March 23, 1943. B. HELGOTH 2,314,784

BLACK-OUT SHADE CONSTRUCTION

Filed Feb. 9, 1942

FIG. 1

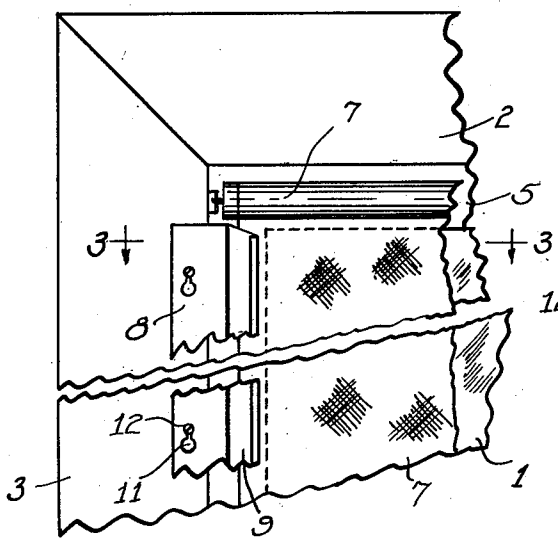


FIG. 2

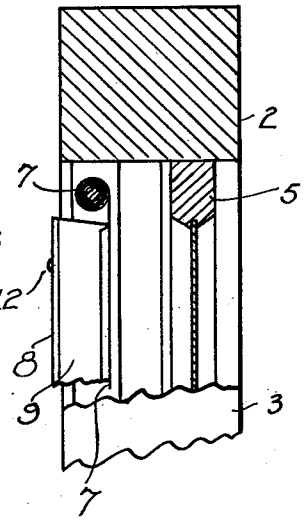
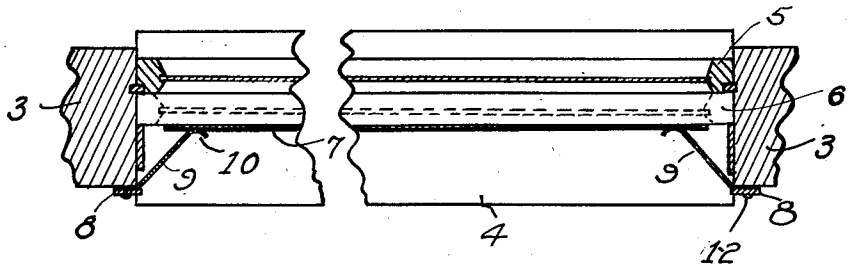


FIG. 3



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BLACK-OUT SHADE CONSTRUCTION

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9 Claims. (Cl. 160—41)

This invention relates to improvements in black-out devices, and more particularly to a means and construction for blacking out dwelling rooms and the like so as to detract as little as possible from the usual appearance of such rooms.

The invention has among its objects the production of such a construction for blacking out of windows, doors and other similar light openings, which will be neat and attractive in appearance, economical, simple to make and easy to install and remove from installation, and which will require a minimum amount of material in its construction.

Further objects of the invention are to so construct a device of the kind described, that it will be extremely light in weight and easily handled, so that it may be readily mounted in place whenever needed, and just as easily and rapidly removed from operative position and stored in a readily accessible location after the immediate danger has passed.

An added object of this invention is to so construct the device of the kind described, that there will be little or no added wear on the shade with which it is employed, the device being mounted along the side edges of the window frame or other wall opening to be sealed, and having a flexible portion extending inwardly toward the path or plane of travel of the shade cloth, so that as the shade is drawn it will engage with said flexible portion and shut out the light that would otherwise pass between the side edges of the shade and the window frame.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art to which this invention appertains, as will be more apparent from the disclosures herein given.

In the drawing, wherein like references represent like or corresponding parts throughout the views,

Figure 1 is a fragmentary elevational view of one of the upper corners of the window frame with my device mounted theeron;

Figure 2 is a side elevational view of the same, with the shade roller in section; and

Figure 3 is a horizontal cross-sectional view through the construction, taken substantially along the line 3—3 of Fig. 1.

Referring more particularly to the drawing, wherein I have illustrated a preferred embodiment of my invention, there is shown a wall through which a light opening 1, as for example, a door or window of any size, shape and material, is made.

The usual or any special type of frame construction bounds this wall opening, the portion 2 indicating the horizontal top member of such construction, while the side members are indicated at 3—3, and the bottom member, which is usually the sill, is indicated at 4.

Although the window may be of various types, I have preferred to illustrate the usual double-hung window of most dwellings, and wherein the upper sash is indicated at 5 and the lower sash at 6. A spring-controlled roller window shade 7 is mounted in brackets in the usual manner, to regulate the light through the window, although such a construction is not sufficient to really effectively seal the passage of light between its side edges and the adjacent sides of the window frame, even when the shade is fully drawn.

