

(No Model.)

C. A. NEEDHAM.

PHOTOGRAPHIC PRINTING FRAME FOR VIGNETTING.

No. 309,974.

Patented Dec. 30, 1884.

Fig. 1.

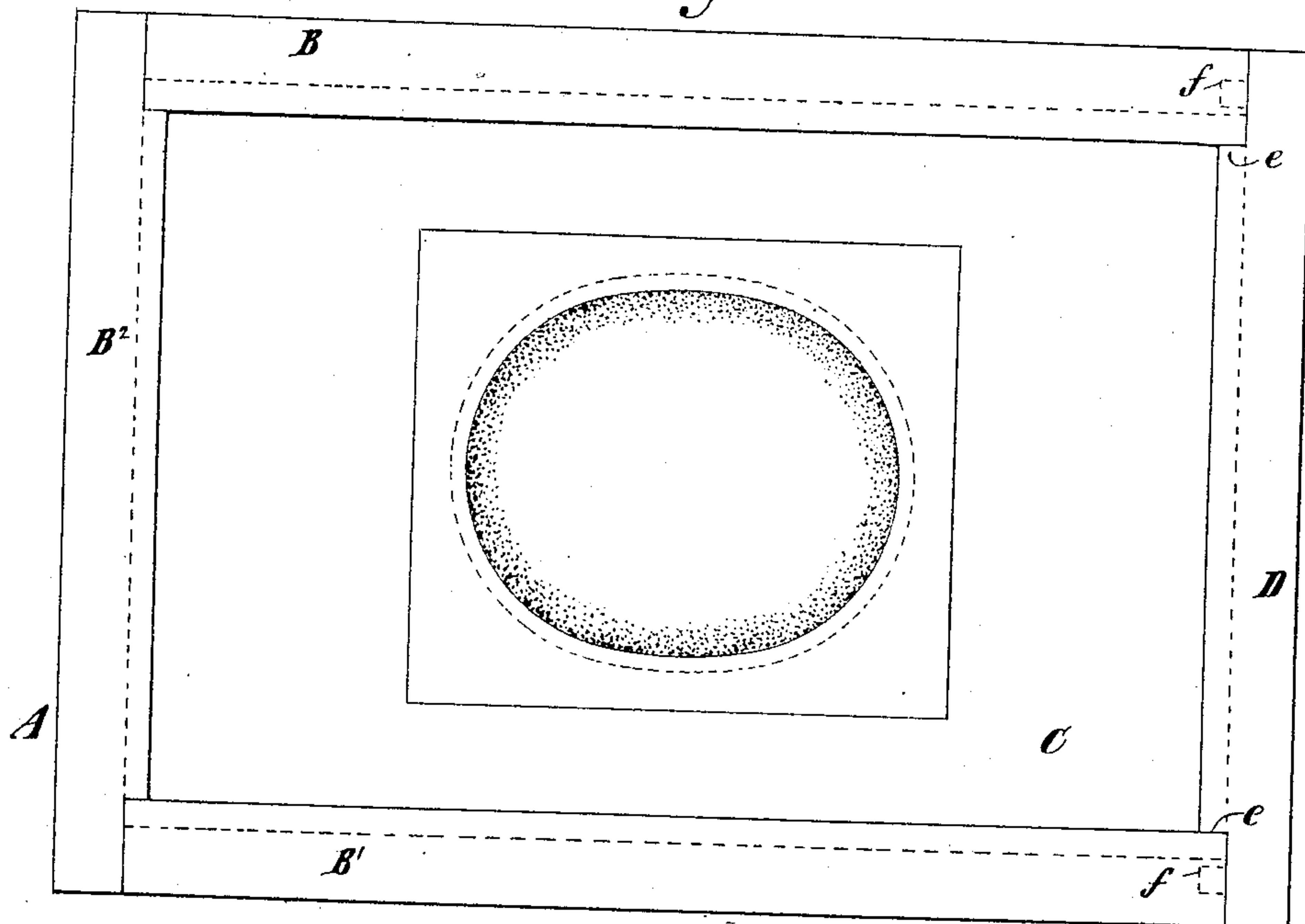


Fig. 2.

