June 6, 1939. L. G. SIMJIAN 2,161,262

POSE REFLECTING APPARATUS

Filed July 30, 1936

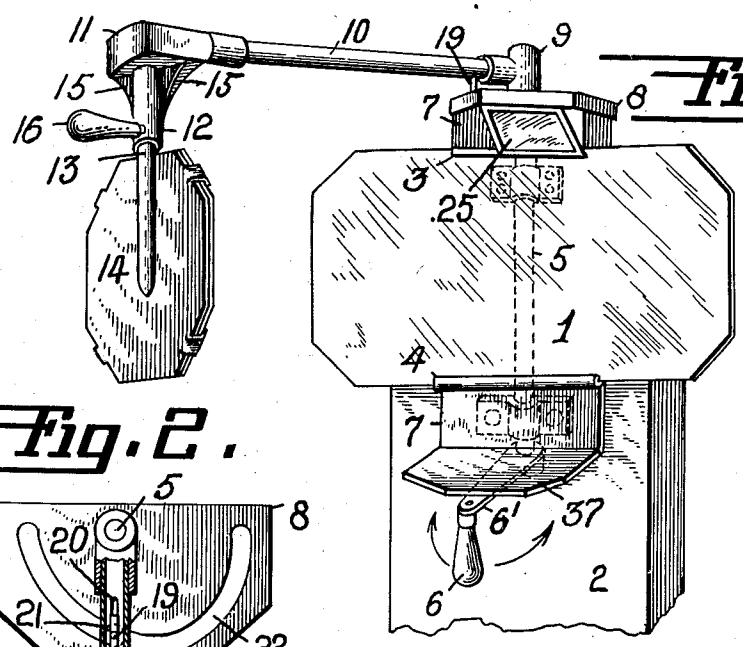


Fig. 1.

Fig. 2.

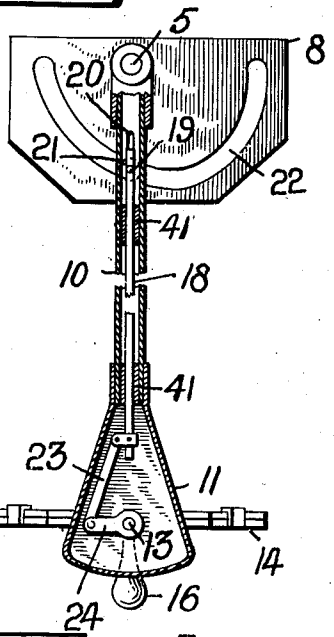


Fig. 3.

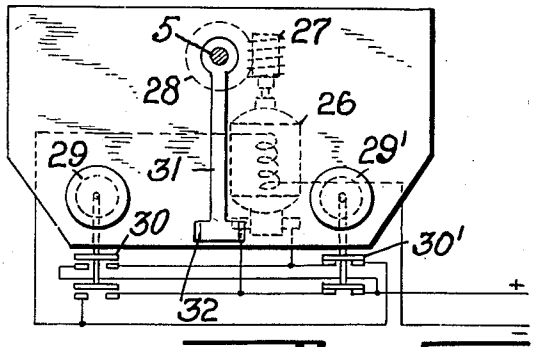


Fig. 4.

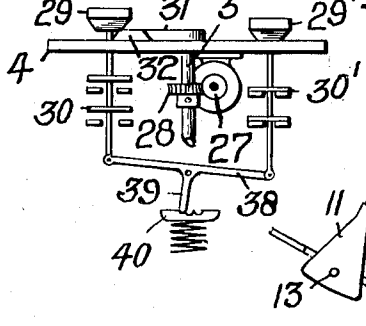


Fig. 6.

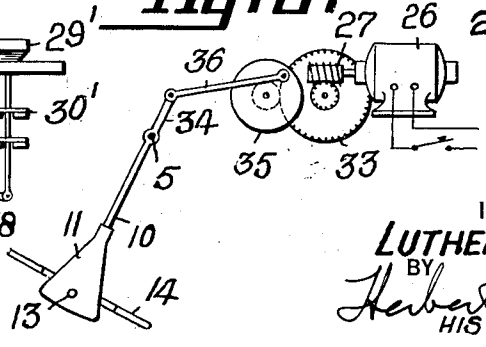
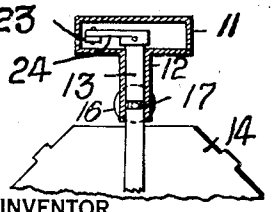


Fig. 5.



