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LIGHT REFLECTING WINDOW

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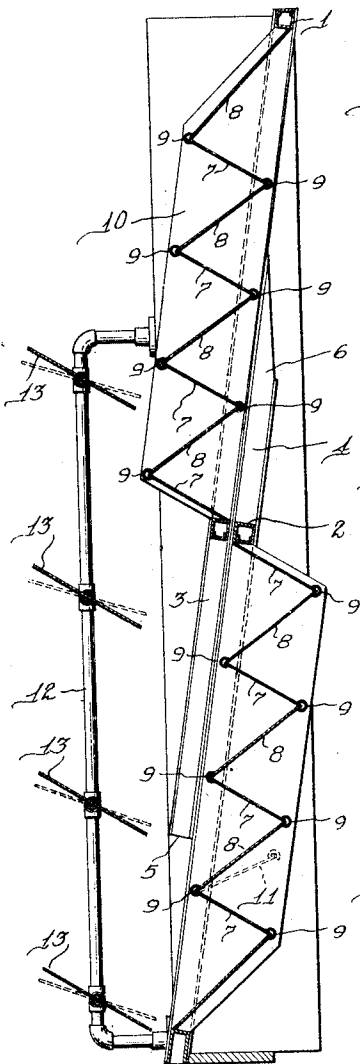


Fig. 1.

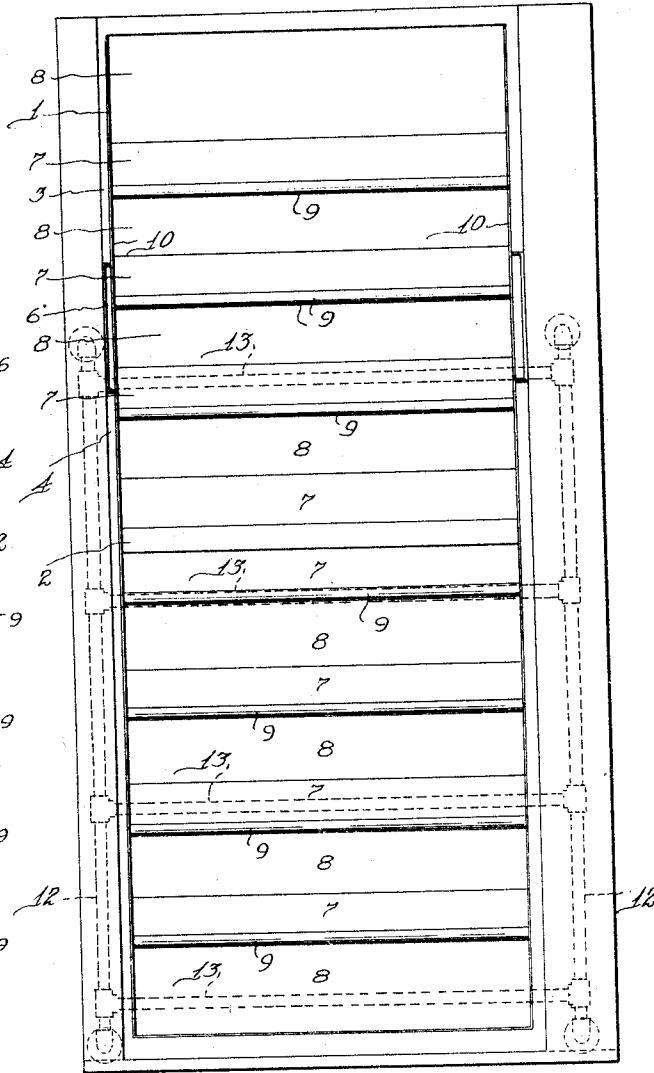


Fig. 2.

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LIGHT REFLECTING WINDOW

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The present invention pertains to a novel window, particularly referring to that type commonly known as a non-glare and light directing window.

5 The primary object of the present invention is to devise a window which will interfere with the direct rays of the sun, but without eliminating any portion, even gathering, when wanted, an extra amount, so that
10 those rays which are aimed downward shall be scattered when meeting a section of mottled glass and those that are variously aimed upward, by being reflected from natural objects outside the window or from the artificial reflectors placed appropriately just in
15 front of the window, shall pass unobstructed upwardly or laterally into the room to be re-reflected from ceiling or walls and thus be very evenly diffused throughout the room,
20 making any sort of window blind unnecessary, unless needed to ward off the sun's heat. To accomplish this object a novel window has been designed with ingeniously arranged panels of glass, through which most of the
25 light rays will be deflected onto the ceiling as they pass through the window, such light rays being reflected again from the ceiling and diffused throughout the room.

30 Another object of the present invention is to devise a novel, non-glare window and adapt it for use in double hung windows with sashes sliding upwardly and downwardly, the window being designed to exclude the elements and yet capable of efficiently ventilating the room.

35 Another and still further object of the present invention is to devise a non-glare window capable of obtaining the above objects and further being equipped with auxiliary
40 means for supplying an additional amount of light rays to be reflected from the ceiling and diffused throughout the room.

