July 15, 1947. J. L. HUNTER 2,423,978

HEAD RAIL AND MOUNTING BRACKET FOR VENETIAN BLINDS

Filed March 24, 1945

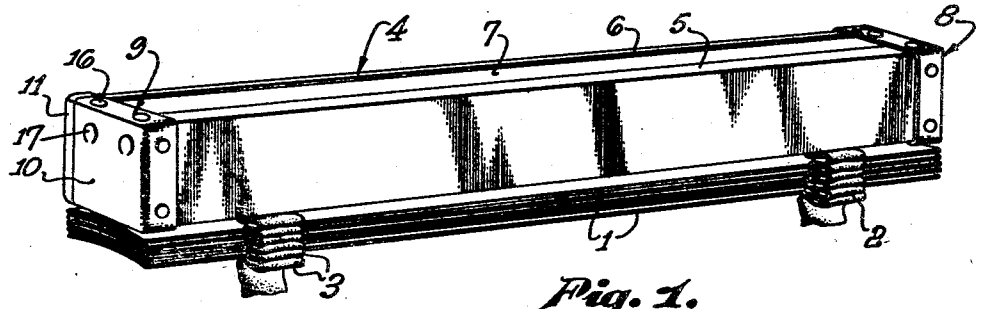


Fig. 1.

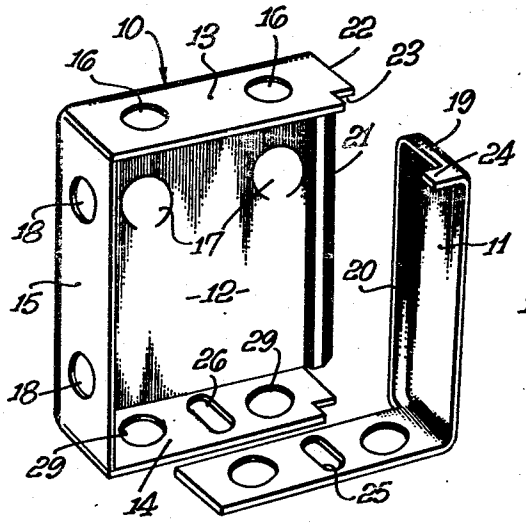


Fig. 2.

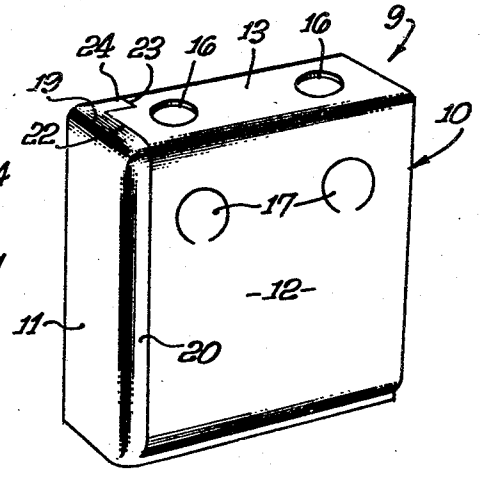


Fig. 3.

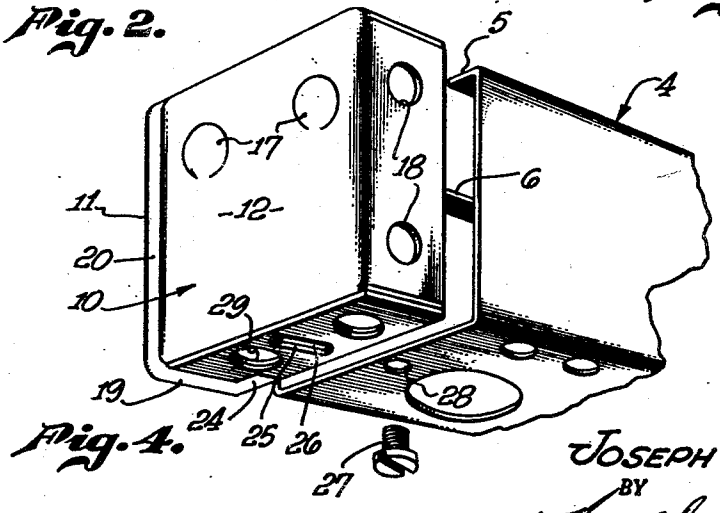


Fig. 4.

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HEAD RAIL AND MOUNTING BRACKET FOR VENETIAN BLINDS

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Application March 24, 1945, Serial No. 584,656

7 Claims. (Cl. 160—178)

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This invention relates to head rails and mounting brackets for Venetian blinds and has particular reference to a structure for mounting a Venetian blind in any one of a plurality of positions with respect to a window or window recess.

