Feb. 18, 1936. F. J. BURNS 2,030,960

SELF LOCKING BRACKET

Filed July 22, 1935

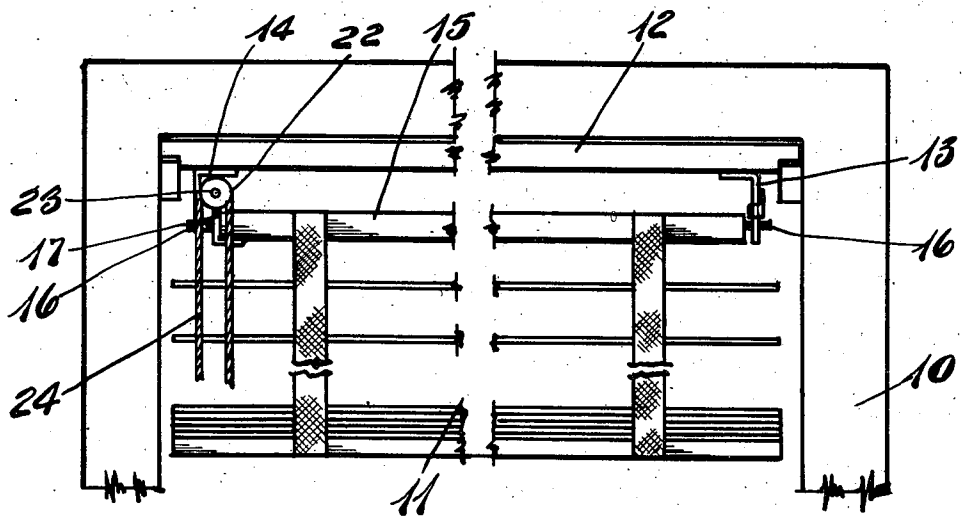


Fig. 1.

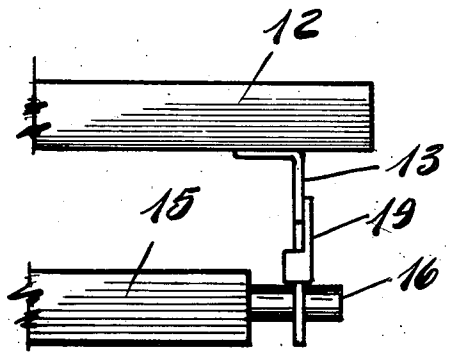


Fig. 2.

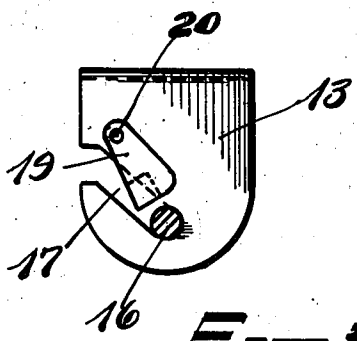


Fig. 5.

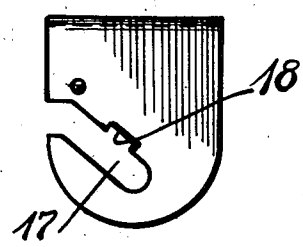


Fig. 4.

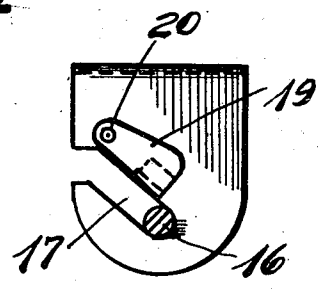


Fig. 5.



Fig. 6.

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SELF-LOCKING BRACKET

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5 Claims. (Cl. 156—17)

This invention relates to self-locking brackets of the type used in connection with Venetian blinds, and more particularly to a bracket provided with a self-locking dog which securely locks the pintle of the tilt rail in the bracket.

One of the prime objects of the invention is to provide a bracket having a locking dog pivotally secured thereon, said dog being so mounted that it automatically swings to position to lock the pintle in the bracket when the blind is hung in position.

Another object is to design a self-locking bracket on which the locking dog is easily accessible for operation when it is desired to remove the tilt rail from the bracket.

A further object still is to design a self-locking bracket which locks the tilt rail pintle in position, preventing accidental raising of the tilt rail, and thereby preventing the blind slats from becoming marred by jamming against the lower edge of the bracket when the slats are in extreme raised position.

A further object is to provide a self-locking bracket of simple and practical construction, which can be economically manufactured and assembled, and which will not jam or get out of order.

The above and other objects will appear as the specification progresses, reference being had to the accompanying drawing in which I have shown the preferred embodiment of my invention, and in which like reference numerals indicate like parts throughout the several views thereof.

In the drawing—

Fig. 1 is a front elevation of a Venetian blind supported in a window opening and showing my self-locking bracket in position and supporting one end of the tilt rail.

Fig. 2 is an enlarged fragmentary front view.

Fig. 3 is an enlarged end view showing one of the brackets with the pintle shown in section in position.

