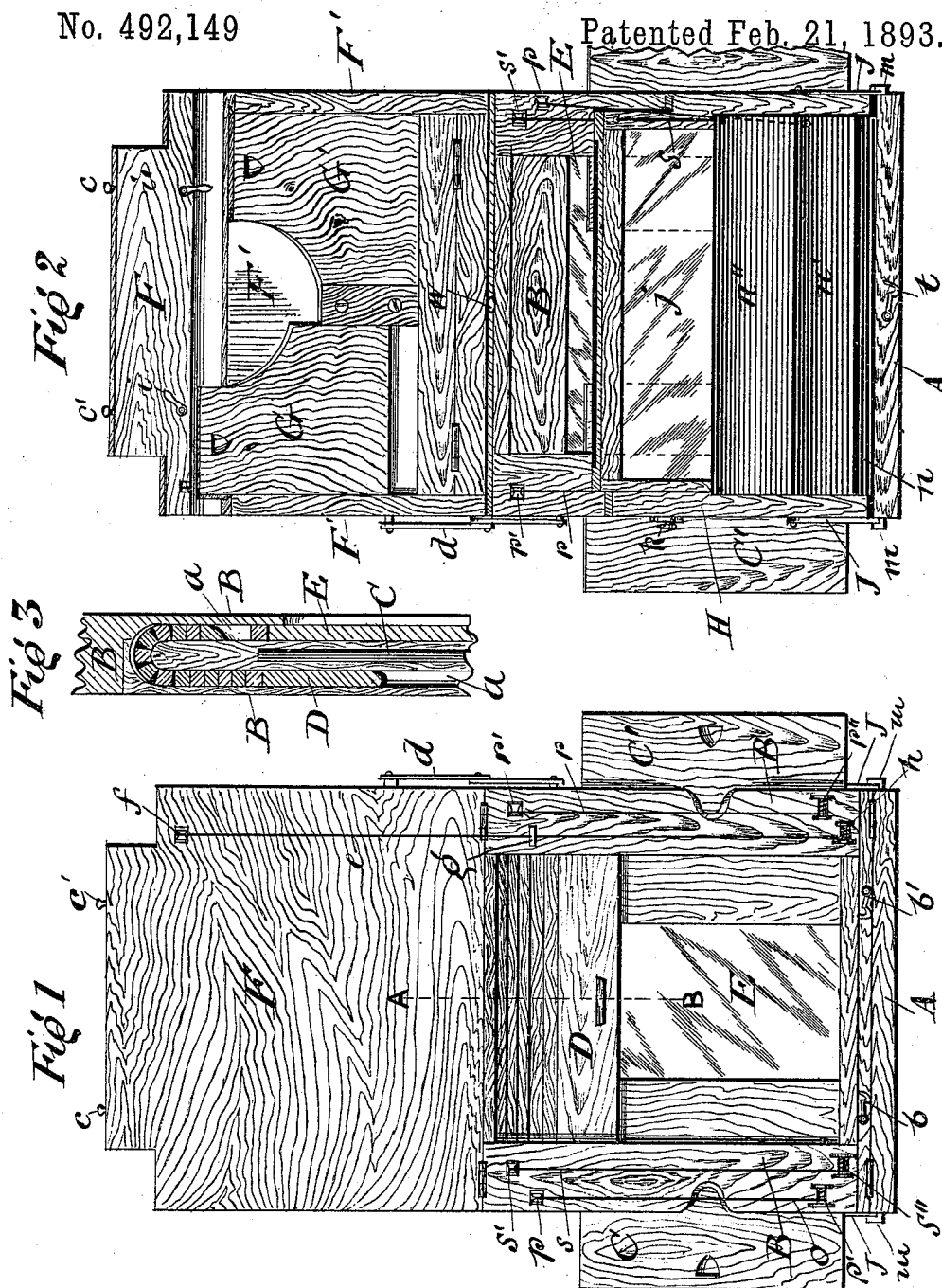


J. DEWE.  
PHOTOGRAPH EXHIBITOR.

No. 492,149

Patented Feb. 21, 1893.



Witnesses  
E. K. Sturtevant.  
F. L. Middleton.

