

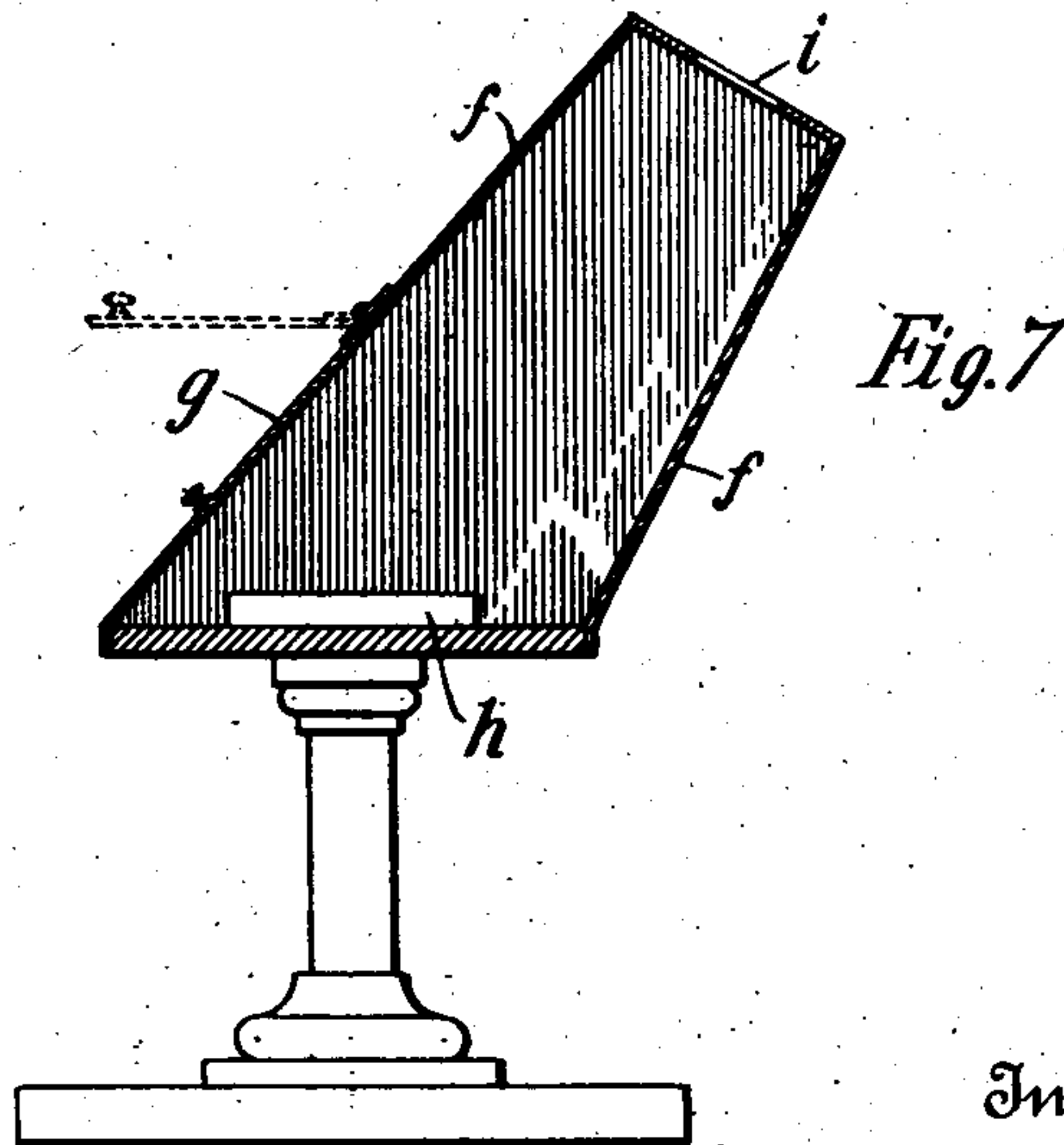
