Dec. 28, 1937. W. WADE ET AL 2,103,397

BLIND HOUSING STRUCTURE

Filed Jan. 28, 1937

Fig. 1.

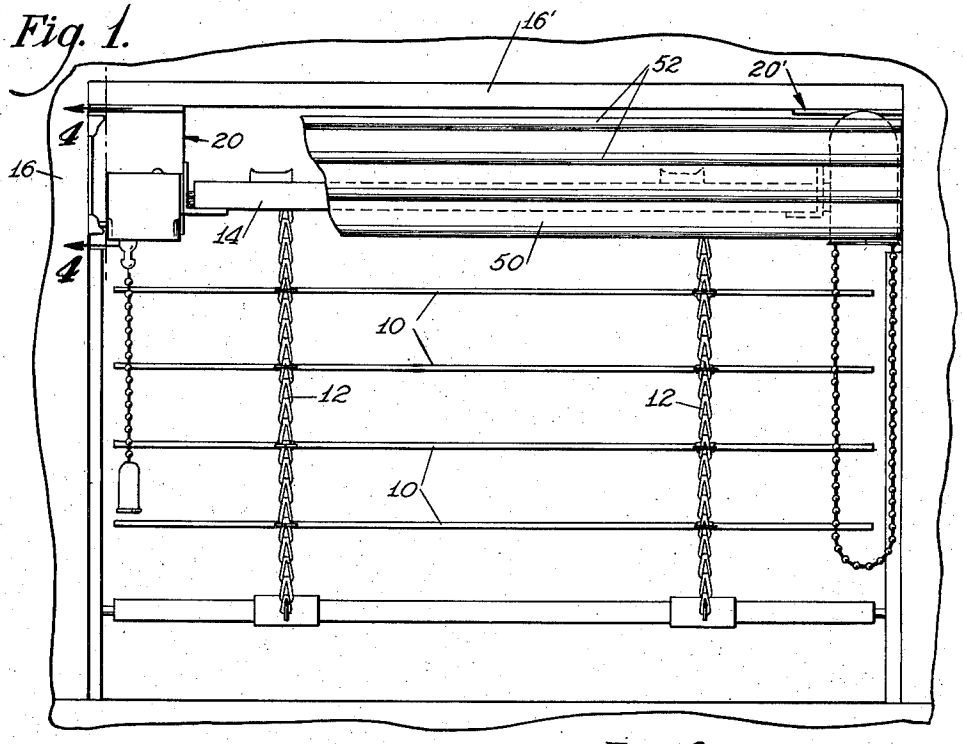


Fig. 2.

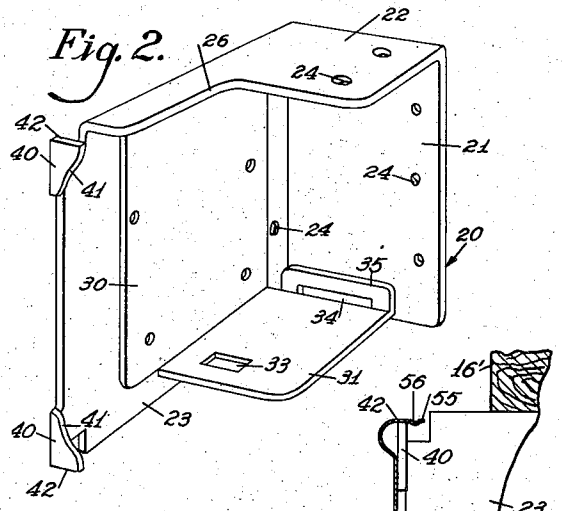


Fig. 3.

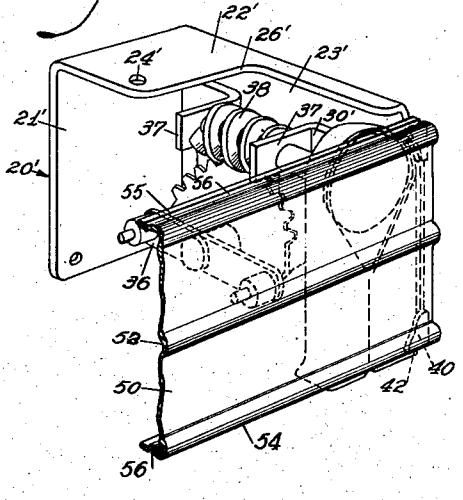
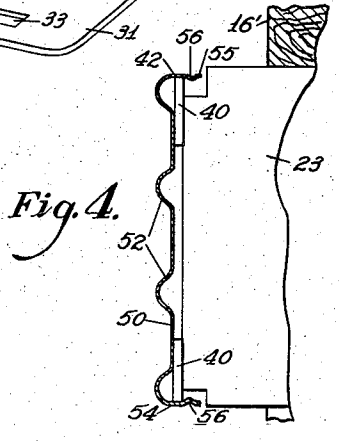


Fig. 4.



