.

I am aware that glass has been reduced or corroded by means of fluoric acid, and I do not claim to have discovered that this acid has such an action upon certain mineral substances; but,

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

Preparing pottery-ware—such as porcelain and other fine ware—in the manner substantially as above described.

JOSEPH CARTISSER.

Witnesses:

M. M. LIVINGSTON,  
C. L. TOPLIFF.