

(No Model.)

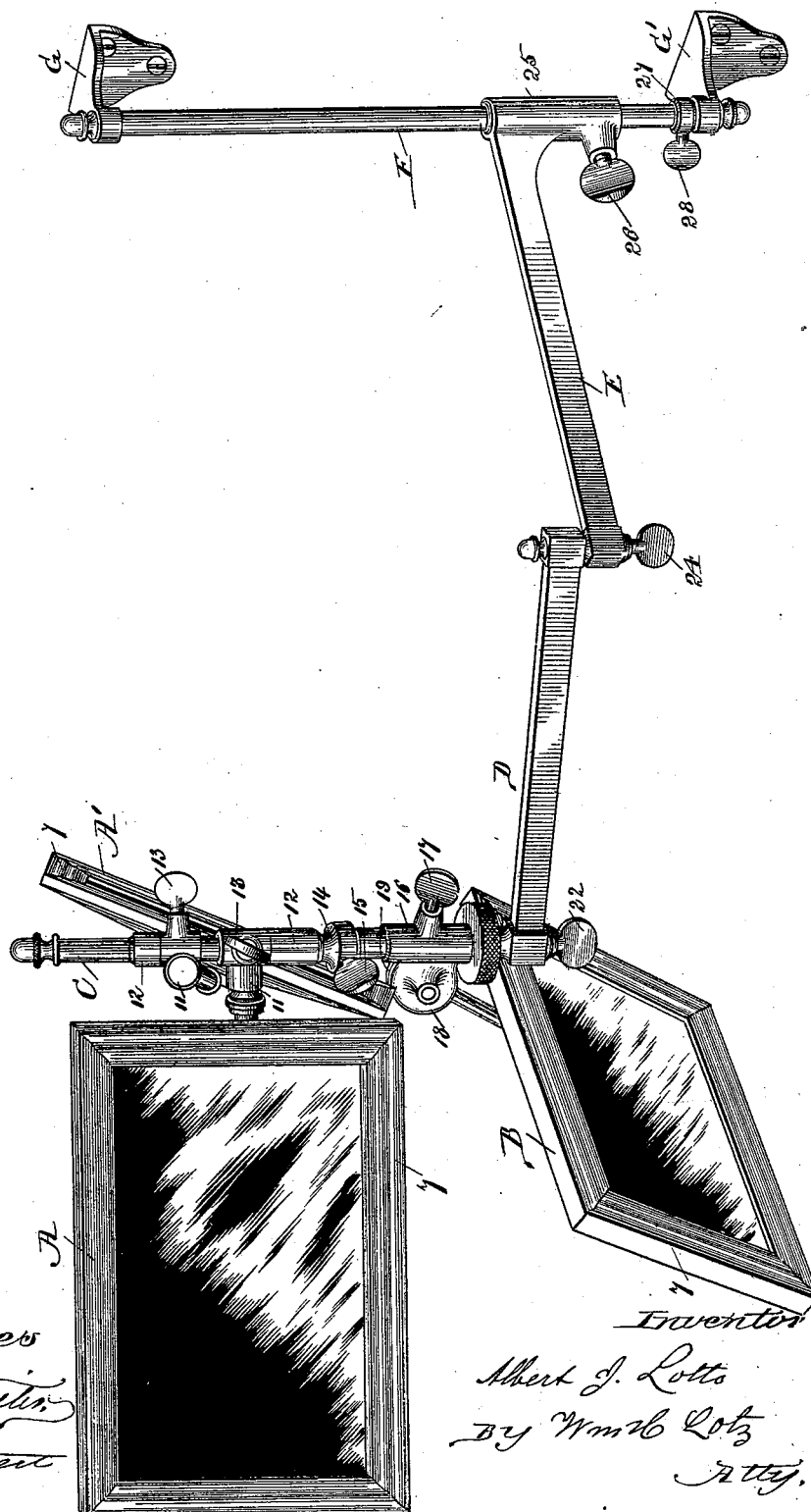
2 Sheets—Sheet 1.

A. J. LOTTO.  
WINDOW MIRROR.

No. 423,434.

Patented Mar. 18, 1890.

*Fig. 1.*



Witnesses  
*W. P. Smith*  
*Chas. D. Smith*

Inventor  
*Albert J. Lotto*  
By *Wm. B. Lotz*  
*Att'y.*

(No Model.)