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BLIND HOUSING STRUCTURE

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Application January 28, 1937, Serial No. 122,799

6 Claims. (Cl. 156—17)

This invention provides certain improvements in housing structures for enclosing the operating mechanism of Venetian blinds and related devices.

More particularly stated, the invention has among its principal objects the provision of novel bracket members adapted to fit into the corner portions of a window casing for attachment thereto, and having means for supporting a blind structure including a movable top slat or carriage and mechanism for moving the carriage, said brackets further having a valance plate supported between the brackets so as to shield the blind operating mechanism from view.

Another specific object of the invention is the provision of brackets formed for attachment in the corners of a window casing and having an elongated valance plate with grooves formed edgewise along the plate and yieldingly engageable with lugs on the brackets so that the plate may be snapped easily into and out of mounted position.

Other novel and more detailed aspects of the invention will appear as the following description proceeds in view of the drawing, in which:

Fig. 1 is a front elevation of a blind and the novel housing structure mounted in a window casing;

Fig. 2 is an enlarged perspective detail of the left-hand bracket;

Fig. 3 is an enlarged perspective detail of the right-hand bracket, while

Fig. 4 is a vertical section through the valance or shield plate.

The present application is a continuation in part of our copending application, Serial No. 122,793 filed Jan. 28, 1937, directed to certain improvements in blind operating mechanism and structure.

In Fig. 1 herein we show a similar blind structure, which includes a plurality of blind slats 10 suspended between pairs of control chains 12 from a top rail or carriage 14.

Carriage 14 is supported between the upper sides of a usual window casing 16 so as to bring the carriage as close as possible to the top horizontal reach 16' of the casing, while at the same time leaving adequate clearance for the pivotal movement of carriage 14 about its long axis so as to tilt the several slats 10.

In order to support the blind operating carriage and mechanism in the manner aforesaid, we have provided a pair of bracket members 20 and 20' (Figs. 2 and 3), each having three rectangularly disposed side wall portions 21, 22, and 23, and 21', 22', and 23', respectively. These side walls are variously provided with screw-holes 24 and 24' through which screws or other suitable attaching means are extended for engagement with the casing structure.

It is important to observe the provision of the bracket surfaces in two and three-dimension space and at right angles to one another so as to fit flush into and against the corner walls of the window casing, and while in many instances the back walls 21 and 21' might be omitted, it is found desirable as a matter of convenience and economy to provide the third or back surfaces 21 and 21' so that the blind structure will be universally applicable to common forms of window and door structure.

These brackets 20 and 20' may be formed from metal or other convenient material and by various methods. In the preferred practice incident to the manufacture of the brackets herein illustrated, they are stamped from sheet metal and have the top wall portions 22 and 22' cut away as at 26 and 26' to facilitate the attachment of the carriage brackets 30 and 30', and also to reduce the amount of bracket area which will project beyond the casing. At the same time the bracket structure is not materially weakened.

Near their respective forward corner portions, the side walls 23 and 23' of the brackets (see especially Fig. 2) are provided with inwardly extending and somewhat triangularly shaped ears or lugs 40 and 40', each having a decoratively curved edge 41 and 41', and each having a horizontal edge part 42, 42' for engagement with a valance of shield plate 50.

As seen in Figs. 1 and 4, the valance plate 50 is elongated and preferably formed of relatively thin sheet metal provided with a plurality of decorative stampings which, in the present embodiment, may desirably be in the form of a plurality of parallel ribs or flutes 52 spaced apart adequately to give rigidity to the plate as well as to decorate it.

Each of the longitudinal edges of the valance plate 50 are turned in or crimped as at 56 to provide mounting lips 54 and 55 which are adapted to yield outwardly so as to snap or hook onto the edges 42 of mounting lugs 40. Being of light metal, it will be evident that the lips 54 and 55 may be sprung slightly to force the crimps onto and over the lugs 40, the disposition and dimensioning of these crimps being designed with a view to making it easy to snap the valance onto and off of the lugs, while at the same

time assuring an adequate grip to secure the valance against casual dislodgement.

It may be pointed out also that similar ears or lugs may be formed in the outer vertical edge portions (for example) of the rear faces **21** and **21'** of the brackets so as to provide a mounting means for a back or second valance shielding the mechanism in those installations where both sides of the carriage are exposed to view as on a doorway.