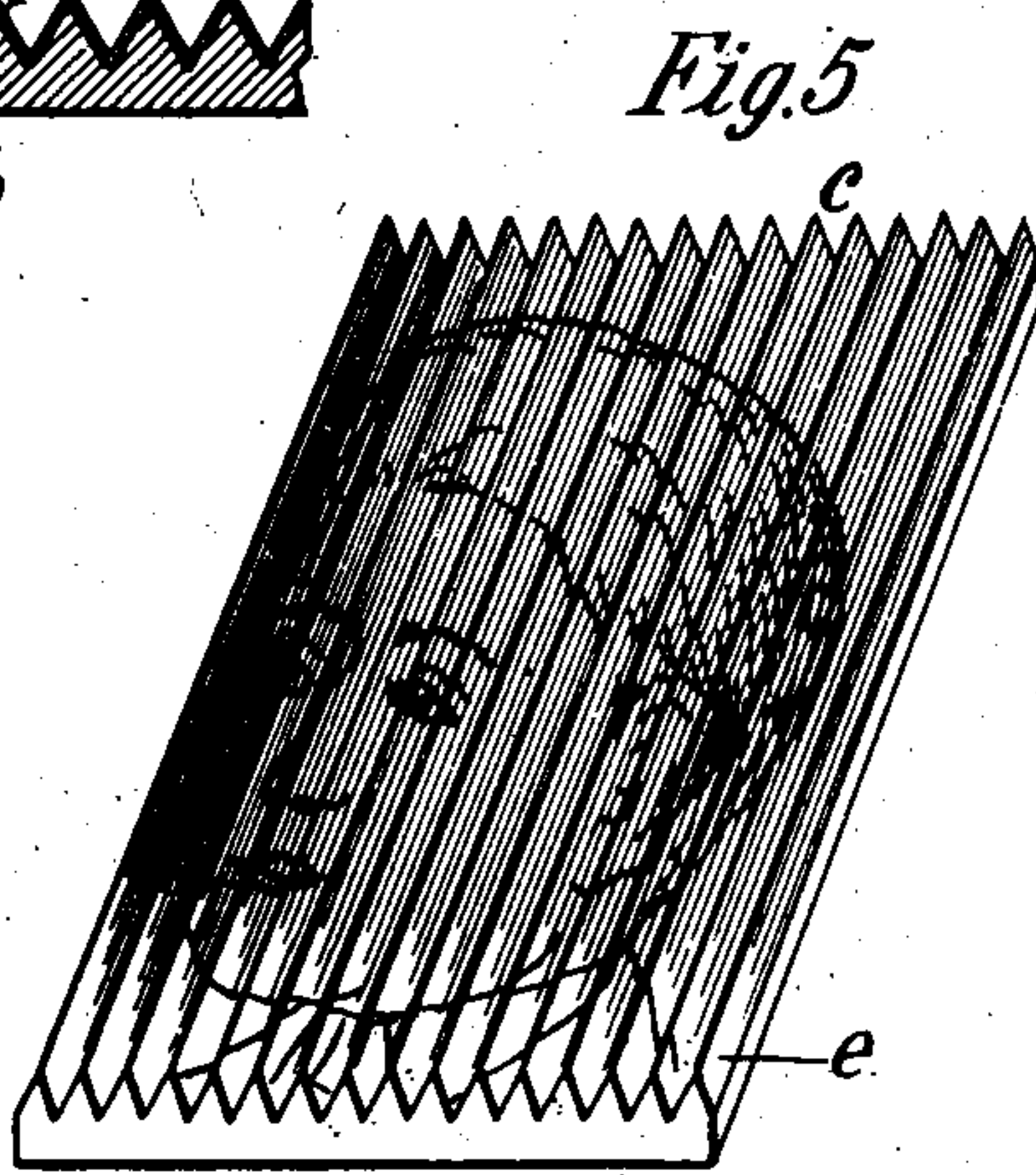
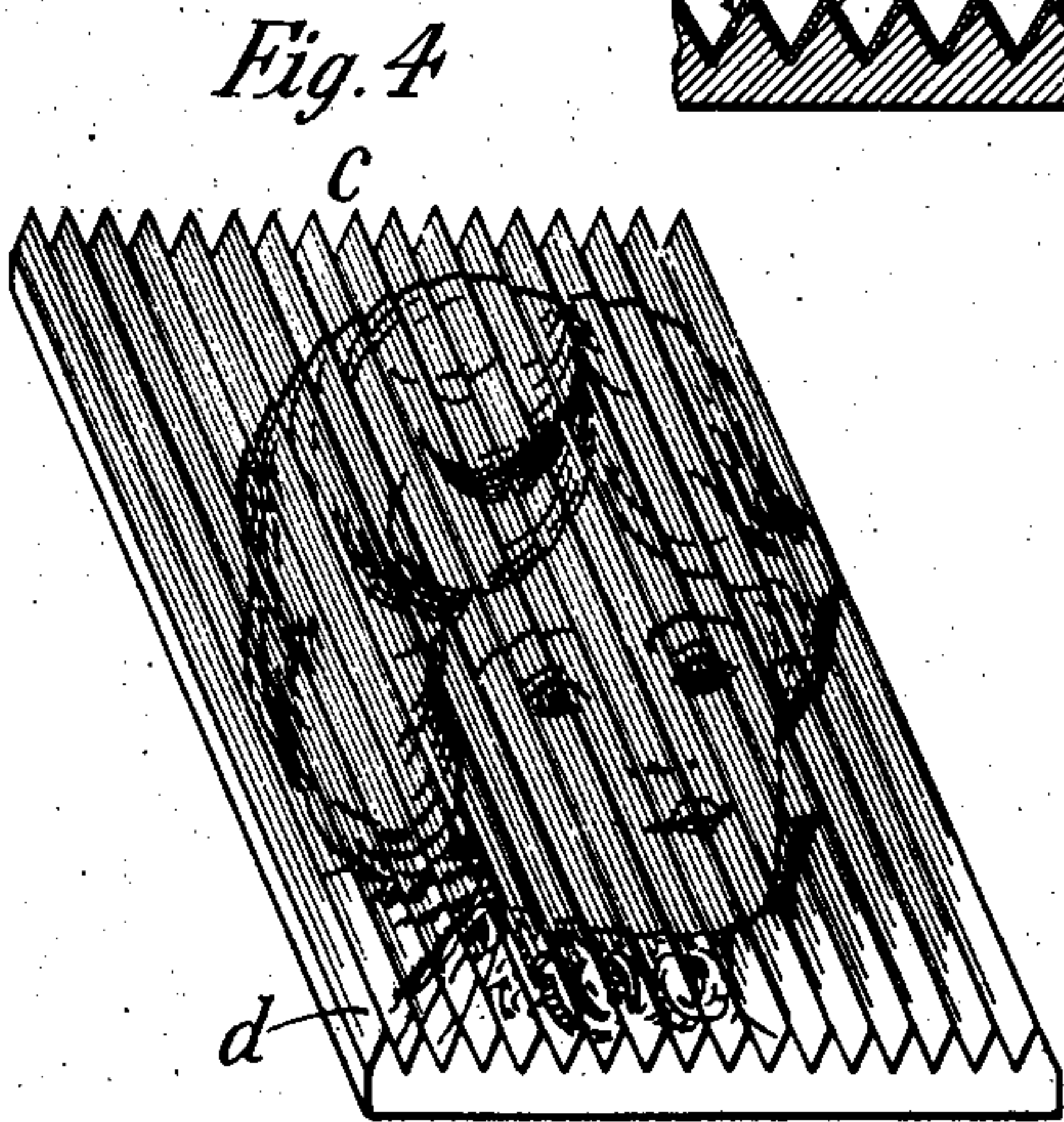
