June 6, 1939. C. SCHWARZENBACH ET AL 2,161,535

WINDOW SHADE HOUSING

Filed Oct. 19, 1936

Fig. 1.

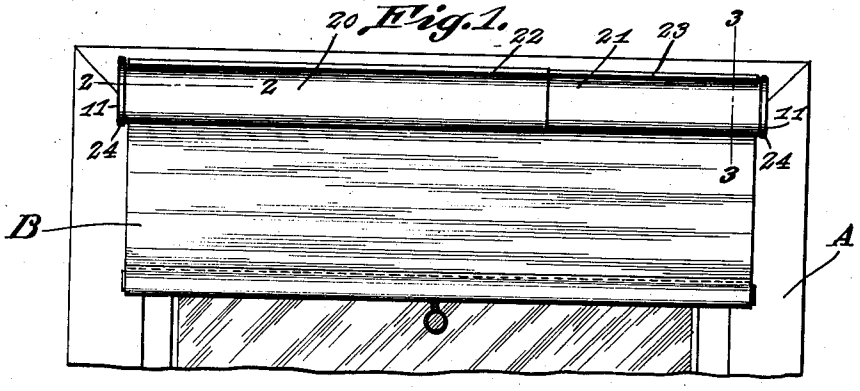


Fig. 2.

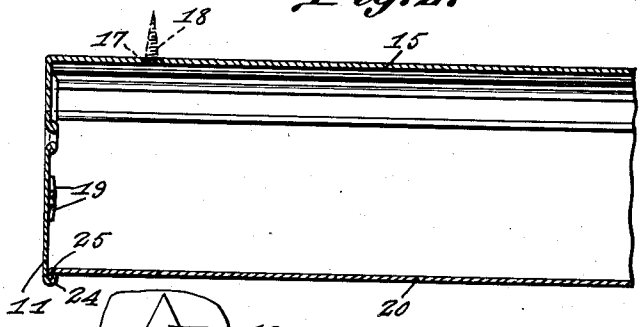


Fig. 3.

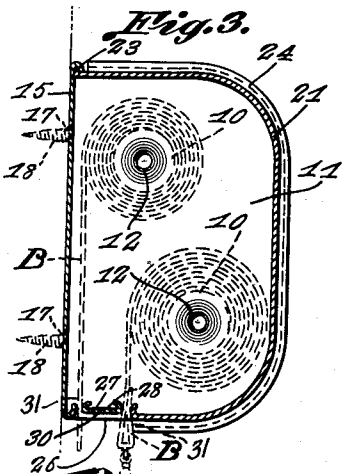


Fig. 7.

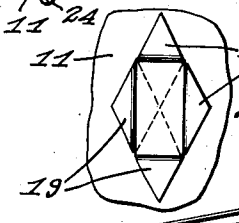
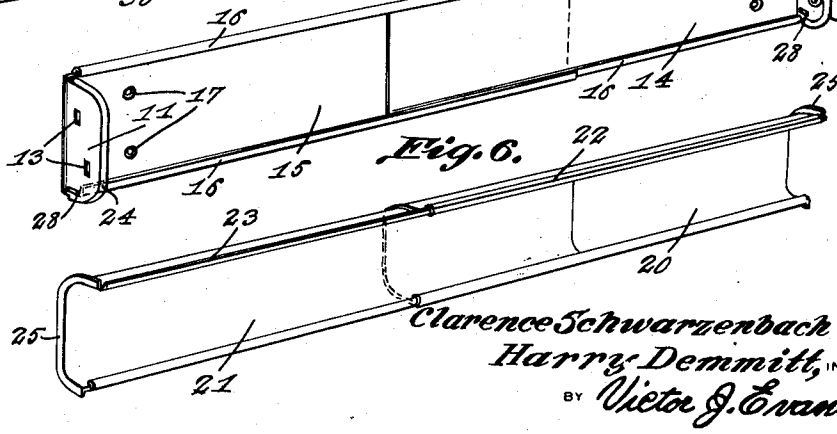


Fig. 4.

Fig. 5.

Fig. 6.



Clarence Schwarzenbach
Harry Demmitt, INVENTORS
BY Victor J. Evans & Co.
ATTORNEYS

Patented June 6, 1939 2,161,535

UNITED STATES PATENT OFFICE

2,161,535

WINDOW SHADE HOUSING

Clarence Schwarzenbach and Harry Demmitt,
Catonsville, Md.

Application October 19, 1936, Serial No. 106,430

1 Claim. (Cl. 156—10)

The invention relates to an enclosed window shade holder and more especially to a window shade housing.

The primary objects of the invention is the provision of a structure of this kind, wherein one or several window shades can be incased so as to protect the same from dust, dirt and light when not in use, the structure being of novel form to effect a holder for the shade or shades and the latter can be readily adjusted at will when the structure is fixed to a window frame.

Another object of the invention is the provision of a structure of this kind, wherein a shade or shades when hung upon a window frame will be concealed from view when not in use, that is to say, when the shade or shades is completely rolled upon its roller or rollers and at the same time protection is afforded thereto against light and dirt or dust.

A further object of the invention is the provision of a structure of this kind, which is simple in its make-up, thoroughly reliable and efficient in operation, enabling the window shades to be hung upon a window frame in a convenient manner for use, protecting the shade when not in use, neat in appearance, durable, and inexpensive to manufacture.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention and pointed out in the claim hereunto appended.

In the accompanying drawing:

Figure 1 is a fragmentary elevation of a window frame showing the structure made up in accordance with the invention applied thereto.

Figure 2 is an enlarged fragmentary sectional view on the line 2—2 of Figure 1.

Figure 3 is a sectional view on the line 3—3 of Figure 1.

Figure 4 is a perspective view of an extensible guide for use in the structure.