45 With these and other objects in view our invention is fully set forth, and more particularly pointed out in the appended claims, reference being had to the accompanying drawings, in which

50 Figure 1 is a transverse cross-sectional view through a double hung window con-

structed in accordance with the present invention, and

Figure 2 is an elevation of the inside of the window.

Like characters are employed throughout 55 to designate the corresponding parts.

The numeral 1 indicates the upper sash and 2 the lower sash both sashes being slidable in the ways 3 and 4 respectively, said ways being secured to the inner face of the
60 window casing. This construction is in accordance with the conventional construction of double hung windows, the sashes being balanced by weights whereby they may be moved upwardly or downwardly with ease. 65
There is a departure from the conventional double hung window in one respect inasmuch as the ways 3 and 4 are inclined which leaves the open ends 5 and 6 to permit the easy installation of the sashes 1 and 2 and which also
70 permits their removal for cleaning or for repairs. If it is found necessary a locking mechanism may be quite readily supplied to prevent the sashes from being accidentally removed from the ways through these open
75 ends.

Both sashes 1 and 2 have a series of glass panels 7 and 8 which are angularly disposed in relation to each other, the whole presenting a saw-tooth arrangement. The upper
80 and lower sashes are practically identical in construction, except that the saw tooth arrangement projects outwardly on the sash 1 and inwardly on the sash 2. The panels 7 are made of clear glass and are so disposed
85 that they are inclined inwardly and downwardly from the outer side of each sash while the panels 8 are formed of frosted or similar glass and are inclined outwardly and downwardly from the inner side of each sash. 90
Where these panels 7 and 8 meet at an angle they are set in a split tube 9 which affords a tight weather proof joint and at the same time offers a comparatively small obstruction to the light. The tubes 9 have their ends
95 mounted in side plates 10 formed on each side of the sashes 1 and 2.

When the direct rays of the sun strike the frosted panels 8 they are scattered and those deflected upwardly pass through the clear 100

glass panels 7 and are reflected from the ceiling and in this manner such rays are equally disseminated throughout the room. The panels 8, even though frosted, permit light rays to enter but they are scattered when they pass through and in this manner no straight rays of the sun are permitted to pass directly through the window into the room.

It may be found desirable at times to supply ventilation to the room without opening the window by sliding one of the sashes. To accommodate this the lowermost panel 7 may be made pivoted so that it may be swung to the position illustrated by dotted lines in Figure 1 of the drawings and indicated by the numeral 11. In this position the room may be ventilated so that the incoming air is deflected upwardly and thereby prevents a direct draft.

A device is also provided to supply an extra amount of light to the room and consists of a pair of brackets or supports 12 mounted outside the window to support a series of rotatably adjustable reflectors 13. These reflectors are set at an angle whereby they reflect light rays striking thereon through the clear panels 7 into the room and upon the ceiling which will again reflect them downwardly to diffuse them throughout the room.

The described invention provides means for supplying light to a room, for diffusing the light and for preventing any downwardly directed rays to enter the room at full strength. It provides means for supplying an additional or auxiliary quantity of light which is diffused throughout the room and it provides means for ventilating the room without sliding the sash.

Although a specific embodiment of our invention has been illustrated and described, it will be understood that changes may be made within the scope of the appended claims without departing from the spirit of the invention and such changes are contemplated.

What we claim is:

1. A window comprising a plurality of transparent panels of glass extending inwardly and downwardly, a plurality of translucent panels of glass extending inwardly and upwardly, said transparent panels being arranged in alternate relation to said translucent panels, and means for supporting all of said panels in said positions whereby light is reflected upwardly from said translucent panels through said transparent panels.

2. A window comprising a plurality of transparent panels of glass extending inwardly and downwardly, a plurality of translucent panels of glass extending inwardly and upwardly and alternating with said transparent panels, and split tubes receiving the angularly abutting edges of said transparent and translucent panels.

3. A window comprising a sash having a

plurality of angularly disposed glass panels meeting in angular relation at their adjacent edges, certain of said panels being transparent glass and certain of said panels being translucent glass, and alternating with said transparent panels, said translucent panels being arranged to deflect light rays through said transparent panels, and adjustable reflectors supported independently of said sash for reflecting rays of light through said transparent panels.

4. A window comprising a plurality of transparent panels of glass extending inwardly and downwardly, a plurality of translucent panels of glass extending inwardly and upwardly and alternating with said transparent panels, split tubes receiving the angularly abutting edges of said transparent and translucent panels and outside reflectors adjustably supported independently of said panels to reflect rays of light through said transparent panels.

5. A window comprising a sash, a plurality of transparent panels set in said sash and extending inwardly and downwardly thereof, a plurality of translucent panels alternating with said transparent panels and set in said sash and extending inwardly and upwardly thereof, and means for connecting adjacent edges of adjacent panels and holding said panels in angular relation, said panels being set in said sash at their ends and extended thereacross, whereby light is reflected upwardly from said translucent panels through said transparent panels.

In testimony whereof we affix our signatures.

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