INVENTOR
LUTHER G. SIMJIAN
BY
Herbert H. Thompson
HIS ATTORNEY

Patented June 6, 1939

2,161,262

UNITED STATES PATENT OFFICE

2,161,262

POSE REFLECTING APPARATUS

Luther G. Simjian, New Haven, Conn., assignor to Reflectone Corporation, New Haven, Conn., a corporation of Delaware

Application July 30, 1936, Serial No. 93,343

4 Claims. (Cl. 88—84)

This invention relates to pose reflecting apparatus especially adapted for beauty parlors or millinery and dress shops.

One object of my invention is to devise a very simple system of mirrors whereby the poser may obtain, without moving, a full face view and complete side and rear views of the head simply by turning a small handle, pressing a button, or other simple manual operation.

A further object is to simplify apparatus of this character to reduce the cost and improve the appearance to make it available for beauty parlors, barber shops, modiste shops, etc.

Other objects of the invention will become apparent from the appended claims and from the following description of some of the structural forms my invention may assume, but it will be understood that this description is illustrative only, and that the scope of my invention is limited only by the scope of the claims.

Referring to the drawing:

Fig. 1 is a perspective view of one form of my pose reflecting apparatus.

Fig. 2 is a plan view, partly in section, of the same.

Fig. 3 is a horizontal sectional view, partly in diagrammatic form, showing a modified form of the invention, with the wiring.

Fig. 4 is a detailed front elevation of the form in Fig. 3, showing the operating switches.

Fig. 5 is a detailed vertical sectional view showing the connecting means between the auxiliary mirror and swinging arm.

Fig. 6 is a diagrammatic view of a still further modification in the mirror actuating mechanism.

My reflecting system consists essentially of a main mirror 1 mounted in front of the poser as by means of a post 2. In its simplest form, this mirror may be fixed in top and bottom brackets 3 and 4 on a back plate 7. Behind the mirror, I journal a vertical shaft 5 which may be rotated by a small handle 6 extending in front of the mirror so as to be readily grasped by the poser, or in some other accessible position. A shelf 37 is shown extending outwardly from back plate 7 to conceal crank arm 6' which connects handle 6 and shaft 5, the shelf forming a convenient place to place milady's toilet articles. Said shaft extends above the mirror and back plate and above a horizontally extending top plate 8 thereon, and has secured thereto adjacent its top a T or elbow pipe joint 9 which supports a horizontally disposed hollow arm or pipe 10. At its outer end I have shown a housing 11 secured to said pipe and having a downwardly extending sleeve 12 forming a bearing for a vertical shaft 13 carrying an auxiliary or secondary mirror 14, preferably of less size than the primary mirror. Part 12 is shown as reinforced by ribs 15 and as having a set screw and handle 16 mounted therein to slidably engage a groove 17 in shaft 13 to prevent the mirror from falling out of sleeve 12 and at the same time to permit it to be removed at will by unscrewing the screw. Handle 16 is for the attendant's use.

I also provide means to automatically position the mirror 14 about the axis of shaft 13 as it is revolved by handle 6, so that it is always in the correct position so that the image of the poser therein may be seen in mirror 1 by double reflection and without the poser shifting her position from a central posing area. To this end, I slidably mount in bushings 41 within tube 10, a rod 18. At its inner end, said rod is provided with a downwardly extending pin 19 extending through a slot 20 in the tube and having a roller 21 at its lower end engaging a slot or trackway 22 formed in top plate 8. Said slot is of generally spiral shape, being so designed with reference to the link 23 and crank 24, which connect the other end of rod 18 to shaft 13, as to keep facing angle of mirror 14 at the proper angle as it is revolved with arm 10 for the poser to obtain complete views of the back of the head on both sides without shifting her position. The ends of said slot may act as stops to limit the extent of movement of said mirror. If desired, a lamp may be installed above ground glass screen 25 to illuminate the features of the poser.

