

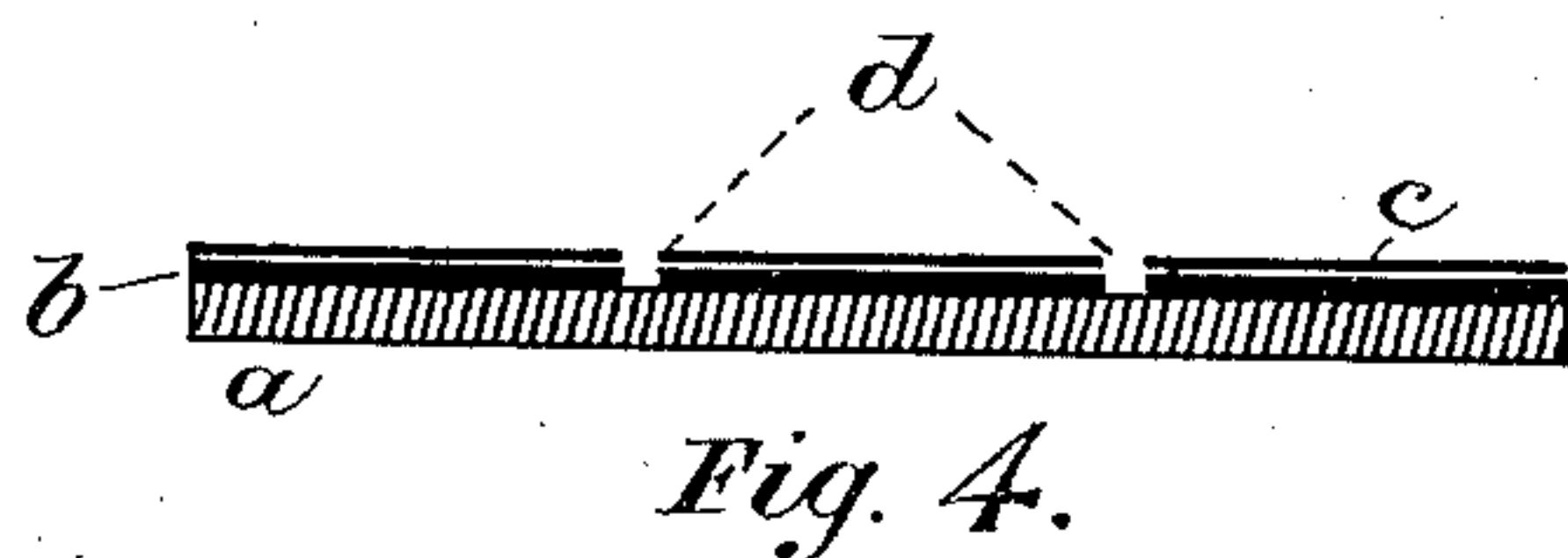
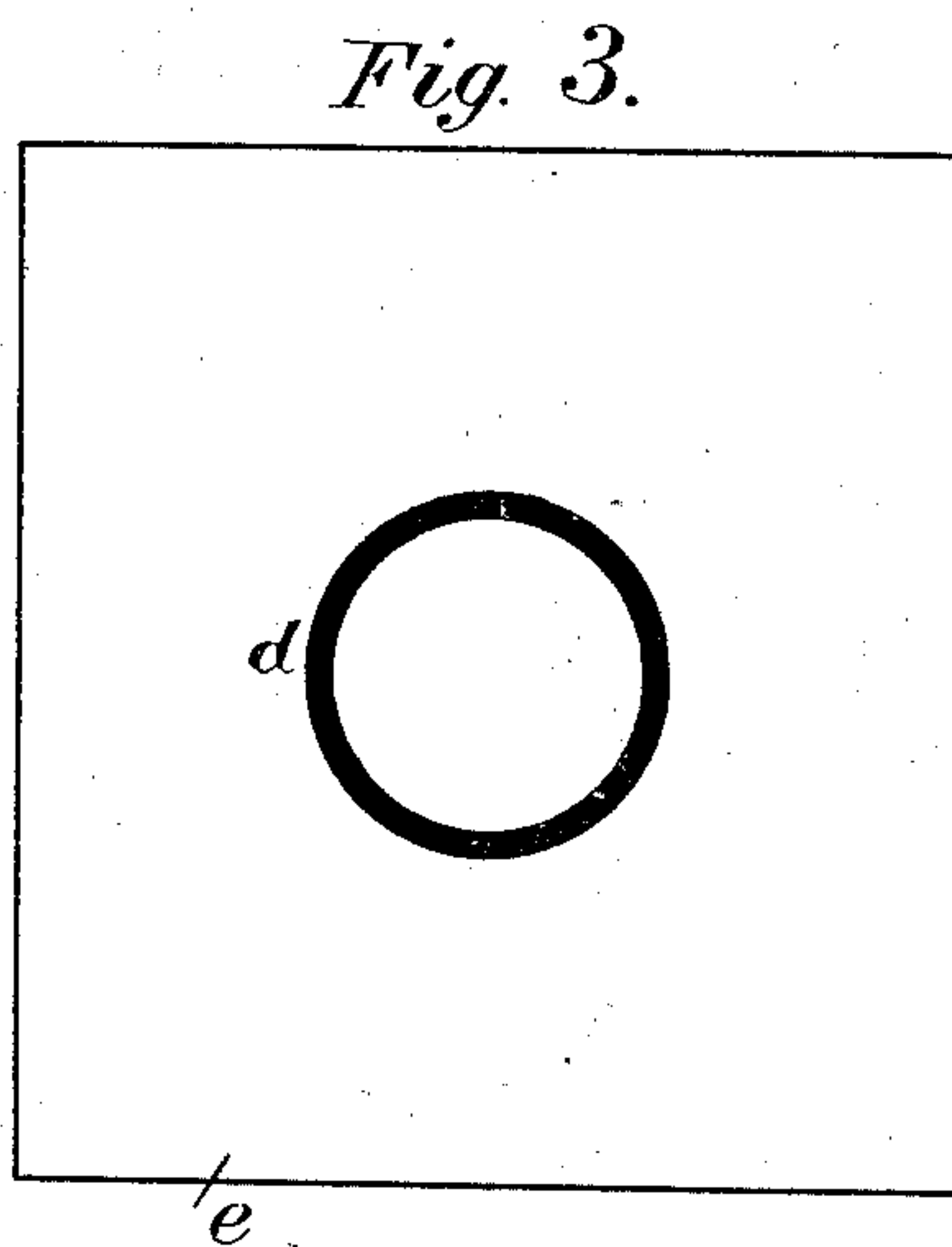