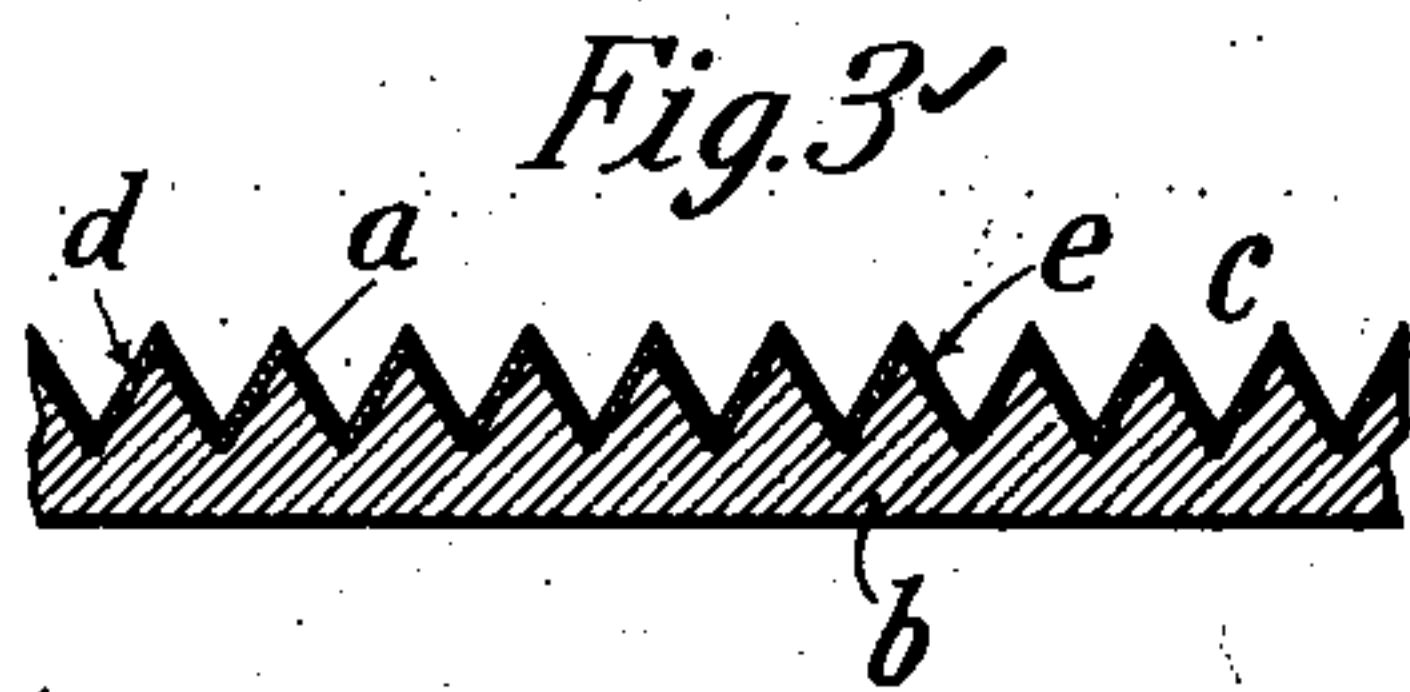
No. 834,048.