Fig. 4 is an enlarged end view of the bracket, with the locking dog omitted.

Fig. 5 is a view similar to Fig. 4 showing the locking dog swung up to permit removal of the pintle.

Fig. 6 is a perspective view of the locking dog.

Venetian blinds are utilized in many different places and are ofttimes subjected to rough treatment, including violent jerking of the lifting cords to raise the slats, causing the tilt rail and slats to "bounce", and it frequently happens that the pintle on the one end of the tilt rail "bounces" out of the open bracket slot, permitting the blind to fall, frequently breaking slats and generally tangling the cords, slats, and tape, and it is the object of the present invention to eliminate the possibility of such accidental displacement by providing means for locking the pintle in the bracket, thus eliminating the expense of damaged blinds and the time required to reassemble and mount, and also preventing the slats from contacting with the lower edges of the bracket and marring the wood and finish.

Referring now particularly to the drawing, the numeral 10 indicates a window frame in which a Venetian blind 11 is hung in the usual manner, said blind including a head rail 12 to which the spaced apart brackets 13 and 14 are secured by means of screws (not shown) as usual.

A tilt rail 15 is revolubly mounted in the brackets 13 and 14, and pintles 16 are secured thereto and are adapted to be detachably mounted in the brackets, the bracket 13 being formed as clearly shown in Figs. 3, 4, and 5 of the drawing, and is provided with an angularly disposed slot 17 which is adapted to accommodate the pintle 16.

A recess 18 is provided in the upper wall of the slot 17, and a locking dog 19 is pivotally mounted on the bracket 13 by means of the rivet 20, the lower end of said locking dog being U-shaped as at 21 so that it can be readily swung up to position so that the end wall of the U-shaped section is accommodated in the recess 18 (see Fig. 5), and when the dog is in this position, the area of the slot 17 will not be restricted, and the pintle can be readily removed.

The dog 19 is mounted to freely swing, and when the pintle is placed in the slot, the dog is automatically forced upwardly to accommodate and permit seating of the pintle, after which it swings downwardly, as a pendulum, closing the slot and preventing the pintle from "bouncing" or becoming disengaged.

This arrangement permits the bracket 13 to be relatively short so that the lower edge does not project below the lower face of the tilt rail; consequently, when the slats are in extreme raised position, the upper slat will not contact with the lower end of the bracket, and the finish will not be marred.

The blind tilting mechanism can be of any design, and in the present instance I have shown a sheave 22 which is mounted on the end of a worm shaft 23, and the operating cord 24 is trained thereover, and by manipulation thereof, the blind slats can be tilted as desired.

From the foregoing description it will be obvious that I have perfected a simple, positive,

and practical self-locking bracket which securely locks the pintle in position, and which is manually operable to permit unrestricted removal when desired.

What I claim is:

1. A Venetian blind having a stationary head rail and a pair of spaced apart brackets secured thereto and adapted to revolubly support a tilt rail, one of said brackets being formed with an angularly disposed slotted opening adapted to accommodate the pintle of the tilt rail, a locking dog pivotally and pendently mounted on said bracket, and an inwardly extending leg on said dog, said leg normally forming a closure for said slot to prevent accidental removal of the pintle.

2. A Venetian blind having a stationary head rail and a pair of spaced apart brackets secured thereto, a tilt rail including projecting pintles on the ends thereof and revolubly mounted in said brackets, one of said brackets being formed with an angularly disposed open slot adapted to accommodate and permit insertion of one of said pintles, and a locking dog pivotally mounted on the bracket adjacent said slot and formed with a leg projecting into the slot, the lower end of said dog normally hanging in position to form a closure for the slot and prevent accidental displacement of the pintle, and in another position to permit the easy removal thereof.

3. A Venetian blind having a stationary head rail, a pair of spaced apart brackets secured thereto and adapted to adjustably support a tilt rail, pintles in the ends of said tilt rail, one of said brackets being formed with an angularly disposed open slot adapted to receive one of said pintles, a locking dog pivotally mounted on said bracket and formed with a U-shaped leg section adapted to receive the upper edge of the bracket slot, and a recess in said upper edge adapted to accommodate the leg connecting section and provide for an unrestricted slot area to permit easy removal of the pintle when the dog is swung upwardly.

4. A bracket of the class described and provided with an angularly disposed open slot, a downwardly depending locking dog pivotally mounted on the bracket, formed with a U-shaped leg section and extending into said slot and normally forming a closure for said slot, and a recess in the upper edge of the bracket slot and adapted to accommodate the leg connecting section of said dog to maintain an unrestricted slot width when the dog is swung upwardly to permit removal of a pintle.

5. A bracket for Venetian blinds provided with an angularly disposed open slot, a locking dog pivotally and pendently mounted on the bracket, the lower end section of the dog being turned at right angles to the main body and projecting into said slot, and a recess in the upper edge of the slot and of a size to accommodate said turned section when the dog is swung upwardly.

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