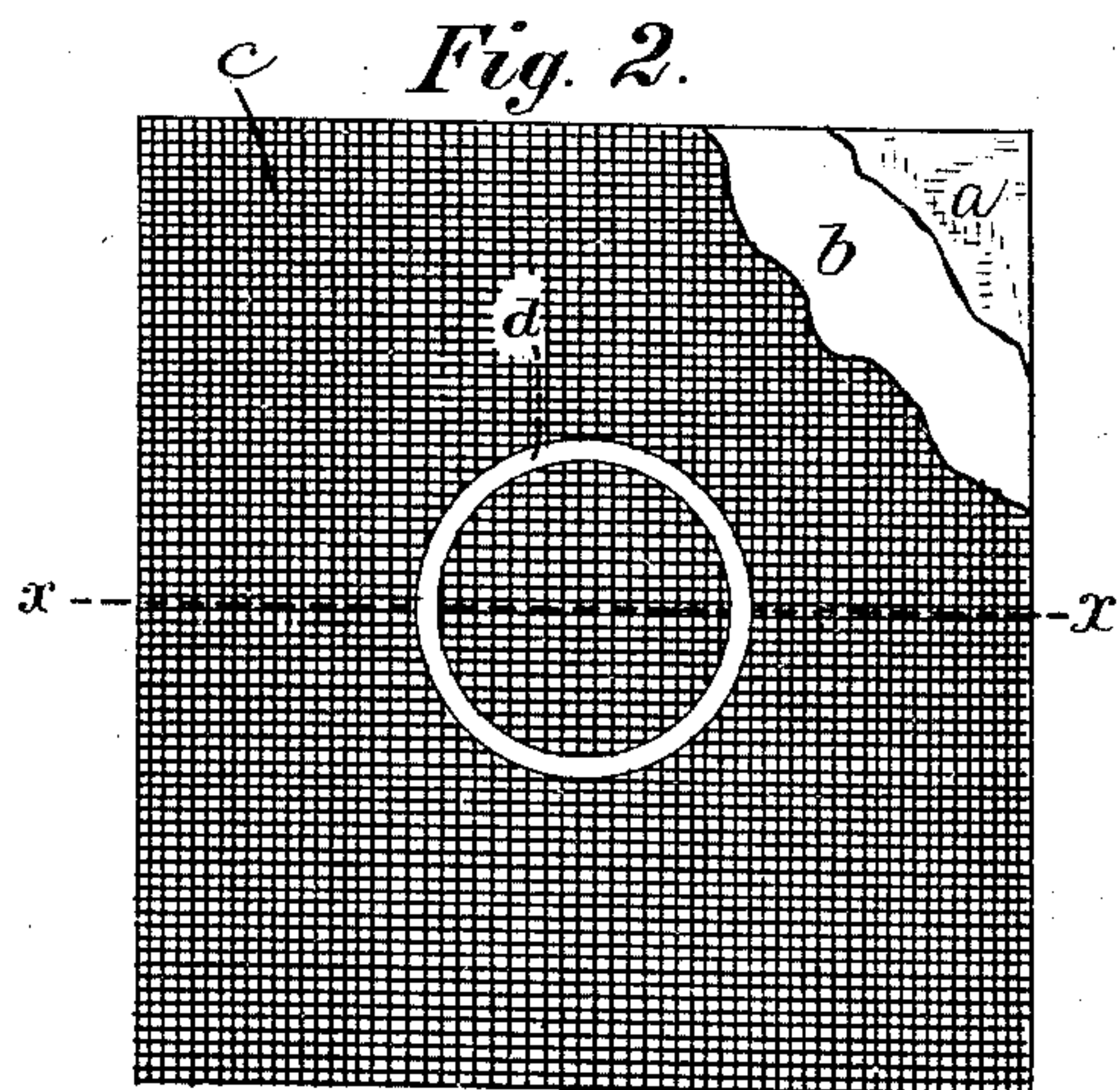
(No Model.)