PATENTED OCT. 23, 1906.

H. C. J. DEEKS.

MATERIAL FOR PRINTING MULTIPLE PHOTOGRAPHS.

APPLICATION FILED NOV. 25, 1904.



Witnesses
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UNITED STATES PATENT OFFICE.

HIRAM C. J. DEEKS, OF PATERSON, NEW JERSEY.

MATERIAL FOR PRINTING MULTIPLE PHOTOGRAPHS.

No. 834,048.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed November 25, 1904. Serial No. 234,125.

To all whom it may concern:

Be it known that I, HIRAM C. J. DEEKS, a citizen of the United States, and a resident of the city of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Material for Printing Multiple Photographs, of which the following is a specification.

My invention relates to the art of photography, and has for its purpose the production of novel and striking effects by photographic means.

My invention provides means for the production on what seems to be to the casual observer the same surface of two photographic views, one of which is perceptible to the observer looking from one angle, whereas the other view is perceptible to the observer looking from another angle.

Referring to the drawings, Figure 1 is a view illustrative of the effect produced upon the eye of the observer when looking at the object from one direction. Fig. 2 is illustrative of the effect produced upon the eye of the observer looking from another direction. Fig. 3 is an enlarged sectional view illustrating the corrugations or ridges produced upon the surface of the paper for the production of the results hereinafter described. Fig. 4 is an enlarged perspective view showing the photograph in sections upon one side of the corrugations of the paper. Fig. 5 is a similar perspective view showing another photograph in sections upon the opposite sides of the corrugations. Fig. 6 is an enlarged sectional view showing corrugations adapted to the stereoscopic purposes hereinafter referred to. Fig. 7 is a sectional view of the apparatus I use for exposure to the light during the printing operations.