Figure 5 is a perspective view of the extensible back for the structure.

Figure 6 is a perspective view of the extensible front for the structure.

Figure 7 is a fragmentary elevation looking toward the inner face of one of the hanger ears.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, A designates generally a portion of a window frame which is of conventional kind and in the top or head of this frame as is usual one or several window shades B are hung for use, in this instance there being two shades and their rollers 10 are journaled in hangers ears 11, these being provided with the circular and rectangular shaped holes 12 and 13, respectively, for accommodation of the trunnions of the respective rollers in the mounting thereof, the trunnions being not shown. These ears 11 are cut and bent from opposite ends of a two-part backing unit, the parts being the sections 14 and 15, respectively, slidably interfitted with each other for a housing adapted to enclose the shades B and constituting the present invention.

The sections 14 and 15 of the backing for the housing at opposite longer edges are formed with outwardly and inwardly curled flanges 16, the flanges on the section 15 being slidably engaged by the flanges 16 on the section 14 and in this manner both sections 14 and 15 are telescopically slidably interfitted with each other. Suitable holes or openings 17 are provided in the sections 14 and 15 for the reception of screws or other fasteners 18 to fix these sections 14 and 15 to the window frame A when the said sections have been adjusted relative to each other for the hanging of the shades B.

The rectangular holes 13 are formed by diagonally cutting into the ear 11 and bending the resultant ear portions 19 inwardly and laterally, as is shown in Figure 7 of the drawing, thereby materially reinforcing the edges of the holes 13.

Adapted to be separably fitted with the sections 14 and 15 constituting the backing unit for the housing is a sectional front unit including the outwardly curved sections 20 and 21, respectively, these being slidably interfitted with each other by the interlocking flanges 22 and 23, respectively, bent from the longer edges of said sections so that the front of the housing can be extended or contracted correspondingly to the expanding or contracting of the back including the sections 14 and 15. The flanges 22 and 23 at the uppermost portions of said sections 20 and 21 when interfitted with each other are adapted to engage the flanges 16 on the sections 14 and 15 of the back at the uppermost edges of said sections 14 and 15 and when this has been done the shades B will be incased or enclosed by the housing to be concealed when not in use and wound on their rollers 10.

The ears 11 are provided with inwardly curled edge beading 24 which separably accommodate out-turned edges 25 formed at the outer ends of

the sections 20 and 21 of the front and in this manner the front and back units of the housing will be latched together.

The sections 20 and 21 of the front unit at the lowermost interfitted flanges 22 and 23 thereon are removed from the sections 14 and 15 at the lowermost flanges 16 thereon to provide a bottom opening or slot 26 in said housing while engaged with the ears 11 through terminal tongues 27 fitting slits 28 in said ears 11 are the slidably interfitted sections 29 and 30, respectively, forming a guide, this occupying the slot 26 to present independent ways 31 in spaced parallel relation to each other for the respective shades B on winding and unwinding of the same on and from their rollers 10 when adjusting said shades. The sections 29 and 30 at their longer edges are rounded or inwardly curled at 32 to avoid damage to the shades B when working through the ways 31 on adjustment of the shades when hung at the window A.

The housing as before described and shown in the drawing will afford protection to the shades B particularly when the same are wound upon their rollers 10 for preventing the accumulation of dust or dirt thereon as well as shielding the same from light when not in use.

The front and back units of the housing are extensible so that said housing can be adjusted for the fitting thereof to the window frame A according to the width thereof and will incase the shades B which will be concealed therein and the usual brackets for the hanging of the shades are eliminated in that the rollers 10 of the shades are journaled in the ears 11 at the outer ends of the backing unit of the housing. In the fitting of the housing to a window frame at the head thereof, the front and back units are now disassembled from each other and the backing unit including the sections 14 and 15 is made fast to the window frame by engaging fasteners in the holes 17 in the sections 14 and 15 which are telescopically interfitted with each other, these prior to the fastening thereof are adjusted with relation to each other to accommodate the window shade rollers, that is to say, the section 15 is first made fast on the frame and the section 14 is adjusted according to the length of the said shade rollers and thereafter made fast to the window frame. The shade rollers are then engaged in the holes 12 and 13 in the ears 11 so that said shade rollers are journaled in the backing unit. These ears 11 will yield sufficiently for the engagement of the shade rollers in the holes 12 and 13. Thereafter the interfitted sections 29 and 30 are adjusted so that the tongues 27 will fit in the slits 28 in the ears 11 and in this manner the guide is properly placed and interfitted with the backing unit. Thereafter, the front unit, including the sections 20 and 21, which are telescopically interfitted with each other, is engaged with the backing unit, this being effected by the engagement of the out-turned edges 25 in the inwardly curled edge beading 24 of the ears 11 while the flanges 22 and 23 are interfitted with the flanges 16 of the sections 14 and 15 of the backing unit whereupon the housing in its assembly has been completed.

What is claimed is:

In a window shade housing, a two-part backing unit, a two-part front unit, the two parts of the backing unit and front unit being telescopically interfitted with each other respectively, out-turned ears formed at the outer ends of the two parts of the backing unit and having holes for journaling of a pair of window shade rollers therein, out-turned edges at the outer ends of the two parts of the front unit, curled beadings formed from said ears and directed inwardly of the backing unit for separably receiving the out-turned edges of the parts of the front unit, means formed at the uppermost edges of the front and back units for separable interfitting with each other throughout said edges, the lowermost edge of the front unit being removed a uniform distance throughout the extent thereof from the lower edge of the backing unit, and an extensible guide arranged between the lowermost edges of the backing and front units and separably fitting the ears of the backing unit for effecting separated guideways for the shades of the two shade rollers, respectively, held between said units.

CLARENCE SCHWARZENBACH.
HARRY DEMMITT.