(No Model.)

L. R. NAEF.

PHOTOGRAPHIC BACKGROUND.

No. 567,495. Patented Sept. 8, 1896.

Fig. 1.

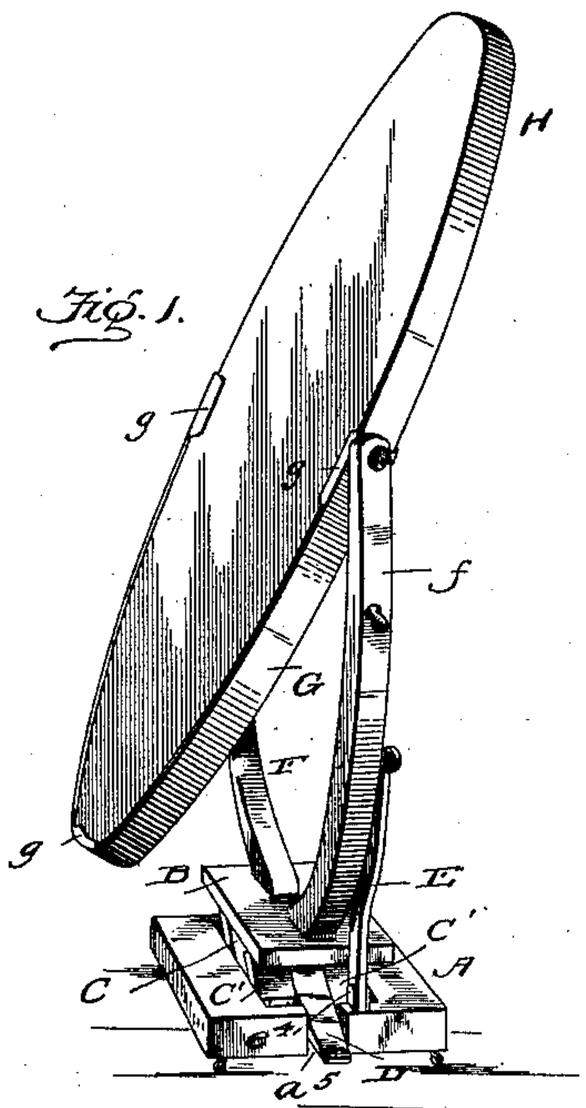


Fig. 2.