Inventor  
John Dewe

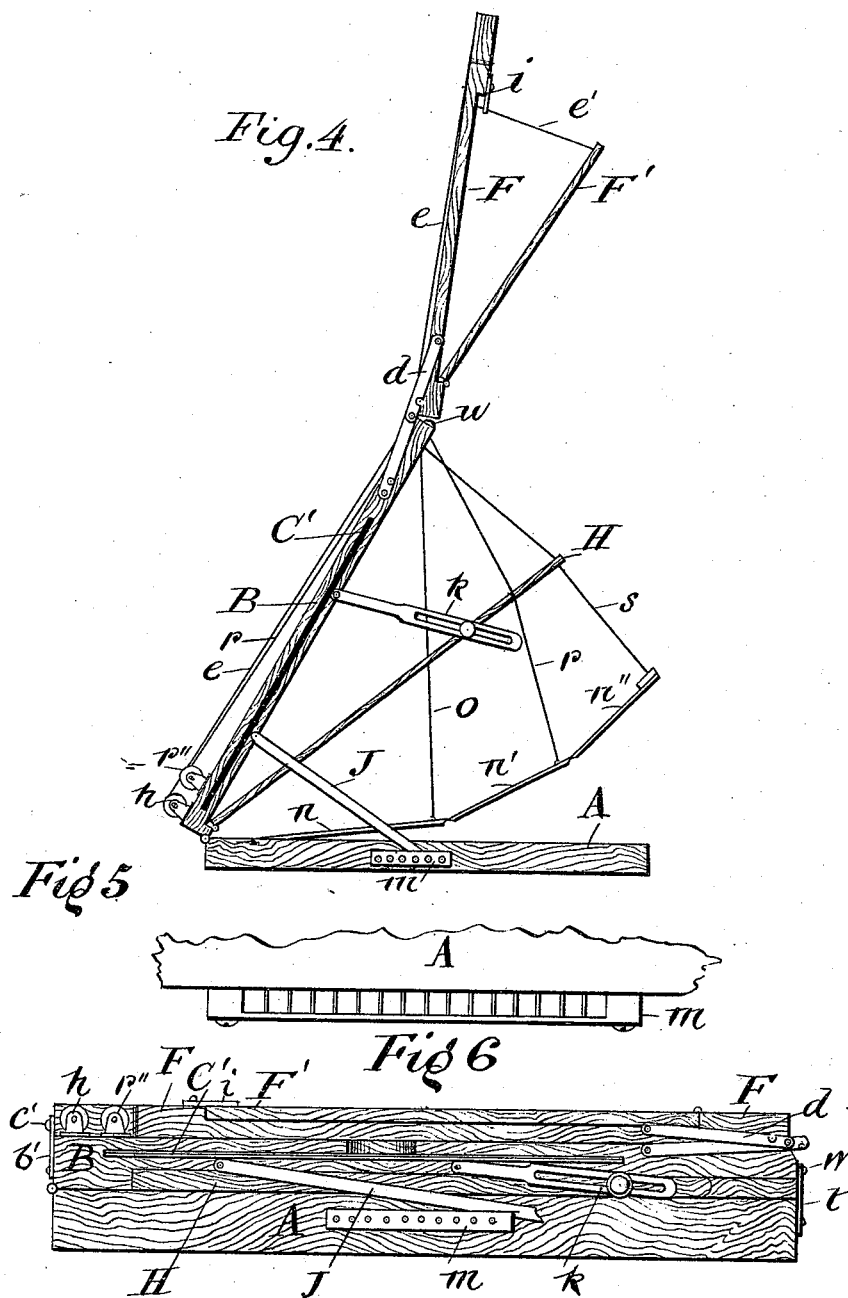
(No Model.)

2 Sheets—Sheet 2.

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# UNITED STATES PATENT OFFICE.

JOHN DEWÉ, OF LONDON, ENGLAND.

## PHOTOGRAPH-EXHIBITOR.

**SPECIFICATION** forming part of Letters Patent No. 492,149, dated February 21, 1893.

Application filed June 30, 1892. Serial No. 438,561. (No model.) Patented in England April 10, 1890, No. 5,436.

*To all whom it may concern:*

Be it known that I, JOHN DEWÉ, a subject of the Queen of Great Britain, residing at the Hotel Metropole, Northumberland Avenue, London, England, have invented certain new and useful Improvements in Connection with Photographs and Apparatus for Exhibiting the Same; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

The invention has been patented in England No. 5,436, April 10, 1890.

My invention relates, first to an improved apparatus for the exhibition of photographs and other pictures, the object of which is to impart thereto, a series of natural and realistic effects capable of being changed or varied indefinitely at the will of the operator. Secondly, of a manner of treating or preparing the photograph or other picture to be exhibited therein.

I will first describe the apparatus, and in order that the manner of constructing and operating the same may be clearly understood, I have appended hereunto drawings fully illustrating the same.

Figure 1, is a front view of the apparatus open as it would appear when in use or when ready for use. Fig. 2, is a back or reverse view of same. Fig. 3, is an enlarged sectional view of part of same taken upon the line A. B. Fig. 1. Fig. 4, is a side view of the apparatus as it would appear when viewed from the right to left of Fig. 1, or from left to right of Fig. 2. Fig. 5, is an enlarged view of the rack at the side of the apparatus employed for adjusting the more or less vertical position of the front frame when in use. Fig. 6, is an enlarged side view of the apparatus as it would appear when closed or not in use.