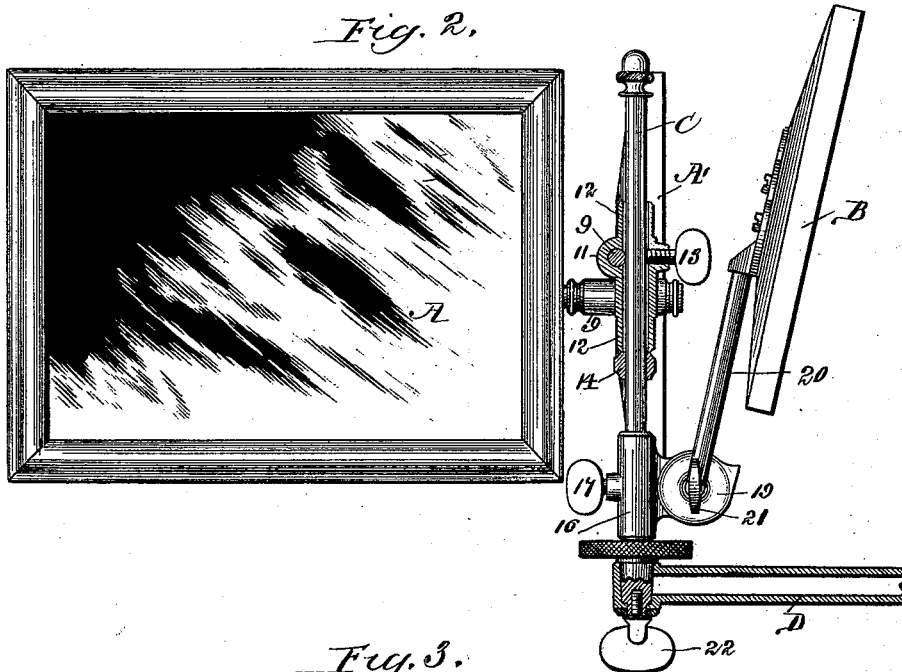
2 Sheets—Sheet 2.

A. J. LOTTO.  
WINDOW MIRROR.

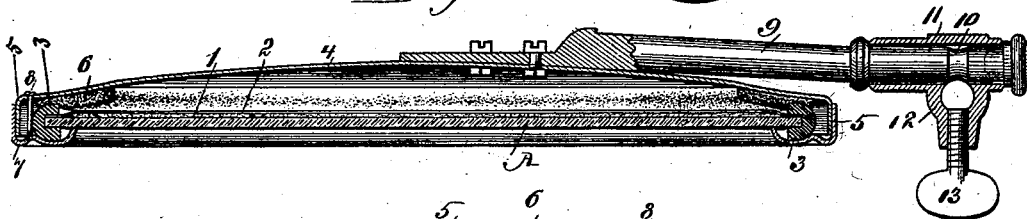
No. 423,434.

Patented Mar. 18, 1890.

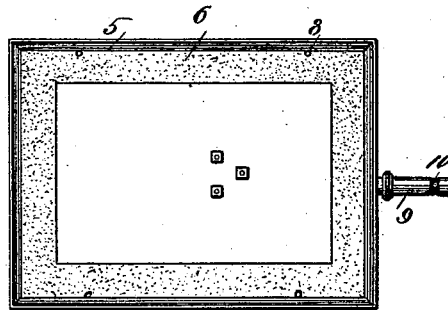
*Fig. 2.*



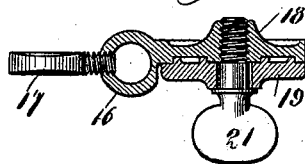
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses  
*W. Rossiter*  
*Otto Lubbert*

Inventor  
*Albert J. Lotto*  
By *Wm. C. Lotz*  
Atty.

# UNITED STATES PATENT OFFICE.

ALBERT J. LOTTO, OF CHICAGO, ILLINOIS.

## WINDOW-MIRROR.

SPECIFICATION forming part of Letters Patent No. 423,434, dated March 18, 1890.

Application filed June 7, 1889. Serial No. 313,523. (No model.)

*To all-whom it may concern:*

Be it known that I, ALBERT J. LOTTO, a subject of the Emperor of Germany, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window-Mirrors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to mirrors fixed outside of the windows of dwelling-houses and adjustably arranged that a person in the room can see all that transpires on the street or people approaching the house; and it is my object to provide such a mirror or combination of mirrors attached to a flexible bracket and arranged for universal adjustment in a ready manner, and also in devices for insulating such mirrors, so as not to be affected by the changes of the outdoor atmosphere; and with these objects in view my invention consists of the novel devices and combinations of devices hereinafter described and specifically claimed.

In the accompanying drawings, Figure 1 represents a perspective view of the device complete and as attached and adjusted for immediate use; Fig. 2, a sectional elevation of the mirrors and adjusting devices; Fig. 3, a section through one of the mirrors and frames, showing the manner of insulating and adjusting; Fig. 4, an interior elevation of the mirror-back frame, and Fig. 5 a section of the adjusting device for the downwardly-deflecting mirror.

Corresponding referential characters in the several figures of the drawings designate like parts.

A and A' are mirrors to be adjusted diagonally for deflecting sidewise of the building up and down the street, and B is a mirror to be adjusted to deflect vertically downward for showing the images of persons entering the house. These mirrors are adjustably connected to a standard C, secured upon the end of an arm-section D, pivotally connected with another arm-section E, both combined forming a flexible arm, and the inward end of arm E is sleeved upon a vertical rod F, fixed between brackets G and G', that are to be secured by wood-screws against the exterior frame of the window.

