No. 792,759. PATENTED JUNE 20, 1905.

J. COSSMANN.

DAYLIGHT REFLECTOR.

APPLICATION FILED DEC. 7, 1903.

Fig. 1.

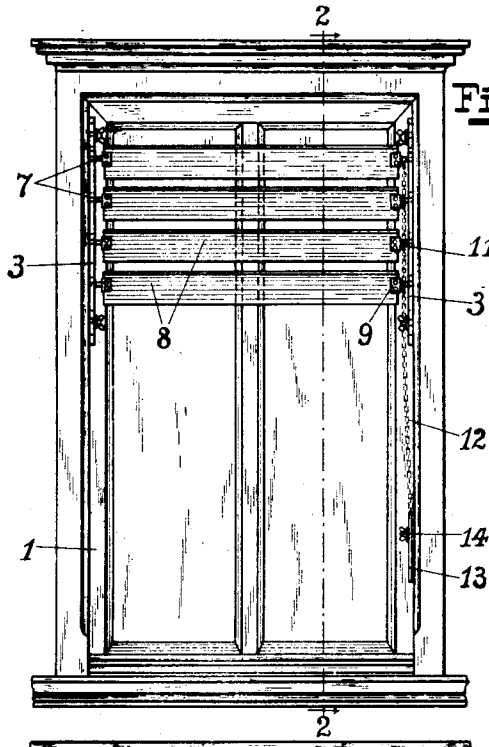


Fig. 2.

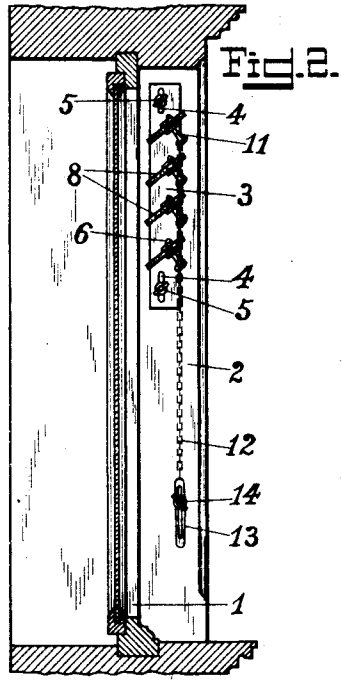


Fig. 3.

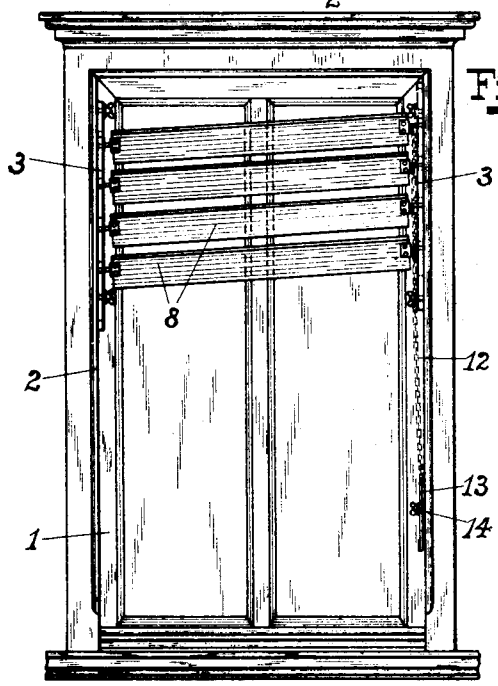
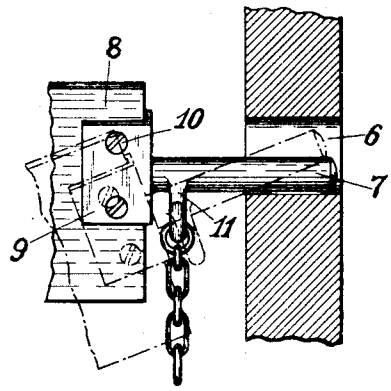


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHANN COSSMANN, OF AIX-LA-CHAPELLE, GERMANY.

DAYLIGHT-REFLECTOR.

SPECIFICATION forming part of Letters Patent No. 792,759, dated June 20, 1905.

Application filed December 7, 1903. Serial No. 184,160.

To all whom it may concern:

Be it known that I, JOHANN COSSMANN, furniture manufacturer, a subject of the King of Prussia, German Emperor, residing at Nos. 33 and 35 Adalbertstrasse, Aix-la-Chapelle, in the Kingdom of Prussia, Empire of Germany, have invented certain new and useful Improvements in Daylight-Reflectors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention relates to daylight-reflectors, and particularly to that class of reflectors consisting of a silvered reflecting glass plate capable of being set at different angles in order to direct the daylight to a certain part of the room to be lighted up. As the reflecting-plate of such a reflector must attain quite unwieldy dimensions in order to lighten up a room contiguous to a narrow street, lane, or yard to any degree of usefulness, the manipulation of the reflecting-plate became extremely difficult, and besides this the front of the house carrying such reflector was more or less disfigured on account of said large projecting reflecting-plate.