The apparatus consists of a rectangular hollow base or tray A, with which photographs or other pictures, and the smaller accessories of the apparatus may be packed when closed as at Fig. 6, to the front of which is hinged a rectangular frame B, the shape and size of which corresponds with that of A. The sides of B, are each provided with a longitudinal slot, in which are caused to slide shutters C,

C', the combined widths of which equal that of the width of B.

The sides of the frame B, are each provided between the outer face thereof and the shutters C, C', with an internal groove *a* which may if necessary extend in a downward direction to any distance required and upwardly as far as the upper cross stile of B, at which point the said grooves are curved in a more or less circular form and extend in a downward direction between the shutters C, C', and the back of B. A jointed horizontal shutter D, is caused to slide within the grooves *a* so that when the lower or front end is pushed upward the upper or pointed end passes along the curved part of *a* and descends at the back of B. This will be clearly understood by reference to Fig. 3, which is an enlarged sectional view taken upon so much of the line A. B. Fig. 1, as is necessary to render this part of the frame B, perfectly clear.

A sheet of perfectly clear white or crystal glass E, is mounted within the frame B, at the back of C, C', and D, and it will be easily understood that the sight or exposed surface of E, may be extended or diminished in width by the shutters C, C', and in height by the shutter D, as required.

To the upper surface of the frame B, is hinged a solid or perfectly opaque shade F, the dimensions of which coincide with that of B, and so hinged thereto as to be capable of folding down upon the outer face thereof when the apparatus is not in use, and retained so closed by any suitable means, which for convenience may be by that of hooks *b, b'*, on the lower stile of B, engaging with studs *c, c'* upon the upper edge of F, and when the apparatus is in use the said shade F, may be kept elevated by the means of a rule jointed stay *d*, or any suitable equivalent therefor.

To the back of F, is hinged a shade F' capable of closing or folding within the thickness of F, and rendered adjustable to any angle by the means of a cord *e'* one end of which is attached to F', and passes therefrom over a pulley or the like within a hole *f* in F, and under a guide *g*, to a milled headed roller *h* mounted upon the lower surface of the outer face of B. Upon the back of F' are two or

more vertical slides G, G' for extending either or both sides of F', as may be needed. The shade F' when shut up into F, may be retained in that position by buttons or the like

5 *i, i'* or any suitable equivalent therefor.

To the lower surface of the back of the frame B, is hinged a frame H, in which are loosely placed two sheets of glass *j*, both of which may be plain or crystal or one plain and the other ground as may be desired. The said frame H, is rendered adjustable to any angle by the means of a screw clamp *k* or any suitable equivalent therefor and the frame B, may be retained in an elevated position when the apparatus is in use by the means of legs J, pivoted thereto at each side, and engaging with racks *m*, fixed upon the outer surfaces of the sides of the base A, or by any other suitable means. The formation of these racks is shown more particularly by the enlarged view Fig. 5.

Within the base A, and occupying the width thereof, I provide an adjustable reflector or reflector holder, consisting of preferably, three pieces *n, n' n''* made of any light material, such as tin, cardboard, or very thin wood, and jointed together by any suitable means, so that they may be adjusted at any angle relatively to each other, or the base A. The piece *n* may be hinged to A, near to B, and the angle thereof adjusted by the means of a cord *o*, one end of which is connected thereto and extends therefrom in an upward direction through a pulley hole *p*, in B, and continues therefrom in a downward direction outside B, and is connected to a milled headed roller *p'* mounted upon the outer lower surface of B, as shown at Figs. 1, 2, and 4.

To the piece *n'* is connected a cord *r*, which extends upwardly therefrom over a recess or through a slot in the frame H, and through a pulley hole *r'* in B, and in a downward direction outside B, to a similar roller *r''* upon the frame B. The piece *n''* is similarly connected by a cord *s* which extends upwardly therefrom through a hole or slot in the frame H, and continuing on passes through a pulley hole *s'* in B, and downward to a roller *s''* also upon the face of B.