In installing Venetian blinds, the workman is frequently faced with the problem of determining the manner in which the Venetian blind is to be installed upon the window casing, it sometimes being desirable to mount the Venetian blind within the recess formed by the window casing, the attachment of the blind being made either to the under side of the head of the casing or to the sides of the casing, while in other installations it may be desirable to mount the blind outside of the casing, attaching the blind to the top trim strip or to the upper ends of the side trim strips. In addition, certain unusual installations require that the head rail be supported upon angle brackets secured to the wall of the room or to the window casement which extends below the head rail.

Heretofore, it has been necessary for the workman to know in advance how the blind was to be mounted and to carry to the installation the correct type of mounting device or brackets for any particular installation.

It is an object of my invention to provide a head rail and mounting bracket structure which is universal in that the same mounting brackets are adapted for any of the four types of installations noted above.

It is also an object of my invention to provide a head rail and mounting bracket structure wherein the mounting bracket constitutes an end cap for enclosing the ends of a hollow head rail within which may be mounted various operating devices for manipulating the blind.

It is additionally an object of my invention to provide a head rail and mounting bracket structure of the character set forth in which adjustment is readily made to adapt a given length of the head rail to window casings of slightly varying dimensions.

It is a still further object of my invention to provide a head rail and mounting bracket structure wherein the ends of the head rail are received in and are enclosed by the mounting bracket structure to produce a finished neat appearance to the assembled structure.

Other objects and advantages of my invention will be apparent from a study of the following specifications, read in connection with the accompanying drawings, wherein:

Fig. 1 is a perspective view of a portion of a Venetian blind assembly incorporating my new head rail and mounting bracket structure;

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Fig. 2 is a detail exploded perspective view of the mounting bracket structure shown in Fig. 1;

Fig. 3 is an external perspective view of the mounting bracket structure in its assembled position; and

Fig. 4 is a detail exploded perspective view of the mounting bracket structure and the end of a hollow head rail with which the same may be employed.

Referring to the drawings, I have illustrated in Fig. 1 a portion of a Venetian blind assembly which comprises a plurality of Venetian blind slats 1 adapted to be supported upon web ladders 2 and 3, the upper ends of which extend into a hollow head rail structure 4 illustrated as being formed of a length of substantially channel-shaped metal, the upper ends of the side flanges of the channels being turned inwardly as indicated at 5 and 6 to form a substantially box-like head rail with a top opening 7 extending throughout the length of the head rail. The hollow head rail 4 is, as more fully set forth in my copending applications Serial No. 584,654, filed March 24, 1945, and my Patent No. 2,396,425, issued March 12, 1946, adapted to house tilting mechanisms and cord pulleys or other devices for raising and lowering the slats 1.

At each end of the head rail 4, I provide a mounting bracket assembly indicated at 8 and 9 at the right-hand and left-hand ends of the head rail, respectively, the mounting brackets each comprising a bracket plate 10 and a cover or closure plate 11. The bracket plate 10 is formed as a box-like structure having an end wall 12, a top wall 13, a bottom wall 14 and one side wall 15. The bracket plate 10 comprises a means for securing a head rail in place in or on the window casing by any one of the four desirable methods of mounting, the top wall 13 being formed with a pair of apertures 16 through which screws or other securing devices may pass to secure the bracket to the under side of the head of the window casing in installations where it is desired to locate the blind within the recess formed by the window casing, while the end wall 12 is formed with a pair of partially cut out "knock-outs" 17 which may be removed from the end wall 12 to permit the passage of screws or other securing devices in installations where it is more desirable to secure the brackets to the sides of the casing.

The side wall 15 is likewise provided with apertures 18 permitting the passage of screws or other

securing devices in installations where it is desired to mount the head rail and Venetian blind upon the trim strips or upon the walls of the room adjacent to the window opening.

The brackets 8 and 9 may be secured in place with the open side of the mounting bracket 10 facing inwardly of the room to permit the head rail 4 to be inserted by a horizontal sliding motion disposing the ends of the head rail between the upper and lower walls 13 and 14, respectively, and the head rail will be supported in place thereby.

To finish the assembly, the cover or closure plates 11 may then be placed upon the brackets, the closure plates comprising substantially an L-shaped piece of metal, the vertical leg of which is deformed to provide shallow flanges 19 and 20. The flange 20 is adapted to overlie an inwardly struck edge portion 21 of the bracket plate 10, while the flange 19 abuts the end edge 22 of the top wall 13 of the bracket, a notch 23 being formed in the top wall 13 to receive a tongue 24 formed upon the vertical leg of the closure 11 to aid in the alignment of the bracket and closure.

The horizontal leg of the closure 11 is adapted to extend beneath the bottom wall 14 of the bracket 10 and is provided with an elongated opening 25 alignable with an elongated opening 26 in the bottom wall 14 through which a screw or bolt may extend to secure the closure plate 11 to the bracket 13 and, as indicated in Fig. 4, to also secure the bracket assemblies to the head rail 4 as by passing a screw 27 through the aligned openings 25 and 26 and into a threaded hole 28 in the lower side of the head rail 4.