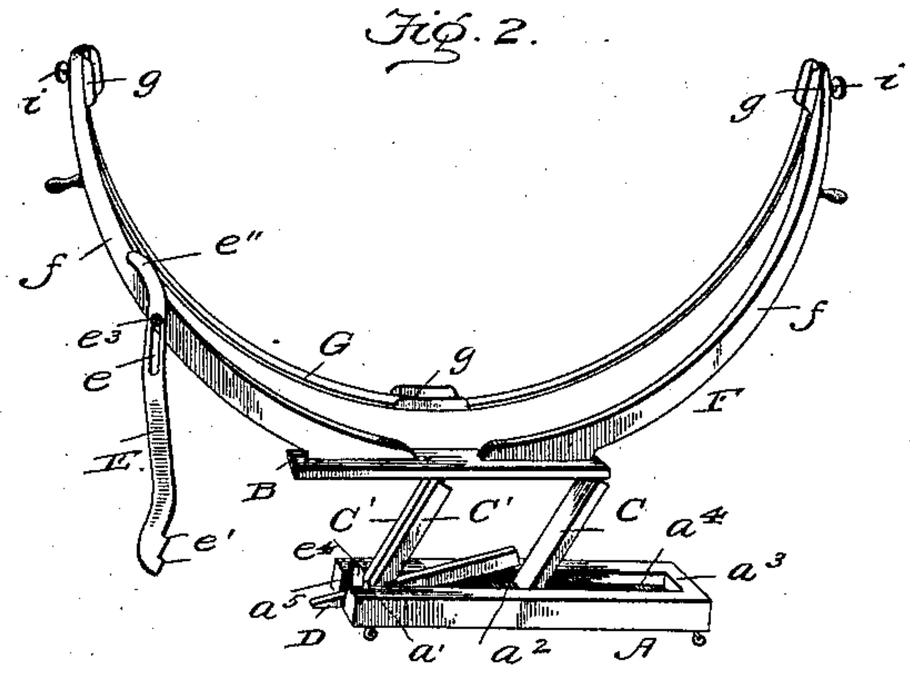
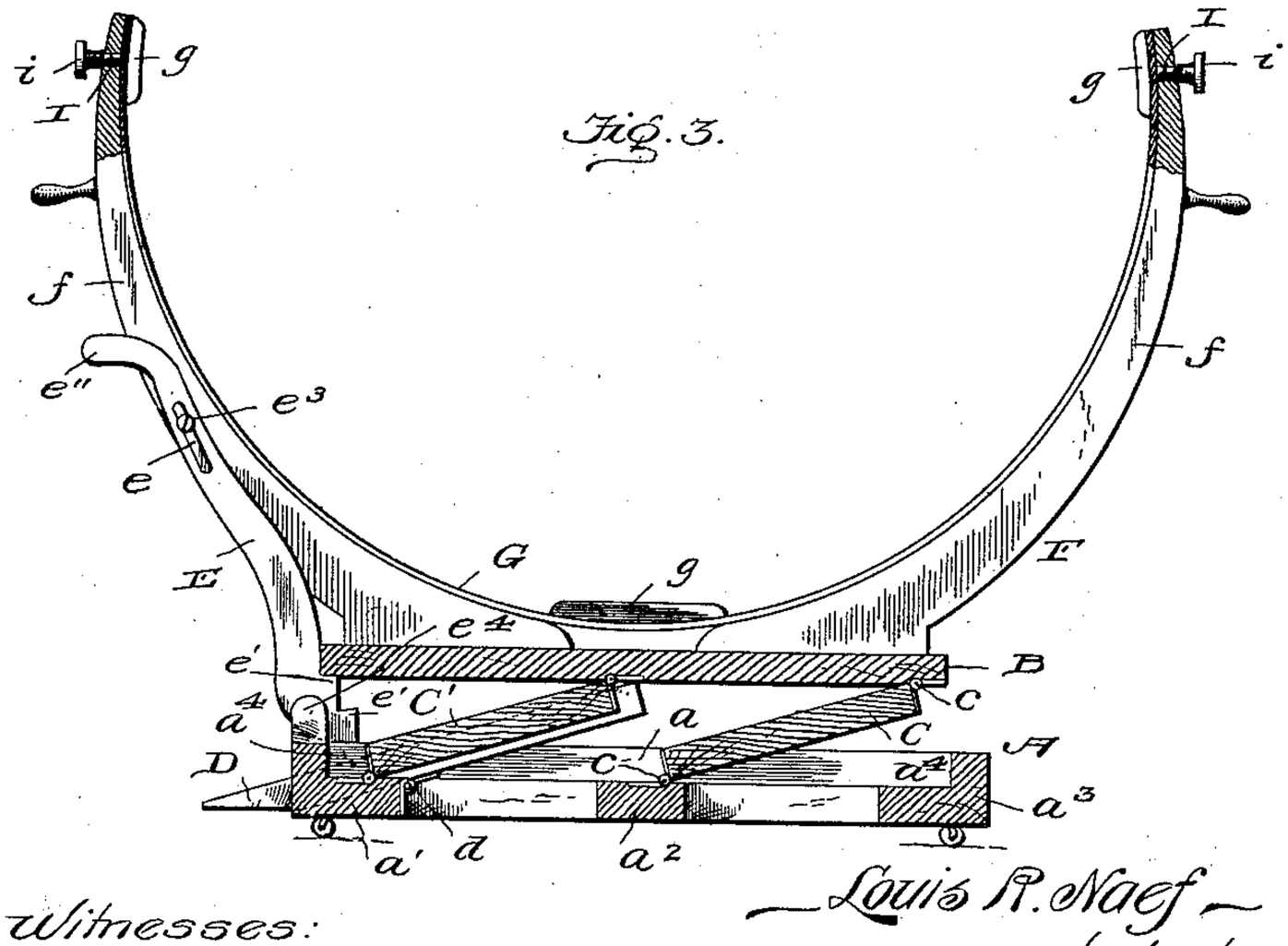


Fig. 3.



Witnesses:
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By Edson Bros.
Att'ys.

UNITED STATES PATENT OFFICE.

LOUIS R. NAEF, OF CONNEAUT, OHIO, ASSIGNOR OF ONE-HALF TO CHARLES S. PUTNAM, OF SAME PLACE.

PHOTOGRAPHIC BACKGROUND.

SPECIFICATION forming part of Letters Patent No. 567,495, dated September 8, 1896.

Application filed April 1, 1896. Serial No. 585,821. (No model.)