The construction of the apparatus will now be fully understood and the manner of operation is as follows: The photograph or other picture to be exhibited is rendered translucent by saturating the same in oil or melted spermaceti or other material and these when dry may be tinted upon certain parts of the back or front or both therefrom in order that the different lights may be rendered more or less prominent and effective and if the photograph or picture be that of a landscape or the like, I prefer to remove the sky therefrom leaving only the sharp outline of the picture. The picture so prepared is then placed upon the front of the glass E,

and the shutters C, C', and D, adjusted until the picture only or so much thereof as is required can be seen, when viewed from the front of the apparatus. The apparatus is then so placed that a strong natural or artificial light is brought to bear either directly or obliquely upon the back of the picture. The shade F, being to shade such light from the eyes of the observer. The shade F', with its slides G, and G', is then adjusted if necessary in order that the power of the light may be more or less moderated according to the effect needed, and by a suitable disposition of colored silvered, gilded or tinted papers or cards or other media laid upon any or all of the pieces *n, n' n''* these may be so angulated or adjusted that the light falling thereon may be reflected therefrom upon the back of the picture, and various and numerous effects thereby produced.

When the picture be that of a landscape, the sky part of which has been removed as before described, I may place between the glasses *j*, in the frame H, transparent papers or the like tinted or artistically painted to represent the sky previously removed, and by a suitable adjustment of the frame H, a marvelous perspective effect is produced which may be still further enhanced by a suitable adjustment of *n, n' n''* so that the light or shade may be reflected therefrom upon the back of the media placed between the glasses *j* or if *n, n' n''* be lowered and the frame F' depressed so as to partly obstruct the light various effects may be obtained too numerous to be particularized herein.

I may in some cases such for instance as when the picture is small or microscopic objects are being displayed, arrange a powerful lens mounted upon a suitable stand fixed to and in the front of A, through which the pictures and the various effects produced may be viewed.

The apparatus when not in use may be collapsed or folded by shutting H, up close to B, and fixing it by the clamps *k* shutting the shade F', up to F' and fixing it by the buttons *i, i'*. F may then be folded down upon the face of B, and retained there by the junction of *b, b'* with *c, c'*. The cords *s, r, o*, being slackened *n, n'* would fall into A, and *n''* be folded upon *n'*. The reflecting media and the pictures employed may then be packed upon the top of *n, n' n''* and by raising the legs J, from *m*, B would shut down upon A and may be thereto fastened by the means of a hook *t* upon A, engaging with a stud *u* upon the top of B, or by any other suitable means. The apparatus would then appear as at Fig. 6, and may be inclosed within a leather or other case or a handle or the like may be fixed upon H, by which the whole may be carried.

I prefer to construct the whole of the apparatus of wood with the exception of such parts as are glass as described, or necessarily

of metal, but with these exceptions I may construct the apparatus of any material suitable for the purpose.

Having now described my invention, what I claim is—

1. In combination, the base, the frame B hinged thereto, at its lower end and having a view opening, a series of shutters carried on the hinged frame for regulating the size of the view opening and the reflecting means, in rear of the hinged frame substantially as described.

2. In combination, the base, the frame B hinged thereto at its lower end and having a view opening the means extending from the base to the frame for adjustably holding the said frame, and the reflecting means in rear of the frame, consisting of the sections pivotally connected to each other, the lower section being pivoted to the base and the means for adjusting said sections, substantially as described.

3. In combination, the base, the frame B hinged thereto at its lower end and having a view opening, the reflecting means in rear thereof and the operating means therefor, consisting of the cords and pulleys, said cords extending from the rear, reflecting means to the front of the hinged frame substantially as described.

4. In combination, the base, the frame, hinged at its lower end thereto the means for adjustably holding the same, extending therefrom to the base the reflecting means in rear of the frame and the frame H intermediate of the reflectors and the frame B, said frame H having glasses *j*, substantially as described.

5. In combination, the base A, the frame B hinged thereto at its lower end, the means for holding the frame B, extending therefrom the base the shutters C C, carried on the hinged frame the said frame having a groove *a* and the flexible shutters D arranged in the said groove, substantially as described.

6. In combination, the base, the frame B pivotally carried thereby, the means for holding the frame adjustably extending therefrom to the base, the reflecting means in rear of the frame and the shade F pivoted at the upper edge of the hinged frame with means for adjusting the same, said shade having adjustable slides G G', substantially as described.

7. The apparatus herein described and shown consisting of a base or case A, with a frame B hinged thereto having a glass E and horizontal sliding shutters C, C', and vertical compound shutter D, sliding within grooves *a* with shade F, hinged to the upper surface of B, with jointed stay *d* and shade F' hinged to F, and carrying slides G, G', the frame H, hinged to B and carrying glasses *j* and adjusted by a screw clamp *k*, the pieces *n n'* hinged together and capable of folding within A, the stay or legs J engaging with racks *m* for retaining the elevation of B, the cords *e, o, r, s*, and by the milled headed reels *h, p' s''* and *p''*, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOHN DEWE.

Witnesses:

S. J. EARL,

GEO. THOS. HYDE.