By providing the elongated openings 25 and 26 having their major axes extending longitudinally with respect to the head rail 4, it will be apparent that the head rail 4 may be prefabricated to a given standard length adapted for a given width of window casing, the head rail being preferably made slightly shorter than the standard width of the window casing with which it is adapted to be used so that minor variations of the particular window casing from its standard dimensions will not interfere with the ready installation of the blind, the elongated openings 25 and 26 permitting the assembly of the head rail and brackets even though there may be as much as three-quarters of an inch variation of the casement opening from the expected standard.

While the particular dimensions of the head rail and bracket assembly are not critical, I prefer to form the top, bottom and side walls of the bracket 10 with a width approximately three-quarters of an inch and to form the openings 26 and 27 about seven-sixteenth of an inch in length which will provide an adjustment of approximately three-eighths of an inch at each end of the head rail or a total adjustment of three-quarters of an inch in the overall length of the assembly, head rail and brackets.

To adapt the bracket assembly for certain unusual installations in which the head rail is to be supported upon angle brackets or other devices extending below the head rail, I may provide apertures 29 in the bottom wall of the bracket plate 10 and to corresponding alignable apertures in the lower leg of the L-shaped closure plate 11.

It will be observed that the employment of a head rail and bracket structure as described herein not only permits the universal assembly of the blind in or on the window casing, but in addition thereto the bracket assembly comprises an end closure enclosing the ends of the head rail and enhancing the pleasing appearance of the assembly.

While as illustrated herein, each of the bracket members is formed with the removable closure plate 11, it will be apparent that the assembly of the head rail and bracket members may be made using one bracket member having a removable closure while the bracket member for the opposite end of the head rail may be formed in one piece with four side walls instead of with one side opening. Thus the brackets could be secured in place, the one end of the head rail inserted in the single piece bracket and the other end of the head rail swung into place through the open side of the other bracket, after which the closure plate could be secured to that bracket member.

While I have shown and described the preferred embodiment of my invention, I do not desire to be limited to any of the details of construction shown or described herein, except as defined in the appended claims.

I claim:

1. In a head rail and mounting bracket assembly for Venetian blinds, a bracket member for each end of a head rail comprising a box-like structure for receiving and enclosing the end of the head rail, and at least one of said bracket members having a removable closure forming one of its side walls to facilitate the insertion of the end of the head rail after the bracket members have been secured to the window casing.

2. In a mounting bracket for Venetian blinds, a bracket member comprising a box-like structure for receiving and enclosing the end of the head rail, said bracket member having an end wall, a top wall, a bottom wall and one side wall, and a removable closure member defining the final side wall of said bracket member.

3. In a mounting bracket for Venetian blinds, a bracket member comprising a box-like structure for receiving and enclosing the end of the head rail, the bracket member being formed with an end wall, a top wall, a bottom wall and one side wall, a closure member for defining the final side wall comprising an L-shaped member, the bottom leg of which extends below the bottom wall of the bracket member and the vertical leg of which forms the said final side wall.

4. In a mounting bracket for Venetian blinds, a bracket member comprising a box-like structure for receiving and enclosing the end of the head rail, the bracket member being formed with an end wall, a top wall, a bottom wall and one side wall, a closure member for defining the final side wall comprising an L-shaped member, the bottom leg of which extends below the bottom wall of the bracket member and the vertical leg of which forms the said final side wall, the bottom leg of said closure member and the bottom wall of said bracket member having alignable apertures formed therein elongated in a direction longitudinal of the head rail.

5. In a mounting bracket for Venetian blinds, a bracket member comprising a box-like structure for receiving and enclosing the end of the head rail, the bracket member being formed with an end wall, a top wall, a bottom wall and one side wall, a closure member for defining the final side wall comprising an L-shaped member, the bottom leg of which extends below the bottom wall of the bracket member and the vertical leg of which forms the said final side wall, the vertical leg of said closure member being formed with

an inturned flange at one side to overlie the adjacent edge of the end wall of the bracket member.

6. In a mounting bracket for Venetian blinds, a bracket member comprising a box-like structure for receiving and enclosing the end of the head rail, the bracket member being formed with an end wall, a top wall, a bottom wall and one side wall, a closure member for defining the final side wall comprising an L-shaped member, the bottom leg of which extends below the bottom wall of the bracket member and the vertical leg of which forms the said final side wall, the top wall of the bracket member having a notch formed in its outer and forward edge, the vertical leg of said closure member having an inturned flange at one side to overlie the adjacent edge of the end wall of the bracket member and a finger extending

from the upper end of said vertical leg to engage in said notch.

7. In a mounting bracket for Venetian blinds, a bracket member comprising a box-like structure for receiving and enclosing the end of a head rail, said bracket member having an end wall, a top wall, a bottom wall and a removable closure forming one side wall.

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