SHADE MOUNTING FOR OUTSWINGING WINDOWS

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In general, my invention relates to outswinging window assemblies and more particularly to a shade mounting whereby the conventional shade may be used either as a window shade, or as an awning when the window is swung to open position.

One of the objects of the invention is to provide an integrated window unit construction having means for mounting conventional shades and in such manner that they will be out of sight and protected from dust and moisture when not in use.

Another object is to provide a window construction including windows of the outswinging type and provide means whereby the usual window shade may be utilized as a free swinging adjustable shade for controlling light in the conventional manner, or detachably connected to the outswinging window to serve as an awning when the window is swung outwardly and is held in such position, or as an insulator in cold weather to prevent circulation of air between the window and the drawn shade.

A further object is to provide an assembly by means of which the window shade is protected from the wind and elements when used as an awning, and which can be very quickly and easily attached and detached from the sash when desired.

Other objects and corresponding advantages, such for example, as durability, comparative economy in manufacture and assembly, ease of installation, and an attractive appearance, will be apparent to those skilled in the art, upon an examination of the following description taken in connection with the accompanying drawings in which:

Fig. 1 is a vertical sectional view showing the window shade attached to the outswung sash and serving as an awning, the screen being shown in lowered position;

Fig. 2 is a view similar to Fig. 1 with the sash closed and the window shade used in the conventional manner;

Fig. 3 is a front elevational view with the lower sash omitted, the upper sash being shown in partially open position with a portion broken away, the screen being in lowered position;

Fig. 4 is an enlarged sectional detail illustrating one method of anchoring the end of the shade to the sash; and

Fig. 5 is an enlarged fragmentary view from the inside looking out, and illustrating one method of anchoring the lower end of the screen.

The window frame illustrated in the accompanying drawings is of standard design, it is of the outswinging type and comprises a sill 8 mounted on side jambs 9 in the usual manner, with a head jamb 10 connecting the upper ends of the side jambs, and a cross bar 11 spans the window opening to divide it as desired. A head casing 12 forms a trim for the window frame, and a drip cap 13 is provided therein as usual.

The upper sash 14 is hinged connected, at its upper end, to the head casing 12 by means of hinges 15, the upper end stile of said sash having a projecting shoulder 16, which, when the sash is in closed position, extends into a groove 17 provided in the head jamb 10, and a resilient gasket 18 is provided in said groove to form a tight, weatherproof joint thereat.

The lower end of the sash 14 is also shouldered as at 16, the end section being slightly beveled to provide a tight weatherproof joint with the shouldered portion 20 of the cross bar when the sash is closed.

One or more pins 21 are provided on the sash 14 at a point intermediate its length, and jointed arms 22 are pivotally connected to the sash and window frame respectively and serve to hold the sash in outswung position.

The lower sash 23 is hung in exactly the same manner as in the sash 14, both sash engage the blind stop "B," and the jointed arm 24 is also of the same general construction and serves the same purpose as the arm 22.

A compartment 25 is provided in the frame above the head jamb 10 and spaced apart spring tensioned shade rollers 26 and 27 respectively are mounted therein, the mounting being of conventional design, and the interior trim 28 of the room is hinged as at 29 to provide ready access to the compartment.

A conventional window shade 30 is wound on the roller 25, and a screen cloth 31 is wound on the roller 27, this shade and screen being vertically adjustable to form an awning and insect proof closure for the window opening as will be hereinafter described.

The head jamb 10 is formed with elongated slits 32 and 33 respectively, to accommodate the window shade and screen, this shade 30 being of the free swinging type and can be vertically adjusted as desired, but when it is desired to utilize the shade as an awning, the ring 34 which is attached to the end of the shade is attached to pins 21 provided on the inner face of the lower stile 35, (see Fig. 4 of the drawings), the shade being preferably fastened prior to the opening of the window so that the swinging of the window
also tensions the shade, the shade bearing against the cap 33 provided on the one edge of the slit 32. The hinged arm 22 serves to hold the window in outswing position, and inasmuch as the shade lies against the inside of the window, it is more or less protected from heavy winds and foreign matter, also from snow, rain, and weather.

Grooves 31 are provided in the side jambs of the frame and accommodate the edges of the screen 31 which travel therein, the bottom edge of the screen being formed with a bar 40, and locking means "C" are provided on said bar, said means comprising cylindrical housings 41 and spring actuated plungers 42 are provided in said housings, these plungers registering with and engaging sockets 43 provided in the side jambs in alignment with said plungers, when the screen is in lowered position. The screen 31 normally is in raised position as indicated in Fig. 2 of the drawings, and when it is desired to prevent flies, insects, etc., from entering the room, when one or both sash are in open position, the screen 31 is pulled down until the plungers 42 register with and engage the sockets 43 in the side jambs, the screen bar 40 rests tightly against the sill, so that the entire window opening will be completely and effectively screened. The locking means can be of any desired design, one suitable structure being shown in Patent No. 2,027,570 for "Venetian blind bottom rail bracket," granted January 14, 1936.

The arrangement described provides for the control of light and ventilation. The shade serves either as a conventional window shade, insulator, or as an awning, and the screen effectively closes the opening against flies and insects.

The combination has many advantages, it is a compact, pre-assembled window unit, it including a window shade that can also be used as an awning, and a screen is provided to exclude flies and insects when the window is open, the operating mechanism is entirely concealed from view, it is protected from dust, dirt and moisture, and it is readily accessible for adjustment, repair or replacement by merely raising the hinged strip 22.

From the foregoing description it will be obvious that I have perfected a very simple, practical and inexpensive window unit including a combination shade and screen arrangement, which can be easily manufactured and assembled, and which is effective for use as a shade, awning or insulating means.

What I claim is:
1. In combination with a window frame having outswinging sash, hingedly connected at its upper end a compartment provided in the upper end of the frame, an elongated slit in the bottom wall of the compartment and open to said frame, an individual spring tensioned roller journaled in the compartment, a shade wound on said roller with the unwound portion extending through said slit, and anchoring means provided on the lower end of the sash and to which the free end of the shade is detachably anchored to form an awning when the sash is swung to open position.

2. In combination with a window frame having outswinging sash hingedly connected at its upper edge, a compartment provided above the head jamb of the frame, a spring tensioned roller journaled in the compartment, a shade mounted on said roller, a longitudinally disposed slit provided in the head jamb and through which the unwound free end of the shade depends, a smooth surfaced shoe attached to one edge of the shade slit and over which the shade slides as the roller is operated, and anchoring means provided on the lower end of the hinged sash and to which the free swinging end of the shade is detachably connected to form an awning when the window is swung and secured in open position.

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