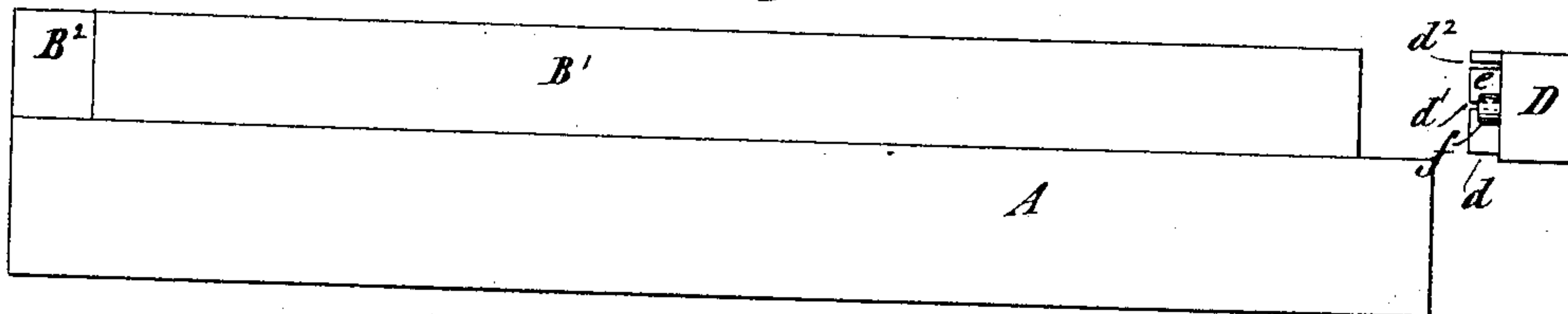
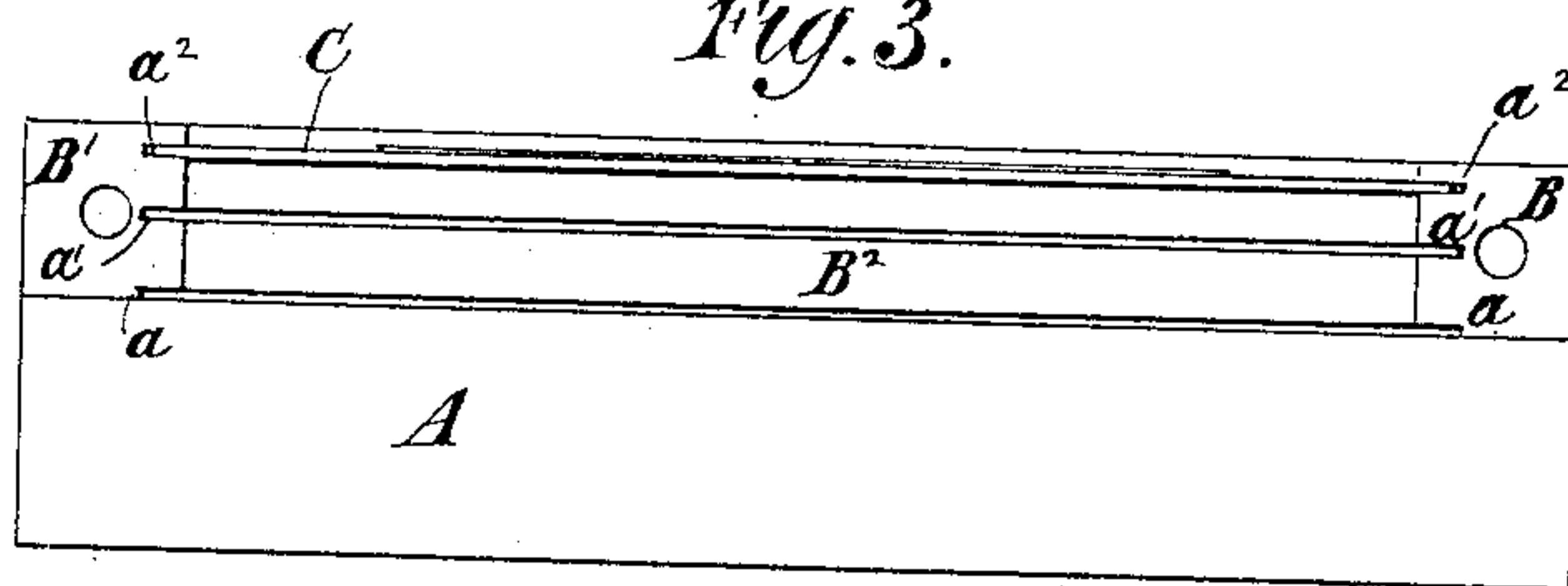


Fig. 3.



