D. J. KENNEDY.

Window-Mirror.

No. 165,738. Patented July 20, 1875.

Fig. 1.

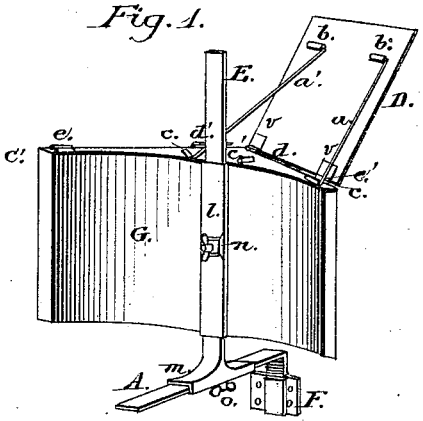


Fig. 2.

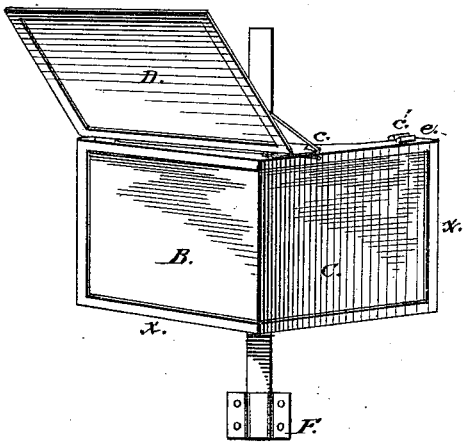


Fig. 3.

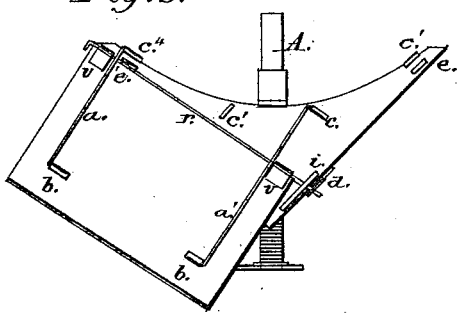
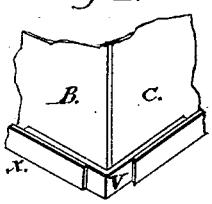


Fig. 4.



Witnesses:

Paul Dyer

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Inventor:

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UNITED STATES PATENT OFFICE.

DAVID J. KENNEDY, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN WINDOW-MIRRORS.

Specification forming part of Letters Patent No. **165,738**, dated July 20, 1875; application filed June 23, 1875.

To all whom it may concern:

Be it known that I, DAVID J. KENNEDY, of Philadelphia, Pennsylvania, have invented an Improvement in Window-Mirrors, of which the following is a specification:

In the accompanying drawings, forming part of this specification, in which like letters represent like parts, Figure 1 is a rear perspective view; Fig. 2, a front perspective view; Fig. 3, a top view, and Fig. 4 a view of the mirror-lock.

The purpose of this invention is to suspend outside of a window in a dwelling a number of mirrors, disposed at such angles of inclination that they will reflect objects upon the sidewalk below, so as to bring them within the vision of a person inside of the building. By this device objects approaching the building from either direction, and while directly in front of it, may be observed by a person within the building without self-exposure.

Devices of this class have long been in use, but they have been so constructed that their range of usefulness has been confined by their limited adjustments, which have impaired their utility and prevented their general adoption.

By my invention is provided a simple and inexpensive mirror, having means for its adjustment both vertically and horizontally, as well as means for varying the angle of deflection of the upper mirror, which reflects the objects beneath the window, thus providing a mirror adapted to be used in connection with the windows of any building, no matter what the depth of their boundary-walls may be, nor what the relation of the entrance-door is to said windows, whereby the position of any object near to or approaching the building may be readily seen without exposing one's person.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

The body or frame G is formed from sheet-metal plates, so shaped and united as to present two planes at right angles, or nearly so, to each other, which planes or surfaces are provided with edge-laps or bearers *x*, which form supports for the glass reflectors B C. This mode of securing the mirrors is similar to that practiced in holding glass plates in metallic lamp and lantern frames, but obviously may be changed as expediency may require. In Fig. 4 one mode of holding the plates B C in proper position is shown, where a right-angular key, V, serves this purpose. The back-piece, which unites the top and bottom by the seams usual in working sheet metal, is shown to be curved, thus providing a sufficient brace for strength, and at the same time furnishing an ornamental finish. The precise shape of the frame G, the mode of uniting its parts, and its material of construction, may be varied without departing from the invention. It may thus be made of wire or of wood, though I prefer the form and material described, as combining cheapness, strength, and utility. A vertical socket, *l*, formed by soldering or riveting a flat metallic tube to the body G, provides a means for holding the mirror-frame upon its supporting-rod E, upon which it is adjustable to fixed positions by the set-screw *n*. This rod E slides upon a brace or arm, A, through which a set-screw, *o*, extends to receive it longitudinally thereon. The brace A is secured to the window sill or frame by any well-known means. I have shown a socket-piece, F, for this purpose, which is to be permanently attached to the window-frame, into which a right-angular bend of the brace A is adapted to enter. The mirror-frame G is thus provided with means for moving it into a position sufficiently distant from the window-frame to clear the walls of the building, or provide for its including within the range of its angle of inclination a large or small extent of the sidewalk or street, or both. By its vertical adjustment it may be positioned to accommodate the observer whether seated or standing, thus being adapted for use by any person, no matter what may be their height or position of observation. Surmounting the frame G a mirror, D, is supported upon a hinge-joint by braces or rods *a a'*, so as to incline at any angle which shall cause it to reflect objects directly beneath it, or angularly beneath it, as at an entrance-door. To this end its hinge is formed by a rod, *r*, which passes through the eyes *v v* on its base-line, and is held at one end in an eye or socket, *e'*, and at the other under a strap, *i*. Its angle of inclination, relative to the

horizontal position of the frame G, is fixed by the wire braces *a a'*, whose right-angular ends, which enter the eyes *b b c c*, may be bent at will, so as to shorten or lengthen the brace, as may be desired. When the angular position of the top mirror is to be varied relatively to the vertical plane of the main reflector, as shown in Fig. 2, the rod *r* is moved forward or back under its holding-strap *i* until the required angle is produced, in which position it is held by a spring-arm, *d*, fastened to the frame G, which overlies its projecting end. Thus the upper mirror may be readily adjusted to reflect objects entering or standing before the door of the building. A second set of the devices for supporting the upper mirror are provided, so that it may be adjusted over either of the main mirrors, whereby the device is adapted to be used upon any building without regard to the relation of the entrance-door to the windows thereof.

What I claim is—

1. A window-mirror having a supporting-arm, A, for its attachment to the window-frame, upon which the mirror-frame is adjustable horizontally to and from the window, substantially as described.

2. A window-mirror having reflectors diverging outwardly to reflect objects approaching from a distance in either direction, and a single detachable reflector, adapted to be adjusted over either horizontal mirror to reflect objects beneath it, all substantially as described.

3. A window-mirror having horizontal reflectors B C, surmounted by a reflector, D, whose angle of deflection is changeable by means of stay-rods or braces *a a'* and holding eyes *b b c c*, substantially as described.

4. A window-mirror whose upper reflector is adjustable in horizontal and vertical angles with relation to the main reflector, substantially as described.

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Witnesses:

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