J. C. ELDER.

PROCESS OF PRODUCING BLUE PRINTS.

No. 368,656.

Patented Aug. 23, 1887.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## PROCESS OF PRODUCING BLUE PRINTS.

SPECIFICATION forming part of Letters Patent No. 368,656, dated August 23, 1887.

Application filed July 24, 1885. Serial No. 172,510. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES C. ELDER, a citizen of the United States, residing at Jefferson, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in the Process or Art of Making Photographic Negatives, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to the manufacture of negatives for use in making sun-prints; and it consists in a negative plate for such purpose composed of a transparent plate having applied thereto a coating of opaque material covered with a coating of light pigment of colored material in such a manner that a pencil, pen, or other similar instrument may be employed to mark on such light or white pigment, and by which the drawings made thereon may be altered without interfering with or injuring the black undercoating, which must be thin and perfect, so as to give a clear-cut line without ragged edge to the print, and in certain steps in the art of making sun-prints by first coating a plate of transparent material with a dark-colored pigment; superposing a coating of light-colored pigment; delineating lines upon the upper coating; cutting through both of said coatings on the lines delineated; subjecting prepared paper to the action of light through the plate, and, finally, washing the same in the usual manner, all as hereinafter described, and particularly pointed out in the claims. By this process a pencil-sketch, when drawn to satisfaction, may be transferred upon the white coating, or may be drawn thereon, which saves much time and redrawing, and which facilitates and cheapens the work.

Heretofore when the drawings were made on the single black pigment or coating, if a mistake were made it could not be cured, and thus the negative plate was destroyed; but with my process the lines may be changed several times until they are correct, when they may be etched or cut through the black coating by proper instruments. The plate is then ready for use.

In the accompanying drawings, Figure 1 is a sectional view through a transparent plate having the opaque or dark coating and a portion of the light-colored coating applied thereto. Fig. 2 is a plan view of a plate having the dark and light coatings applied and a drawing etched through said coatings, parts of said coatings being removed. Fig. 3 is a plan view of a sun-print made from the negative as shown in Fig. 2; and Fig. 4 is a section on line *xx* of Fig. 2.

Like letters of reference mark the same parts wherever they occur in the different figures of the drawings.

Referring specifically to the drawings by letters of reference, *a* is a transparent plate, preferably of glass, although it may be made of any suitable transparent material.

*b* is a coating superposed thereon, composed of any suitable opaque material, preferably a black pigment, applied by running it on, or applying it in any other suitable manner.

*c* is a coating of light-colored material, preferably a white pigment—such as Chinese white—placed upon the dark coating, as shown.

When a plate has been prepared by superposing, as described and shown, the opaque and light-colored pigments, a drawing may be made upon it with ink or pencil, and the said lines, or the portions of the coatings covered by said lines, are removed with suitable etching or engraving tools, leaving those portions of the transparent plate clean to permit the passages of the rays of the light therethrough.

To make a sun-print, an ordinary sheet of sensitive photographic paper—such, for instance, as is used in making the well-known “blue prints”—is covered by such plate and exposed a proper length of time to the rays of the light, preferably the sun’s rays, and then removed, the print being fixed by any suitable and well-known process; if the blue-print process, the paper is thoroughly washed, leaving the lines of the drawing blue and the rest of the sheet white.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—



1. As a new article of manufacture, a transparent plate having an opaque coating suitable for use in making sun-prints, and upon such opaque coating a light coating suitable for the delineation of forms, all as set forth, whereby a drawing may be made and amended without detriment to the opaque coating, and whereby when both coatings are cut on the lines a sun-print may be made in the usual manner.

2. As an improvement in the art of making sun-prints, preparing a transparent plate by coating it with an opaque material of a character suitable for removal by a graver or other usual means, and covering said opaque coat with a light-colored coat suitable for the delineation thereupon of lines preparatory to the cutting of both coatings upon said lines.

3. The process herein described for pro-

ducing blue prints, which consists in first coating a plate of transparent material with a dark-colored pigment, then superposing another coating of light-colored pigment upon the first, thereby presenting an erasable drawing-surface, then delineating the desired sketch or drawing upon the top coating and cutting through both of said coatings on the lines of the drawing, so as to expose the clear surface of the plate, then subjecting prepared paper for the usual print process to the action of the light through the plate, and finally washing the same in the usual manner, substantially as described.

JAMES C. ELDER.

Witnesses:

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