

No. 788,129.

PATENTED APR. 25, 1905.

A. BECHER.

PROCESS OF MAKING WATERPROOF TRANSPARENT CELLULOID PICTURES.

APPLICATION FILED MAR. 16, 1904.

Fig. 1

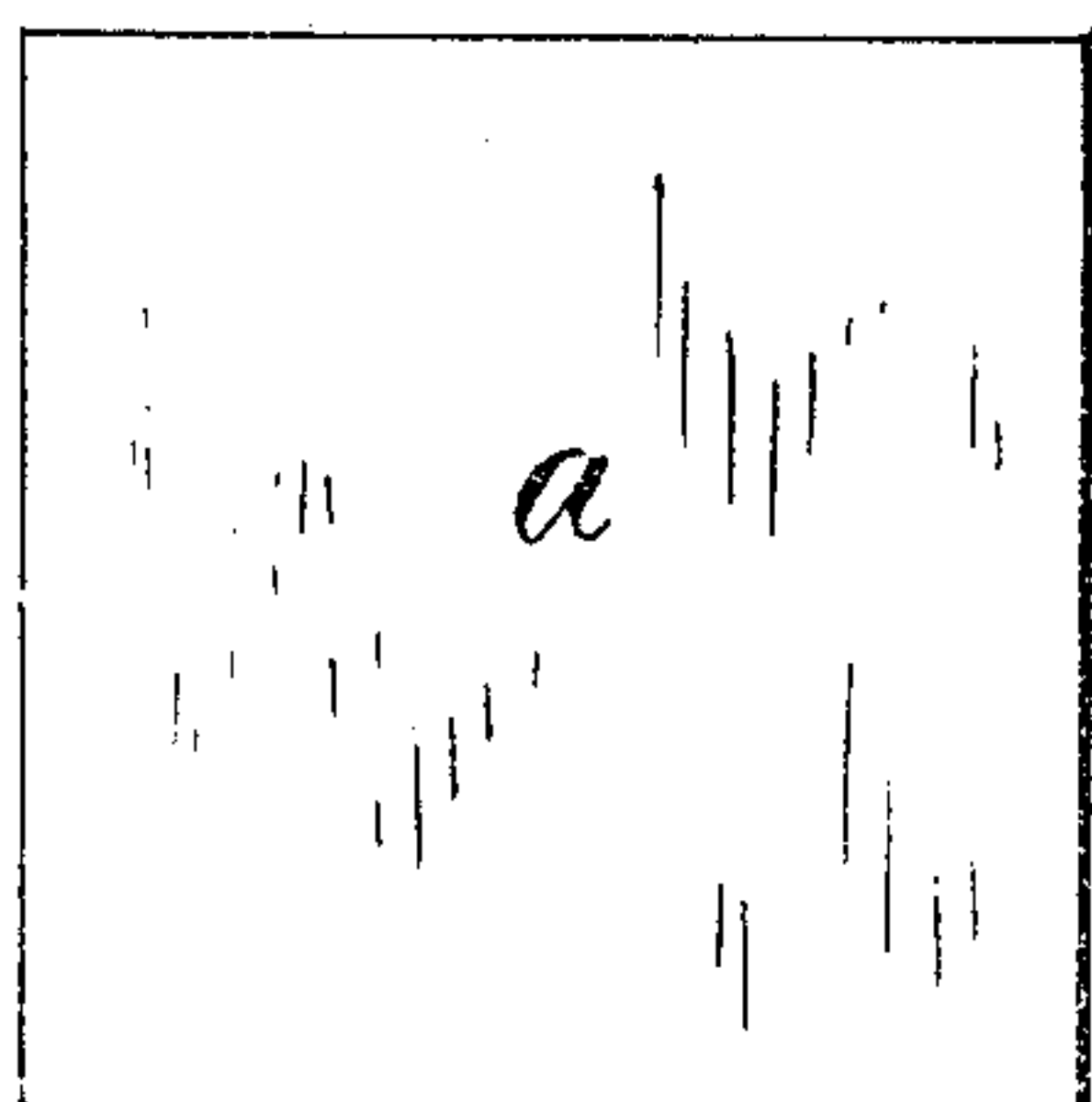


Fig. 2

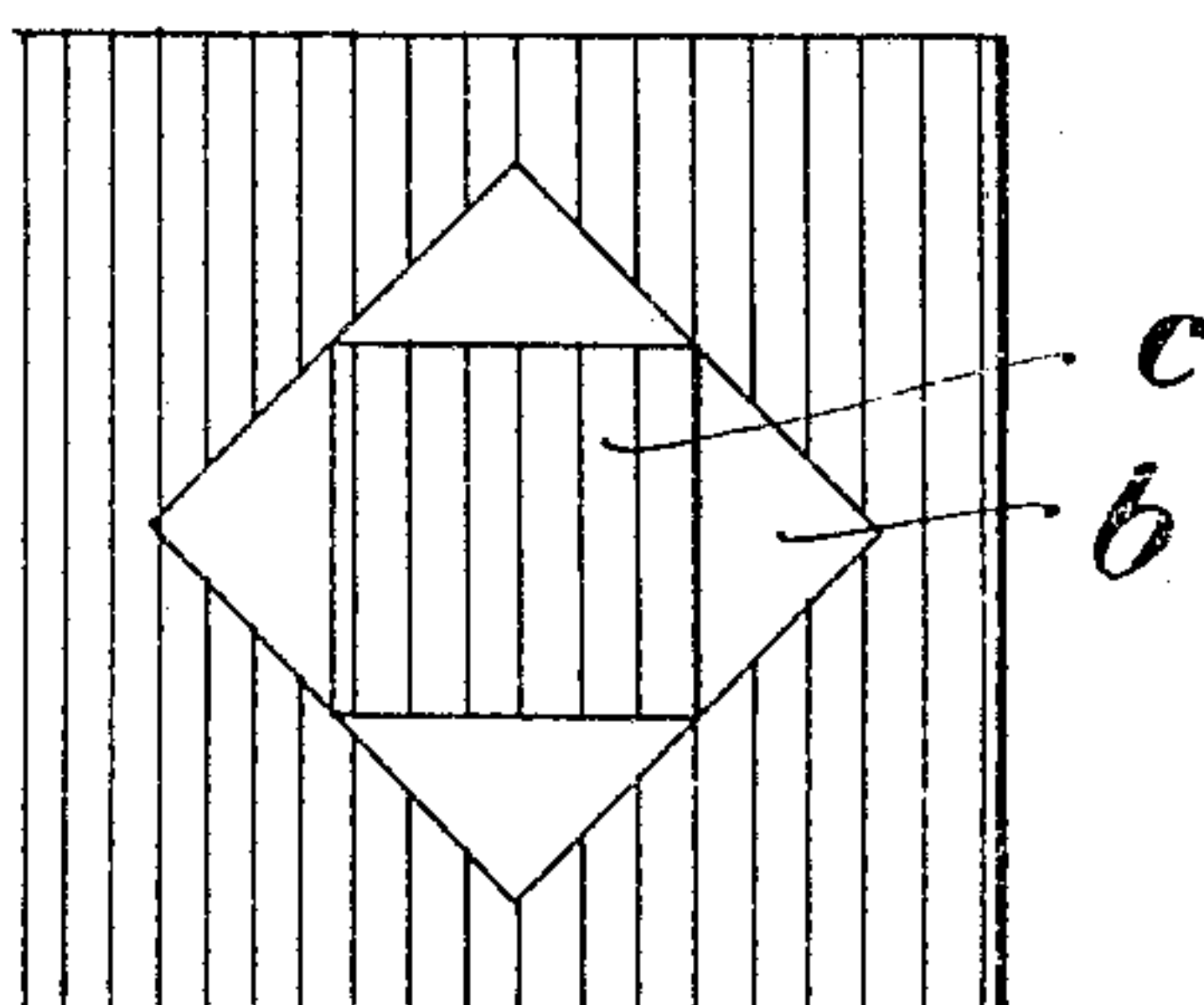