To all whom it may concern:

Be it known that I, LOUIS R. NAEF, a citizen of the United States, residing at Conneaut, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Photographers' Backgrounds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a background for photographers' use in which the background proper may be rotated or turned as upon an axis to bring different portions of its surface into position most desired by the operator, to enable the background to be tilted at the desired upright position so as to assume different angles to the horizon, and also to provide for the vertical bodily adjustment of the background, all of which adjustments of the device may be effected without interfering with each other.

To the accomplishment of these ends my invention consists of a disk-like background combined with an arc-shaped supporting-shoe provided or constructed to form a retainer or retainers, in which the disk-like background is edgewise seated or fitted in a manner to be retained therein, and also to adapt the background to be rotated or turned as upon an axis.

My invention further consists in the combination of a suitable frame, an arc-shaped shoe hung therein in a manner to adapt the shoe to swing or tilt to different inclined positions, and a background fitted or seated in said tiltable shoe.

The invention further consists in the combination of a platform on which the shoe and background are mounted or carried, a base having suitable cross-rails, bars, or leaves pivotally connected to said base and to the platform, a foot-lever hung in the base and adapted to raise the platform, and a suitable detent for holding the platform at the desired elevation; and the invention further consists in the novel combination of devices and in the construction and arrangement of parts, which will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective view of my photographic background. Fig. 2 is a similar view of the supporting and adjusting contrivances with the background proper omitted and showing the shoe swung or tilted. Fig. 3 is a sectional view taken longitudinally through the base and platform.

Like letters of reference denote corresponding parts in all the figures of the drawings.

A designates the base, which may be, and preferably is, mounted on rollers or casters, to render the structure portable and reversible, so as to be easily moved from place to place and to bring either side of the background into view. Said base comprises an open frame having the side bars *a a* and the cross-bars a' a^2 a^3, which are recessed or so constructed as to produce the seats a^4 and the notch a^5, whereby the leaves or bars that uphold the platform B may be folded down into the base A so as to rest flush with the side of the base and enable the platform B to rest flat and securely on top of the base.

The platform B is smaller than the top of the base, but it is arranged to lie over and conceal the bars C C′ C′ when the latter lie or fold down within the base. The bar or leaf C is quite wide, and it is hinged or pivotally connected, as at *c c*, to the platform B and the bar a^2 of the base. The other bars or leaves C′ C′ are spaced apart or arranged to produce an open space between them for the foot-lever D, and said bars or leaves C′ C′ are hinged or pivotally connected at their ends, as at c' c', to the platform B and the bar a^3 of the base, whereby the bars or leaves are made to sustain the platform in parallel relation to the base in all of its adjustments, and the bars or leaves are made to fold with the platform. The foot-lever D is hung or fulcrumed at an intermediate point of its length, as at *d*, and the lever is arranged to have its short arm project through the slot or recess a^5 of the base, while the long arm of the lever extends beneath the platform, as shown by Fig. 3. The lever D acts to lift the platform when

pressure is applied by the foot to its projecting short arm, thus making the device easy and convenient of adjustment. This platform is designed to be held at the desired elevation by a suitable retainer, and in the drawings I have illustrated one type of retainer which may be used. It consists of a long rod or bar E, slotted longitudinally at an intermediate point of its length, as at *e*, and provided at one end with a series of notches or spaced shoulders *e'* and at its other end with a suitable handle *e''*. This holding bar or rod is loosely attached to the frame of the structure by means of a headed pin or screw e^3, which is passed through the slot *e* and fastened in the frame. The free notched end of the holding-bar is adapted to be placed on the base A and between the vertical ears or lugs e^4, so that one edge of the platform B may rest in any one of the notches or shoulders of the series. The bar E is prevented from being displaced by the headed screw e^3 and the ears e^4, and said bar serves to hold the platform steadily in place. The platform carries the frame F, which, in the embodiment shown in the drawings, consists of the curved arms *f f*, which are rigidly fastened to the platform and rise upwardly therefrom to a suitable height.

G is the shoe, which is designed to carry the background H. This shoe is of arc-shaped form, or it may be called semicircular, and it is fitted within and between the curved arms which form the frame F. Said shoe is made of metal or other appropriate material, and it may be formed with a channel, recess, or otherwise constructed to produce a seat for the background H. The background which I prefer to use is of circular or disk-like form, and it is fitted or seated edgewise in the seat provided for its reception in the shoe G. The background consists of a circular frame and two coverings or facings stretched over and secured to the frame. I prefer to make one side of the background dark and the other side light, and either side of the background may be brought into use by reversing the structure, the base of which is mounted on rollers or casters for convenient reversal.