Witnesses  
Edward T. Roche  
J. H. Kane

Inventor  
Charles A. Needham  
by his attorneys  
Littell & Brown

# UNITED STATES PATENT OFFICE.

CHARLES A. NEEDHAM, OF NEW YORK, N. Y., ASSIGNOR TO E. P. NEEDHAM  
& SON, OF SAME PLACE.

## PHOTOGRAPHIC-PRINTING FRAME FOR VIGNETTING.

SPECIFICATION forming part of Letters Patent No. 309,974, dated December 30, 1884.

Application filed June 12, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. NEEDHAM, of New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Photographic-Printing Frames for Vignetting, of which the following is a specification.

I will describe a photographic - printing frame embodying my improvement, and then point out the various features in the claim.

In the accompanying drawings, Figure 1 is a top view of a photographic-printing frame embodying my improvement. Fig. 2 is an edge view thereof with a stopper forming part thereof removed a slight distance from the position which it occupies when in use; and Fig. 3 is an end view of the frame with the said stopper removed.

Similar letters of reference designate corresponding parts in all the figures.

A designates the printing-frame. It has the usual rabbet for the negative, the sensitized paper to be printed, and, if necessary, also a pane of glass for protecting the latter. Its back is removable, and consists, preferably, of two sections hinged together and secured in place by resilient buttons or bars pivoted to them, and adapted to be engaged with or disengaged from clips or catches on the frame proper at pleasure. On the front of the box are rails B B' B<sup>2</sup>. Two of these rails, B B', extend lengthwise of it, and the third of the rails, B<sup>2</sup>, extends between the others. In the inner edges of these rails are grooves *a a' a<sup>2</sup>*. The groove *a* is formed in the side of the rails which is next the printing-frame; but the others are formed entirely in the rails, and at different distances from the printing-frame.

C designates a vignetter. This may consist of a piece of card or analogous material provided with an aperture having its edges cut suitably to produce the desired effect, or it may consist of a piece of card or analogous material provided with an aperture having transparent and suitably-stippled paper arranged over the aperture, and secured in place adjacent to the aperture by mucilage or other adhesive substance. The piece of card or

analogous material C will be made of such a size that it may be inserted in any of the grooves *a a' a<sup>2</sup>*. It may thus be arranged at different distances from the sensitized paper, to cause the light to act upon the same in any desired manner.

At the ends of the rails B B', which are distant from the rail B<sup>2</sup>, a stopper, D, is arranged. It consists of a bar corresponding approximately in size to the rail B<sup>2</sup>, and provided with grooves *d d' d<sup>2</sup>*, like the grooves *a a' a<sup>2</sup>* in the rails B B' B<sup>2</sup>, and which are adapted, when it is in place, to receive the adjacent end of the piece of card or analogous material C. The ends of the bar forming the stopper are provided with shoulders *e*, which fit between the rails B B'. The extreme end portions lap over the ends of the rails B B', and are provided with pins *f*, entering recesses located in the ends of the said rails B B'; but said pins *f* may extend from the ends of the rails B B', and enter recesses in the extreme end portions of the bar forming the stopper, so that the stopper will be secured in place against accidental detachment while in use.

It is advantageous to use a stopper with grooves for receiving the outer end of the piece of card or analogous material C, in order that light shall be precluded from passing between the latter and the stopper.

When the stopper D is taken off, and the piece of card or analogous material C is removed from the rails B B' B<sup>2</sup>, the printing-frame can be used for other purposes than vignetting.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with a photographic-printing frame, A, of rails B B' B<sup>2</sup>, arranged directly on the front, and provided with grooves *a a'*, the piece of card or analogous material C, and the stopper D, unconnected with the rails B B', and provided with grooves *d d'*, substantially as specified.

C. A. NEEDHAM.

Witnesses:

T. J. KEANE,  
E. T. ROCHE.