Fig. 3

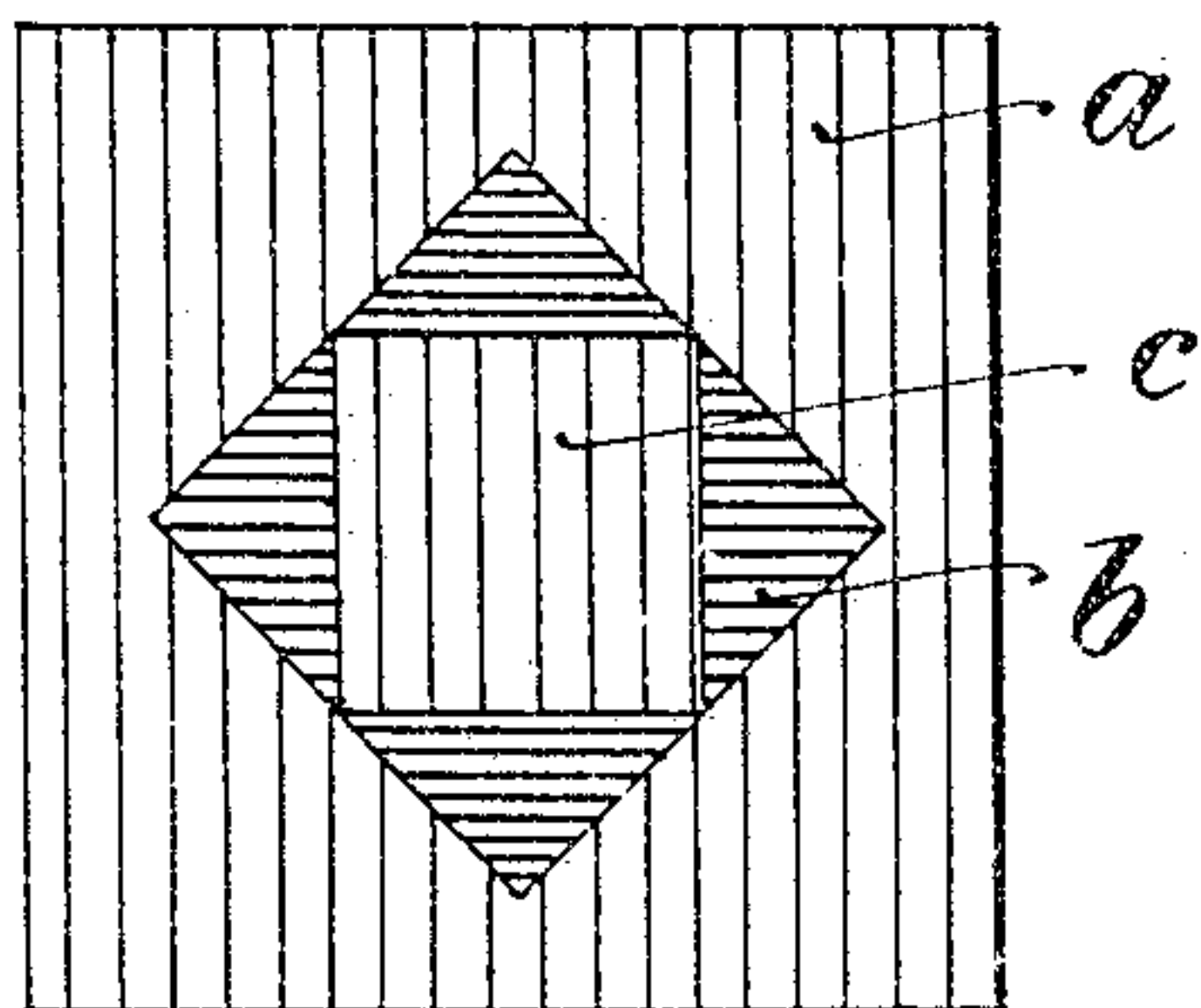


Fig. 4

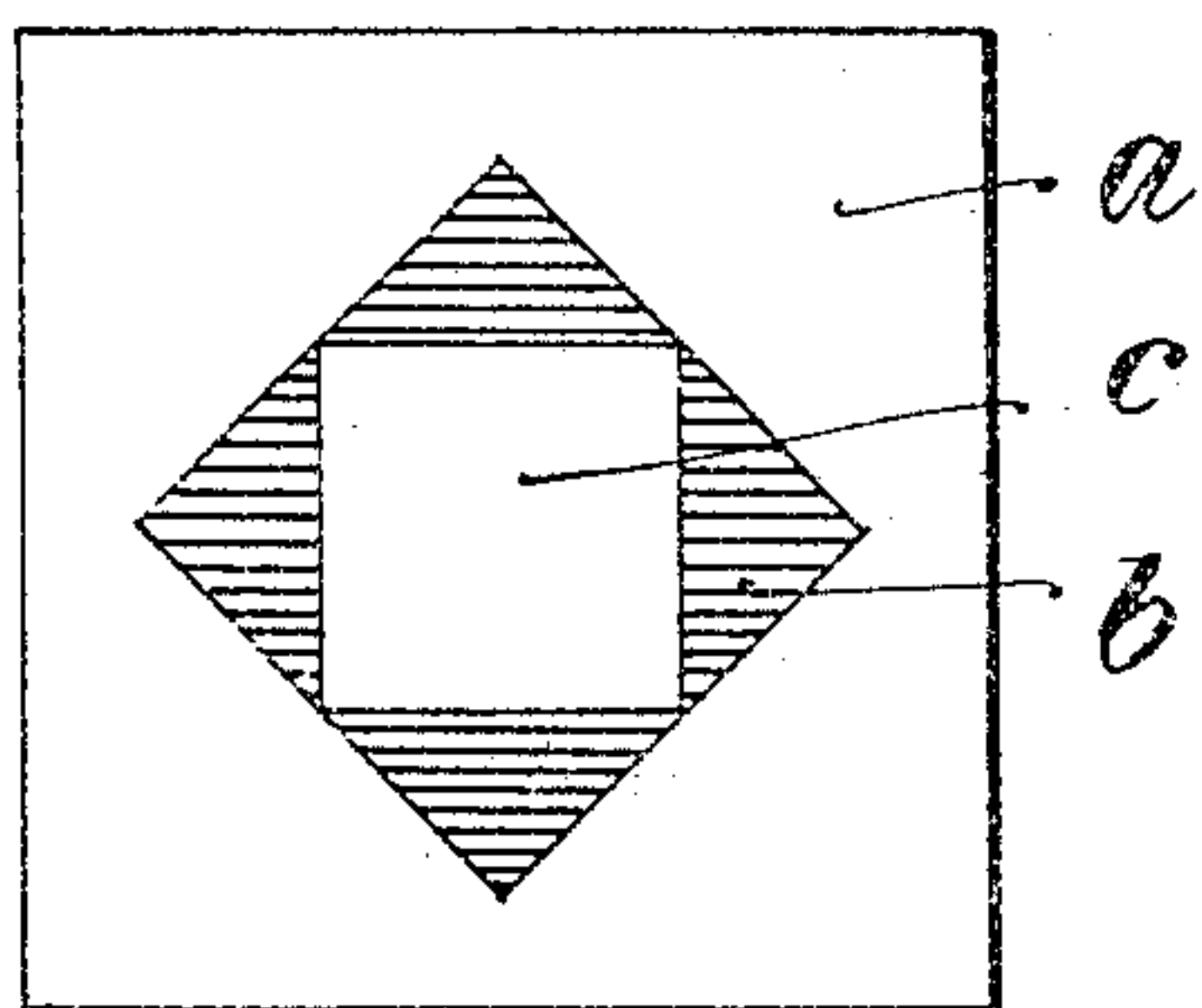