In order to supplement this seal and to make for a really useful seal competent to be of service in black-outs and similarly serious emergencies, wherein even ordinarily minor leakages of light are apt to prove not only objectionable, but dangerous to the occupants of the rooms, I have provided means whereby this side leakage of light is completely blocked off and prevented from passing between the inside and outside of the room.

To do this, I have provided side members adapted to be mounted to extend lengthwise of the wall opening, one at each edge wherein it is desired to exclude the passage of light, and therefore two such devices would be employed with a simple window opening.

Each such side member consists of a mounting strip or flat element 8, made of wood or other material that is strong enough and cheap enough for the purpose, and will stand decoration to harmonize with the interior trim or furnishings of the room in which the device is to be installed.

To this strip 8 there is attached an auxiliary element 9 consisting of a strip of starched or sized cloth or other light-weight but form-sustaining flexible material, this element 9 being arranged to be substantially co-extensive in length with the element 8 and projects a sufficient distance sidewise from one edge of the latter, and bent from the plane of the element 8 so that when the device is mounted as shown, and with the shade drawn, the element 9 will overlap the sides of the shade cloth and snugly engage and contact with the inner face of the latter, with the free edge of the element 9 being preferably rounded or bent as at 10 in order to minimize on the shade cloth and at the same time give a more efficient seal against passage of light therebetween.

Although the block-out devices may be permanently mounted in place, yet in many instances it is more desirable to provide for temporary mounting, and to this end, I have provided elongated openings 11 at spaced points along and through the strip 8, these openings being narrow enough to just engage the shank of the fastening screws 12 mounted on the members 3—3, and provided with an enlarged portion 12 to easily pass over the head of said screws. When mounted as shown, the device is retained against accidental displacement, and yet may be readily removed by lifting upwardly and then away from the screws. The same may be just as readily hung in position by a reverse movement of the strips.

The length of the device is such that the top of the strips ends at about the spring roller, and the bottom ends at about the sill, so that when thus mouned and the shade is drawn, the edges of the shade cloth bear against the inwardly projecting portion of the black-out device, and seals the passage of light between the interior and the exterior of the room. The bottom of the window is sufficiently sealed on account of the overlap of the generally stiffened lower edge of the shade cloth and the bottom rail of the window sash.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, arrangement, construction, and combination herein shown and described, or the uses mentioned, except as limited by the state of the art to which this invention appertains, and the claims hereunto appended.

What I claim as new and desire to secure by Letters Patent is:

1. The combination with a window shade adapted to cover an opening, of a side member adapted to be fixed in place along a side of said opening and overlap the side edge of said shade to press the latter in one direction, said member slidingly yieldingly engaging only one face of said shade.

2. The combination with a roller window shade adapted to cover an opening, of a fabric side member adapted to be stationary along a side of said opening and extend toward said movable shade to overlap a side edge of the same and engage only one of its faces.

3. The combination with a roller shade mounted to cover a wall opening, of a fabric side member adapted to fit along a side of said opening and to project inwardly toward said shade and overlappingly engage only one face of a side edge of the latter.

4. The combination with a roller shade mounted to cover a wall opening, of means for making the opening substantially light-tight along a side thereof when the shade is fully drawn and comprising a supporting strip adapted to be mounted along the inside of said wall and having a flexible portion extending toward and engaging only the inner surface of the shade along a side edge of the latter when the same is drawn.

5. The combination with a shade roller mounted to cover a wall opening, of means to prevent leakage of light at a side of said shade, said means comprising a supporting strip demountably attached to the inside of said wall to extend lengthwise of said opening and having a flexible element coextensive with said strip to yieldably engage the inner surface only of the shade cloth while the shade is drawn.

6. In a device of the kind described and in combination with a roller shade mounted in a window frame, a side strip adapted to be attached temporarily to the sides of said window frame, and a flexible tab carried by and coextensive with said strip and projecting therefrom into engagement with only one face of said shade when the latter is drawn, to form therewith at said side of the opening a substantially light-tight structure.

7. The combination with a window shade adapted to cover an opening, of means for making said opening substantially light-tight along the side of the opening when the shade is drawn and comprising a supporting strip adapted to be mounted along said side of said opening and having a flexible fabric tab whose free edge extends toward and engages the inner face only of said shade when the latter is drawn, said free edge of said tab being bent to provide a rounded longitudinal edge for engagement with said shade face to minimize frictional contact with the latter.

8. A black-out means for use with a roller shade that is movable across an opening, said means comprising a freely flexible element adapted to be mounted in a stationary position along a side of said opening to project toward said shade and overlappingly lightly engage a face of a side edge of the shade while the latter is being drawn.

9. A black-out means for use with a roller shade mounted to cover an opening, to make said opening substantially light-tight along a side when the shade is drawn, said means comprising a supporting element adapted to be mounted along said side of said opening and having a flexible fibrous tab extending lengthwise of said supporting element and overlappingly lightly engaging a face of said shade while the latter is being drawn.

BUD HELGOTH.