In the drawings I have shown the shoe as consisting of a piece of length of appropriate metal, having bent-up flanges which form the seats *g g* for the edge of the disk-like background, but the detailed construction of the shoe is not material.

In posing the person or sitter it is frequently desirable to tilt the background in order to throw the light to the best advantage on the person's features, and in my improved structure I provide for the tilting of the background by hanging the arc-shaped shoe within the frame A. This shoe G is pivoted to the frame F by means of the threaded bolts I I, which pass through the ends of the shoe and the upper extremities of the arms *f*, and on the outer ends of said bolts are fitted the thumb-nuts *i i*, which may be easily tightened to hold the shoe in its adjusted position. It will be seen that the shoe G, and with it the background H, may easily be tilted either to the right or left of the supporting-frame, and be thereby caused to assume different angular positions relative to the horizontal line of the base and platform, after which the shoe may be held firmly in place by tightening the thumb-nuts. By making the shoe arc-shaped in form and employing a disk-like background which is seated edgewise in the shoe, the background may be rotated or turned in the shoe as upon an axis in order to bring the background to the position most preferred by the operator. It is evident that different scenic effects may be painted or otherwise applied to the background.

From the foregoing description, taken in connection with the drawings, it will be noted that my improved structure secures three several adjustments, either of which may be had without affecting the others. The shoe may be tilted or swung back or forth to incline the background without disturbing the position thereof within the shoe or without changing the platform. The background itselfmay be turned within the shoe and not affect its angular or vertical position; and the platform may be raised or lowered without affecting the shoe or the background.

My invention provides for the various adjustments and requirements of a photographer in posing the poser by a simple and inexpensive structure which can be adjusted with great precision and ease.

My invention is distinguished from adjustable shades or reflectors used by photographers to throw or reflect the light on the features of the sitter or person whose photograph is to be taken in that the part G is made of large size to constitute the background proper for the picture, while the shoe and the frame for supporting the shoe and background are made of sufficient size to maintain and support the background steadily in place while insuring the necessary adjustments of said background G in planes inclined to the vertical axis of the supporting frame or base, or in vertical alinement with the same, or to permit the background to be rotated within the shoe and without requiring the shoe to be changed or adjusted.

I am aware that it is not new to provide a photographer's head screen or reflector in which is combined a standard, an arm coupled by a universal joint to the standard and adjustable to different inclined positions relative to the vertical axis of the standard, and a shade or reflector having a hoop-like frame clamped to the free end of said arm and said hoop-like frame held in said clamp, so as to be adjusted therein in a plane at an angle to the axis of the arm.

It is evident that changes in the form and proportion of parts and in the details of construction of the devices herein shown and de-

scribed as the preferred embodiment of my invention can be made by a skilled mechanic without departing from the spirit or sacrificing the advantages of my invention, and I therefore reserve the right to make such modifications and alterations as fairly fall within the scope thereof.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a supporting-frame, of a shoe carried by the frame, and a background, proper, seated edgewise in the shoe, as and for the purposes described.

2. The combination of an arc-shaped shoe provided with the seat or seats, and a disk-like background fitted edgewise in the seat of said shoe and capable of turning therein, substantially as and for the purposes described.

3. The combination with a suitable frame, of a tiltable arc-shaped shoe hung within said frame, and a background seated edgewise in said shoe, as and for the purpose described.

4. The combination of a suitable frame, a tiltable arc-shaped shoe having a seat or seats, the pivotal bolts having clamping devices for suspending and holding the shoe, and a background seated in the shoe, substantially as and for the purposes described.

5. The combination with a base, of a vertically-adjustable platform carried by said base, a shoe mounted on supports carried by the platform, and a background seated in the shoe, as and for the purposes described.

6. The combination with a base, of a vertically-adjustable platform carrying a background, leaves or bars connecting said platform and base, means for raising the platform, and a retainer for holding the platform at the desired elevation, as and for the purposes described.

7. The combination of a recessed base, a vertically-adjustable platform carrying a background, leaves or bars hinged to the platform and to the base and adapted to fold into the latter when the platform is lowered, a foot-lever for raising the platform, and a retainer to hold the platform at the desired elevation, as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS R. NAEF.

Witnesses:
HENRY E. COOPER,
H. I. BERNHARD.