Fig. 5

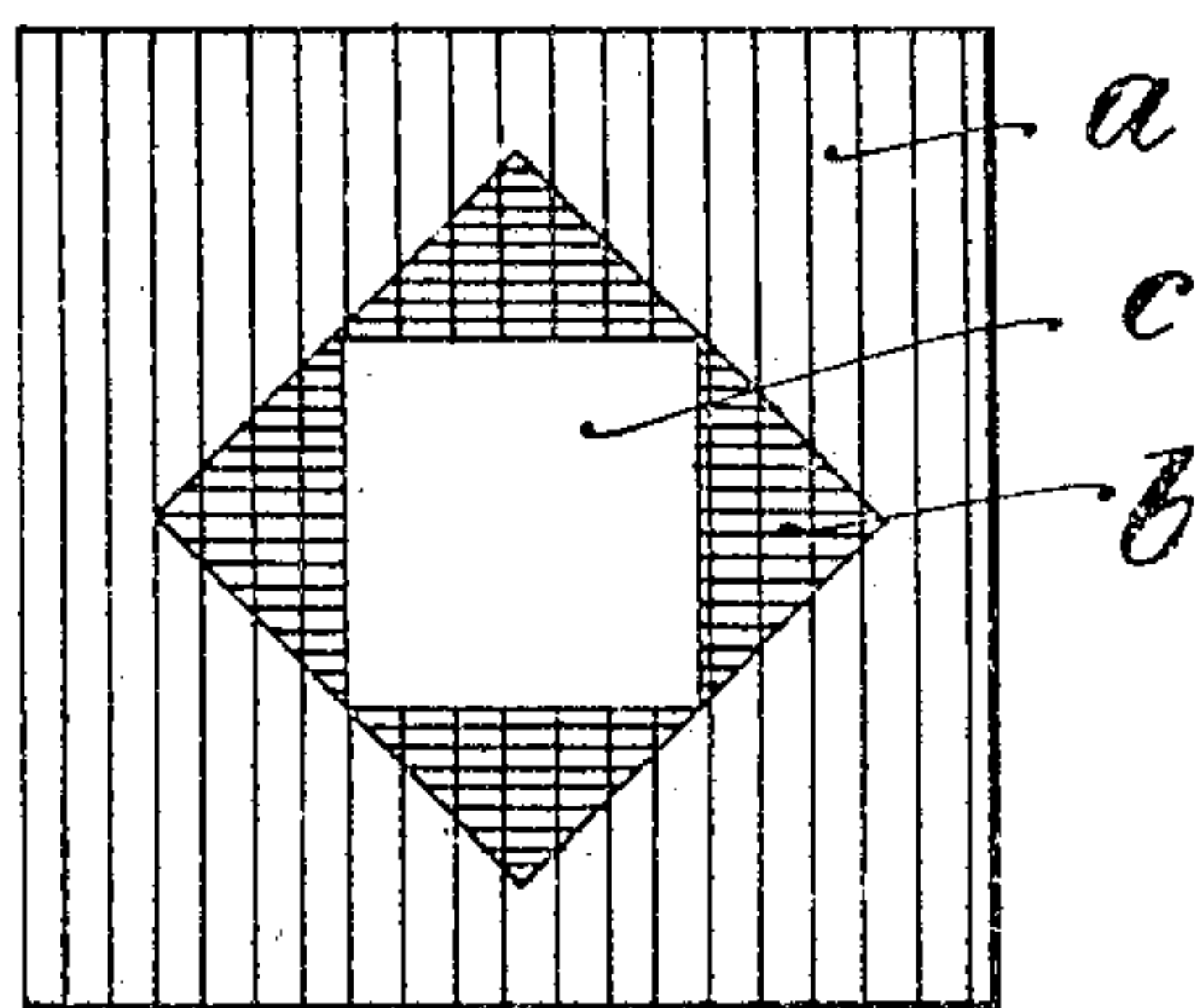


Fig. 6