Each mirror A and B is covered on its silver-coated face with a thin sheet of fabric 1, this being covered again with sheet-rubber 2, the edges of which are covered by a semi-tubular ring of rubber 3, stretched over the edges of the mirror.

The back frame for each mirror A and B consists of a sheet-metal plate 4, concaved and provided with a projecting rim edge 5, inside of which the plate 4 is lined with flannel strips 6, against which the rubber edge covering 3 of the mirror will rest while being secured by a sheet-metal molding 7, closely fitting over the rim edge 5 of plate 4, and lapping over the rubber edge covering 3, to be secured by a series of screws 8, so as to be easily taken apart for inserting a new mirror in case of breakage.

Each plate 4 of mirror-frames A A' is secured by screws to an arm 9, having near its end a segmental annular groove 10, where it is inclosed by a sleeve 11, that again has formed integral therewith at one side thereof another sleeve 12, that is fitted upon standard C, which also engages the groove 10 in arm 9, both sleeves 11 and 12 being at right angles to each other and sleeve 12 having a boss tapped for a thumb-screw 13, that with tightening will not only secure the sleeve 12 to standard C, but at the same time will draw the arm 9 against the standard C to hold the same rigid on the adjusted position. The sleeves 12 of both mirrors A and A' thus being placed upon standard C, one on top of the other, they are supported, while thumb-screws 13 are loosened for adjustment, by a loose collar 14, fitted upon standard C and adjustably secured by a thumb-screw 15. Below loose collar 14 is fitted upon standard C a sleeve 16, having a boss tapped for a thumb-screw 17, by which to fix it adjustably to such standard C, and diametrically opposite to this thumb-screw 17 the sleeve 16 has a disk-shaped extension 18, with an annular recess to provide a bearing for the disk-shaped end 19 of arm 20, that is secured with its opposite end to the frame back plate of mirror B, both disks being adjustably secured one upon the other, so as to hold the mirror B on any angular position by a thumb-screw 21, passed through the central eye of disk 19 and tapped into disk 18.

With this construction, as will be seen, the several mirrors by simple means cannot only be adjusted on standard C vertically to the desired elevation and to the desired horizontally-angular position, but also vertically to any angular position for the desired direction of the points of observation.

The standard C is pivotally secured in the end socket of arm D, so it can be turned therein to swing simultaneously all the mirrors attached to standard C, which then can be rigidly secured by a thumb-screw 22, tapped into the end of such standard C and passed through a washer 23 below the end socket of arm D. The arms D and E are pivotally connected with their ends in the manner of double-armed-bracket gas-fixtures to be rigidly secured by a thumb-screw 24 for adjustably holding the same in any desired relative angular position. The end sleeve 25 of arm E is fitted to slide upon vertical rod F, that is rigidly fixed to the window-frame by brackets G and G', and for holding it vertically and angularly on any desired position it is provided with a thumb-screw 26, tapped through a boss of such sleeve 25. A loose collar 27, also fitted upon rod F and provided with a thumb-screw 28, is for supporting the arm E in its elevated position while the thumb-screw 26 is loosened for angular adjustment of such arm.

The window-mirror thus provided with three mirrors universally adjustable in all directions and insulated to resist the changes of the weather is adapted for all positions and to all climates.

What I claim is—

1. The mirror-plate covered on its silvered back first with a sheet of woven fabric and then with a sheet of rubber and surrounded

on its edges by a semi-tubular rubber overlapping the edges of the rubber sheet, and the whole inclosed in a metal frame, only exposing the reflecting-face of such mirror, substantially as and for the purpose set forth.

2. The combination, with the mirror-plate A or B, covered on its silvered back first with a sheet of woven fabric and then with a sheet of rubber and surrounded on its edges by a semi-tubular rubber overlapping the edges of the rubber sheet, of a metal frame inclosing the mirror-plate thus insulated, and consisting of back 4, with rim 5 and lined with flannel strips 6, and of molding 7, secured to rim 5 and overlapping the edges of the reflecting-face of the mirror, substantially as set forth.

3. The combination of arm D, standard C, secured thereto, sleeves 12, having sleeve-sockets 11 and fitted upon said standard, and provided with a thumb-screw 13, whereby they may be secured in vertical adjustment, and the mirrors A A', provided with arms 9, fitting said sleeves or sockets 11, substantially as described.

4. The combination of arm D, standard C, secured thereto, sleeve 16, fitted upon said standard and provided with thumb-screw 17, whereby it may be secured in vertical adjustment, and having disk 18, and the mirror B, provided with arm 20, having disk 19, fitted upon disk 18, and thumb-screw 21, whereby the mirror B may be secured in angular adjustment, substantially as described.

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

ALBERT J. LOTTO.

Witnesses:

WM. H. LOTZ,  
OTTO LUBKERT.