The left-hand bracket **20** is provided with a carriage supporting bracket **30** having a horizontally extensive bearer plate **31** disposed between walls **23** and **21**. This bearer plate is provided with special slots **33** and **34**, the latter being formed in an upset angled portion **35** extended in a plane substantially parallel to the back wall **21**. These slots are particularly arranged for cooperation with mounting means on the carriage, and are more fully described in applicants' copending application Serial No. 122,794, filed Jan. 28, 1937.

Bracket plate **30** is preferably spot-welded flush against the side wall **23** of the left-hand bracket **20**.

Carriage **14** is supported at its left end (Figs. 1, 2) on the bearer plate **31**, and at its right-hand end on a trunnion yoke **36** (Fig. 3), which in turn is pivotally mounted on the channel bracket **30'** from which are struck a pair of oppositely disposed ears **37** supporting a worm drive mechanism **38** which rotates the trunnion to rock the carriage. The bracket **30'** is also preferably spot-welded to the side wall **23'** of its corresponding bracket, and it will be evident that the cut-away portions **26, 26'** of the main brackets, in addition to dressing the brackets to provide a suitable trim when they are in mounted position on the window casing, also facilitate the attachment of the mechanism-supporting brackets **30** and **31'**.

A preferred embodiment of the invention has been described in detail herein, but it will be apparent that various modifications and adaptations of the structure so-described may be made without departing from the intent and spirit of the invention as defined by the following claims.

Having thus described our invention, what we claim as new and desire to protect by Letters Patent is:

1. A blind housing structure consisting of a pair of brackets having integrally formed extensions for engagement with a valance plate, and an elongated valance plate having formations along its longitudinal edges and adapted to snap into supporting engagement with said bracket extensions whereby said plate may be supported between and by said brackets.

2. A blind housing structure comprising a pair of brackets adapted for attachment to a window casing, and each having a pair of mounting lugs spaced apart in a vertical direction, and a shield plate having parallel edges and body portions struck up along said edges and adapted to clamp onto said lugs whereby said shield plate may be supported by and between said brackets.

3. A blind housing structure including a pair of mounting brackets having rectangularly disposed surface portions adapted to fit flush against correspondingly disposed surface portions of the corners of a window casing, said brackets each having a pair of mounting ears spaced apart along a vertical line, and an elongated shield plate having lip portions struck up along its longitudinal edges and adapted for yielding clamping engagement with said ears in such manner that said plate may be pressed into and out of supporting engagement with said ears, said plate being further adapted when in mounted position as aforesaid to shield said brackets from view.

4. Blind supporting means in the form of a pair of mounting brackets having three angularly disposed surfaces adapted to fit flush against the corresponding corner surfaces of a window casing, means for supporting engagement with a blind carriage and a pair of spaced mounting ears struck up along the edge portion of one of said surfaces and adapted for supporting engagement with a valance plate, and a valance plate in the form of an elongated body member having body portions bent in a direction back upon itself along its longitudinal edges, said bent back portions being adapted for clamping engagement with said mounting ears and said valance plate adapted when clampingly engaged with said ears as aforesaid to shield said brackets and carriage from view.

5. A housing structure for blind mechanisms, said structure comprising a pair of mounting brackets having angularly disposed surface portions adapted to fit flush against the corner surfaces of a window casing, bracket extensions for supporting engagement with blind mechanism and one of said bracket surfaces having a pair of spaced ears struck up along an edge portion and adapted for supporting engagement with a valance plate, and a valance plate in the form of an elongated metallic member having a plurality of reenforcing ribs pressed into its body portions and having one longitudinal edge portion bent back in a direction upon itself to form a lower lip adapted to hook over one of said pair of ears on each bracket, said plate having the opposite longitudinal edge bent back in a direction upon itself to form a second lip, said bent back edge having a longitudinally extensive crimp formed therein between the outermost edge portion thereof and said plate, the latter lip being readily pressed into and out of supporting engagement with said ears on the brackets when said first mentioned lip is hooked onto the ears as aforesaid and said second lip is pressed onto the remaining ears with said crimped portions hooked over the said remaining ears.

6. A housing structure for Venetian blinds including a pair of mounting brackets having three surfaces disposed at right angles to one another, members on said brackets for supporting engagement with blind mechanism and one of said surfaces in each bracket having a vertical extensive edge portion provided with a pair of upset mounting ears spaced apart in a vertical sense, together with a valance in the form of an elongated plate having a plurality of spaced parallel reenforcing ribs stamped therein and having its longitudinal edge portions turned up to form edgewise grooves on said plate spaced apart in a vertical direction a distance corresponding to the distance between said ears on said brackets and said valance being adapted for support by and between said brackets by pressing said groove portions thereof into clamping engagement with said ears.

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