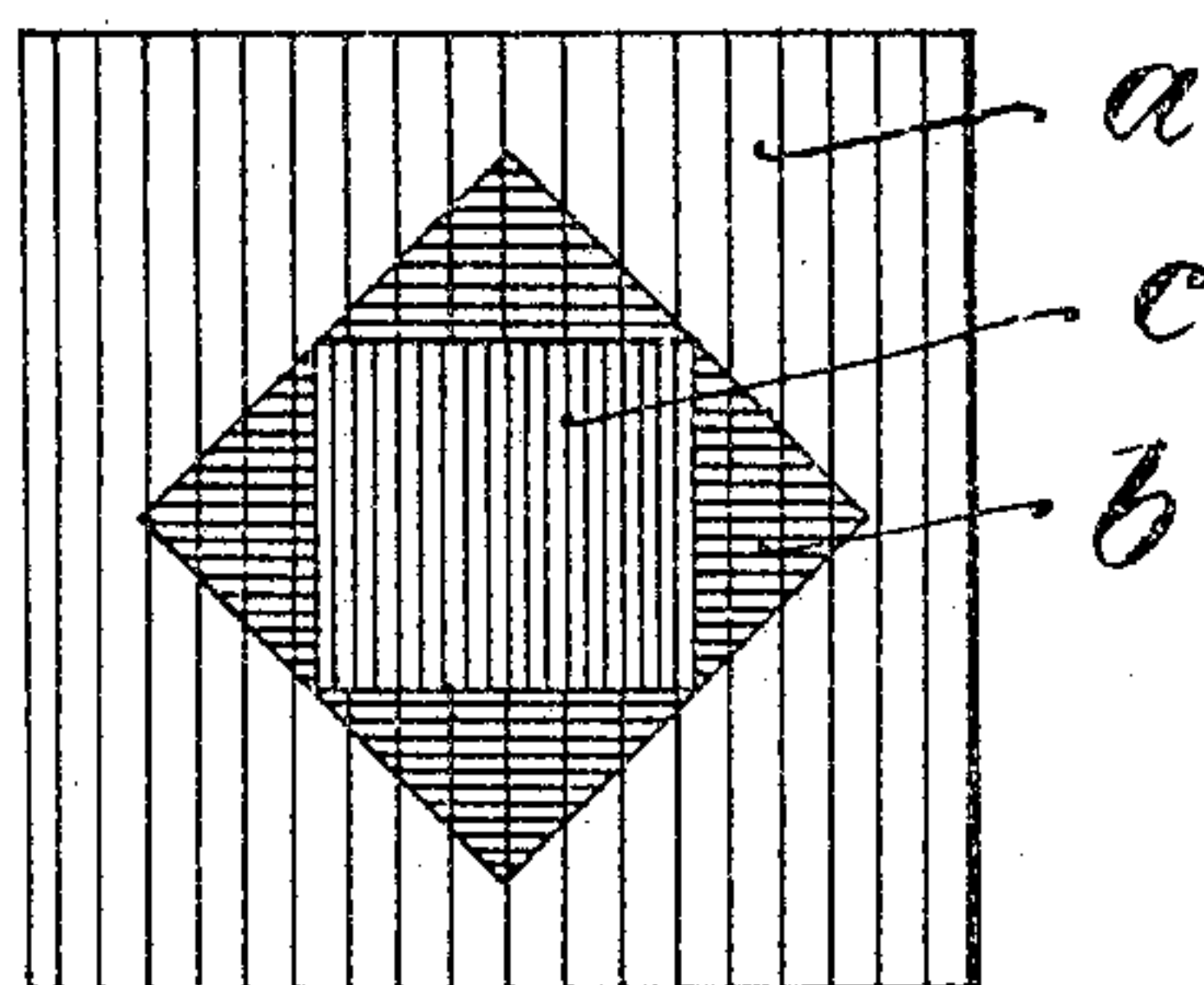
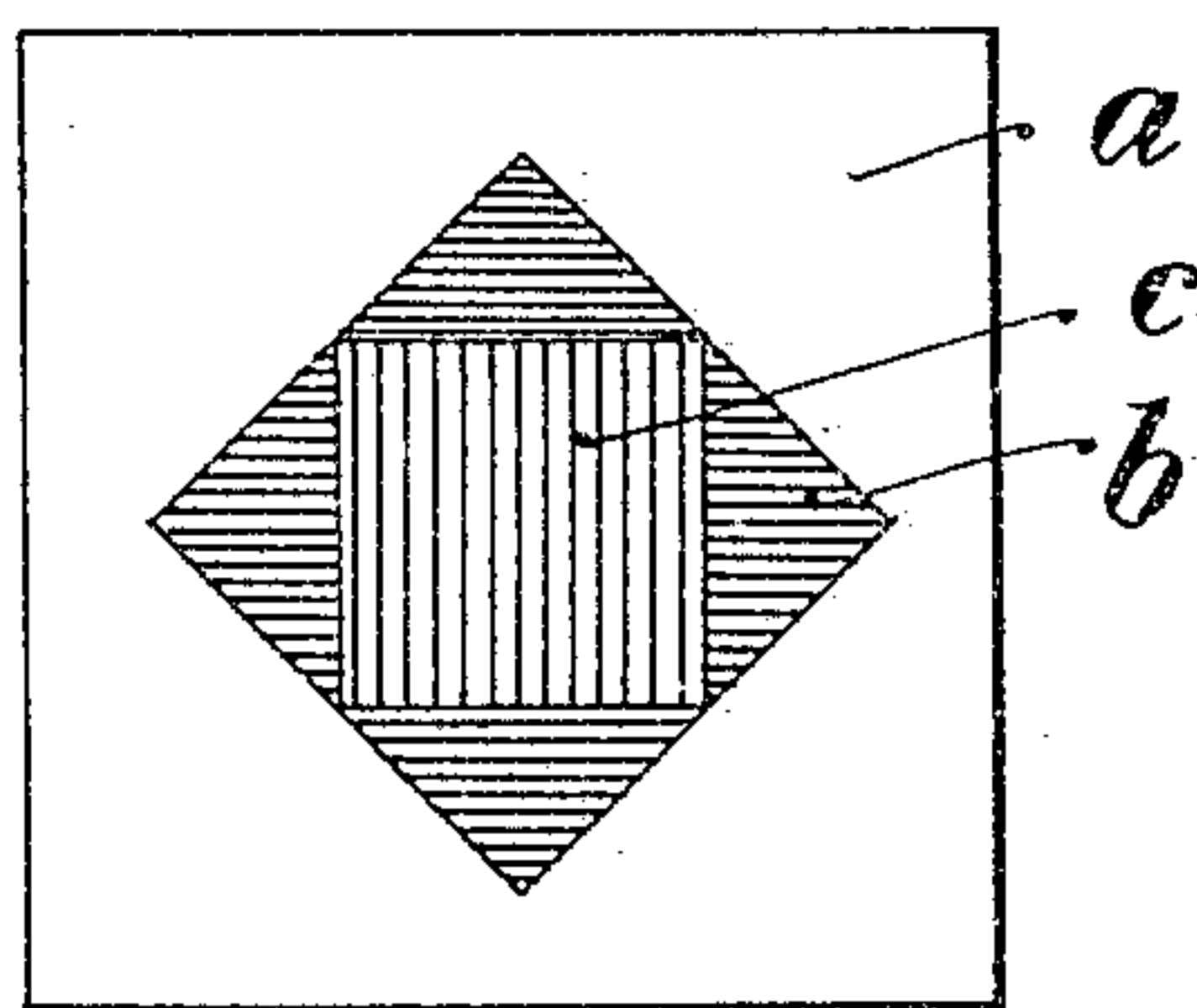