The object of my present invention is to avoid all these drawbacks, to which end instead of one large reflecting-plate a series of narrow plates is arranged above each other after the manner of Venetian blinds, which narrow plates are not only simultaneously revoluble about their horizontally-disposed pintles by means of short arms or fingers secured to said pintles and united by a small chain, rod, or the like, but are also capable of being brought into a longitudinally-inclined position by simply raising or lowering one of the bars carrying the pintles of the narrow reflecting-plates or simultaneously raising the one and lowering the other of said bars. By these simple means it is made possible to direct the reflected daylight to any desired part of the room and do away with the disfiguring of the front of the house, since the narrow reflecting-plates can be arranged without difficulty within the bay of the window.

In the accompanying drawings, Figure 1 is a front view elevation of a window provided with a daylight-reflector according to the present invention. Fig. 2 is a vertical sectional view on line 2 2 of Fig. 1. Fig. 3 is another front view elevation of a window, showing the reflecting-plates in their longitudinally-inclined position. Fig. 4 presents some details of construction on a larger scale.

In front of the window-frame 1 are secured to the sides 2 of the window-bay the bars 3, provided with slots 4, in which are playing the thumb-screws 5, by means of which the bars 3 may be held in any desired position. Besides the slots 4 the bars 3 are provided with shorter slots 6, serving as journals for the pintles 7 of the reflecting-plates 8, arranged above each other and consisting of smooth plate-glass or of any other glass having either smooth, wavy, or ribbed surfaces, as circumstances may decide. To reflect the daylight to the greatest advantage, the lower side of the glass plates employed must of course be carefully silvered. The pintles 7 may be secured in any desirable manner to the reflecting-plates 8. Here they are secured to or forming part of the U-shaped flanges 9, fastened to the ends of said plates in the simplest manner by screws 10. One of the two pintles of each reflecting-plate is provided with a finger 11, and all the fingers of the several reflecting-plates are connected with each other by means of a chain 12, (as shown here,) rod, or any other suitable means, the lower end of which must of course be capable of being secured in any position, so as to hold the reflecting-plates 8 in any desirable position. To this end any securing devices may be employed—as, for instance, a slotted plate 13, fastened to the end of the chain 12, which plate may be held in any position by means of a thumb-screw 14, as shown here; but where a very minute regulation of the reflecting-plates 8 is not necessary the links of the chain may be simply pushed over a hook or the like.

In case the daylight is to be directed to a part of the room which cannot be reached while the reflecting-plates 8 are held in a horizontal position the reflecting-plates 8 are placed in an inclined position, as indicated in

Fig. 3, whereby the pintles 7 will of course also attain an inclined position, as indicated by dotted lines in Fig. 4. According to the desired degree of inclination either one of the bars 3, or both of them at the same time, may be shifted—*i. e.*, the one bar is raised while the other is lowered. After having secured the reflecting-plates 8 in their inclined position they are turned sufficiently by means of the chain 12 to direct the light to the desired part of the interior of the room.

To facilitate the return of the reflecting-plates to their original position, the pintles 7 are arranged somewhat above the center lines of said reflecting-plates, so that on giving the chain free the reflecting-plates are assuming their vertical position automatically.

I claim—

1. A daylight-reflector comprising a window-bay, vertically-adjustable bars arranged upon the sides of said window-bay and provided with a plurality of oblong slots formed in their sides facing each other, and a plurality of reflecting-plates revolubly mounted with their pintles in the oblong slots of said adjustable bars and capable of being set longitudinally inclined to throw the daylight to points of the room not lying in front of the window.

2. A daylight-reflector comprising in combination a window-bay, vertically-adjustable bars arranged upon the sides of said window-bay and provided with a plurality of oblong slots formed in their sides facing each other, reflecting-plates arranged above each other, pintles secured to the ends of said reflecting-plates and loosely journaled in said oblong slots to adjust themselves therein in a vertical direction when the reflecting-plates are set longitudinally inclined to throw the daylight to points of the room lying not in front of the window, fingers attached to one of the pintles of each reflecting-plate, means for simultaneously rotating said reflecting-plates, and means for holding said reflecting-plates in their adjusted position.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOH. COSSMANN.

Witnesses:
HENRY QUADFING,
E. M. BRUNDAGE.