In the drawings, *a* is the printing-paper.

b is the cardboard.

c represents the corrugations, having the faces *d* on one side thereof and the faces *e* on the opposite side thereof.

In the apparatus or box (illustrated in Fig. 7) *f* represents the inclosing sides thereof, having the door or lid *g* for convenience in inserting and withdrawing the printing-frame *h*.

i is the aperture for the entrance of the rays of light.

In carrying out the objects of my invention I first take a sheet of cardboard, to the surface of which I paste an ordinary photographic-printing paper, such as is used for

printing direct from the negative, either by sunlight or artificial light. To secure the two sheets together, I use a solution of shellac and alcohol or other adhesive substance insoluble in water. The printing-paper is affixed to the cardboard in non-actinic light, and the subsequent operations until printing are in non-actinic light. Next I pass the cardboard, with the printing-paper attached, as aforesaid, between two rollers under pressure. One of these rollers is smooth, and the other is cut into sharp parallel corrugations, either lengthwise or around the circumference of the roller. The cardboard, with printing-paper attached, is placed between these rollers, so that the sensitive paper comes into contact with the roller having corrugations. This operation leaves the paper upon the cardboard in the shape illustrated by Figs. 3, 4, and 5. The corrugated paper so prepared is placed in contact with a photographic negative in the ordinary manner in a printing-frame. It is then placed in a receptacle impervious to light except for an aperture at one side, (illustrated by Fig. 7,) through which the rays of light approach and meet the corrugated printing-paper, attacking and printing the same only on the sides of the many corrugations which face toward the aperture from which the light comes. The exposure is timed according to conditions in the usual way. I then remove this negative and secure against the paper a second negative in the same manner and shift the printing-frame so that upon exposure the light will meet the other and opposite sides of the corrugations in the paper, and I print from the second negative in this manner the second picture upon the sides of the corrugations opposite to those already exposed and printed. After the exposure the fixing and toning of the photograph or two photographs is done in the usual way. Both pictures being on the same sheet, they are toned, fixed, and developed at the same time.

The above description refers to the use of my invention for producing upon the same sheet two different photographs, either one of which may be brought to view by merely shifting or tilting the position of the sheet in relation to the eyesight. For stereoscopic purposes the corrugations in the paper should be more pronounced and deep, as indicated by Fig. 6 of the drawings. For this I use

two negatives of the same view taken from slightly-different positions in the usual manner of stereoscopic views. One negative being then used, as above described, for printing on one side of the corrugations, while the other negative is used for printing upon the opposite sides of the corrugations, the same sheet will disclose two views of the object corresponding to the two impressions upon the retina of the eyes. The sheet with the two photographs thereon being held at a proper distance from the eyes, so that one eye sees the photograph only on one side of the corrugations while the other eye sees the photograph only upon the other side of the corrugations, the usual stereoscopic effect will be produced.

Of course it would be feasible to employ within the scope of my invention other material than what I have termed the "printing-paper." Any substance or material prepared or adapted for photographic chemical changes under exposure to rays of light may be employed.

I do not desire to cover in the present application the improved process of making multiple photographs disclosed herein, as the same has been made the subject-matter of a

divisional application, filed November 28, 1905, Serial No. 289,402.

What I claim as new, and desire to protect by Letters Patent, is—

1. Photographic material prepared for printing having a surface with parallel corrugations so adapted to exposure for printing purposes that rays of light may act only upon the sides of the corrugations facing in one direction while a second exposure will admit the light to act only upon sides of the corrugations facing in the other direction.

2. A sheet having a surface provided with two sets of faces alternately arranged, the faces of each set being parallel, and those of one set meeting those of the other at acute angles, both sets of faces being provided with a sensitizing material whereby photographs can be obtained upon them.

Signed at New York, in the county of New York and State of New York, this 27th day of October, A. D. 1904.

HIRAM C. J. DEEKS.

Witnesses:

M. KAUFFMAN,

JOSEPH A. STETSON.