I may, of course, provide a power device, such as an electric motor, to assist the poser in turning the auxiliary mirror. In Fig. 3 I have shown a simple arrangement for this purpose. In this figure, shaft 5 is shown as turned from an electric motor 26 by worm 27 and worm wheel 28. The direction of rotation of the motor may be controlled by push buttons 29, 29' operating reversing switches 30, 30' to run the motor in either direction desired. A limit switch device is provided to prevent the mirror 14 from being revolved through more than the limiting angle in either direction. This may be effected by providing an arm 31 on shaft 5, having camming surfaces 32 thereon which lift whichever button 29, 29' is down when arm 31 turns that far. Pivoted lever 38 may be provided to prevent both buttons being pressed down at the same time. In its central position, both buttons are open with finger 39 in the central notch of spring pressed plate 40, but when either button 29 or

29′ is depressed to close one contact, the other is raised further and cannot be closed without opening the first button.

A similar result may also be accomplished by permitting motor 26 to run and placing oscillatory mechanism between the motor and shaft 5 (Fig. 6). To this end, the worm 27 on the motor shaft is shown as driving a crank arm 35 through reduction gearing 33, which is linked to a crank 34 extending rearwardly from shaft 5 through connecting rod 36 so as to oscillate arm 10 with mirror 14, as before, through a predetermined angle.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. In a pose reflecting device, a primary mirror which the poser normally faces, a secondary mirror, means for revolvably mounting the latter for orientation behind the poser, manually operable means for revolving said secondary mirror, and a mechanical connection between said manually operable means and said secondary mirror, said mechanical connection including means for rotating said secondary mirror about a second axis as it is oriented behind the poser, whereby the poser's image reflected therefrom remains visible in the primary mirror, said manually operable means being movable between the planes of said mirrors and below the poser's reflected image in said primary mirror so as not to obstruct such reflected image therein.

2. In a pose reflecting device, a primary mirror which the poser normally faces, a secondary mirror, means for revolvably mounting the latter to be oriented behind the poser, including a vertical shaft behind said primary mirror, a member actuated by said shaft and projecting therefrom above said primary mirror, operating means connected to said shaft and projecting toward the poser for use in revolving said secondary mirror, said secondary mirror being pivotally connected to the outer end portion of said member, a cam device adjacent said member, and connecting means actuated by said cam device as said member is revolved for rotating said secondary mirror about its pivotal connection with said member for the purpose specified.

3. In a pose reflecting apparatus, the combination of two mirrors spaced apart, one of which is a collecting mirror having a broad scope of reflecting surface, a pivotally mounted arm radiating from a line intersecting the approximate center of said collecting mirror, said arm being hollow and pivotally supporting said second mirror, means adjacent said collecting mirror for automatically swinging said arm, means for automatically limiting the swinging movement of said arm, a cam and cam pin arrangement relatively revolved by said arm, and linkage mechanism enclosed within said arm for rotating said second mirror from said arrangement as said arm revolves for the purpose specified.

4. A pose-reflecting device, including in combination: a pair of substantially oppositely-facing vertical mirrors spaced from each other to provide between them a central posing-area for the accommodation of a poser and each facing toward the said central posing-area, one of the said pair of mirrors being movable relative to the other of said mirrors and around a portion of the said central posing-area; swinging mirror-carrying means extending over the posing-area referred to and constructed and arranged to guide the said movable mirror in its movement with respect to the said central posing-area and the other of said mirrors along a path in which a substantially-horizontal pose-reflecting light-path is maintained from the said central posing-area to one of the said mirrors, thence to the other of said mirrors and from the latter back to the said central posing-area for observation at eye-level by the poser therein as the said movable mirror is moved in either direction from its intermediate position; rigid supporting-means for the said swinging mirror-carrying means; manually-operable control-means for effecting the described movement of the said movable mirror and located below the plane of the substantially-horizontal pose-reflecting light-path between the eye-level of the poser and the two said mirrors; and a connecting-mechanism extending from the said manually-operable control-means below the light-path, to the said mirror-carrying means above the light-path and causing the said manually-operable control-means to effect the shifting of the said swinging mirror-carrying means and the movable mirror carried thereby.

LUTHER G. SIMJIAN.