Fig. 7



Witnesses.
Wilhelm Brase
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Inventor.
Alfred Becher
per Gerson Jach
his Attorneys

UNITED STATES PATENT OFFICE.

ALFRED BECHER, OF BIELEFELD, GERMANY.

PROCESS OF MAKING WATERPROOF TRANSPARENT CELLULOID PICTURES.

SPECIFICATION forming part of Letters Patent No. 788,129, dated April 25, 1905.

Application filed March 16, 1904. Serial No. 198,359.

To all whom it may concern:

Be it known that I, ALFRED BECHER, possessor of an establishment for the fine arts, a subject of the Emperor of Germany, residing at Bielefeld, Germany, have invented an Improved Process of Making Waterproof Transparent Celluloid Pictures, of which the following is a full, clear, and exact specification.

My process relates to such transparent pictures which are made out of celluloid plates or sheets and which are provided with different colors. These diaphanic pictures being completely waterproof can be fixed on the outer side of windows or doors. For making such diaphanic pictures I use thin plates or sheets of transparent celluloid into which the colors forming the picture are etched. The parts of the celluloid plate which are intended to remain free from color are coated before the staining process with a fatty or oily substance—for example, printing color. This protecting substance is generally printed on the plates. For etching the colors into the plate I proceed as follows: The color to be used and etched, preferably anilin color, is dissolved in water or alcohol within a suitable receptacle. For the purpose to make the dissolved color proper for etching I add to the mixture in accordance with the nature of the color or the dissolving agent one-third to nine-tenths of the quantity of the bath of acetic acid. Into this mixture then I dip the prepared celluloid plate five to twenty seconds. After being etched by the mixture the plate is washed with water, and then I remove the fatty or oily substance printed up before by turpentine, petroleum, or a similar dissolving agent. On those places which have not been coated before by the fatty or oily substance the color of the bath penetrates deeply into the celluloid plate, and at the same time the

color is rendered so waterproof that the celluloid plates can lie in water some days without alteration. By repeating the coating of different places with fatty or oily substance and etching in baths of different colors I obtain pictures in various colors.

The results of the successive steps of the process I have illustrated on the accompanying drawings, of which—

Figures 1 to 7 show a celluloid plate to be provided on different parts of its surface with red and blue color.

Referring to the drawings, *a* is the celluloid plate on which the parts *b* are to be colored blue and the rectangle *c* red. At first, Fig. 2, I print the surface of the plate with a fatty or oily substance, such as printing color, except the parts *b*. Then the plate is stained in a suitable mixture, Fig. 3, and the fatty or oily substance is washed off, Fig. 4. After this process the plate *a* is again printed with a fatty or oily substance, except the rectangle *c*, Fig. 5. Then the plate is stained again in a suitable mixture, Fig. 6, and then washed off, Fig. 7.

Having now particularly described the nature of my invention and in what manner the same is to be performed, I declare that what I claim is—

A process for making waterproof transparent celluloid pictures consisting essentially in dissolving a color in water or alcohol, adding to this mixture a quantity of acetic acid, and dipping the translucent celluloid plate, coated partially with a fatty or oily substance into the color-bath, substantially as specified.

ALFRED BECHER.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.