







## **United States Patent Office**

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2,999,537 VENETIAN BLINDS Holger Bror Martin Falck, Abacksgatan 6, Goteborg, Sweden Filed Sept. 1, 1959, Ser. No. 837,507 2 Claims. (Cl. 160—177)

The present invention relates to Venetian blinds of the kind comprising a channel-shaped strip member for carrying the slat-assembly, the pull cords serving for 10 hoisting the slat-assembly being passed through apertures made in the bottom portion of said channel member, thence through the interior of the channel member in its longitudinal direction, and out therefrom at one end of the same. According to a well-known arrangement in 15 Venetian blinds of the kind referred to, there is disposed within said one end of the channel-shaped member an angle-piece of sheet-material having a bottom portion thereof resting on the bottom of the channel member with one end edge coinciding with the extreme end edge of the 20 channel member, the opposite end edge of said portion being integral with a wall or limb extending at right angles to said portion and crosswise of the channel and formed with an aperture for passing said pull cords, and a guide roller for the pull cords being rotatably mounted adjacent 25 the free end edge of said first-mentioned portion of the angle-piece.

The invention more specifically relates to Venetian blinds of the kind referred to in which there is journalled within the channel-shaped strip member a longitudinally 30 extending spindle having secured to it a plurality of rollers to which the ribbons serving for adjusting the inclination of the slats are fastened.

The invention has for its object to provide an arrangement of the kind indicated which enables also the adjustment ribbons of Venetian blinds to be operated in a simple and convenient way.

The invention is mainly characterised in that the anglepiece disposed at said one end of the channel member is provided at its edge coinciding with the extreme end 40 edge of said channel member with an upstanding wall or limb parallel to said first-mentioned wall or limb, and in that a roller rotatable by means of a cord or the like is mounted at its ends in said walls or limbs and is provided with an axially extending recess for receiving 45 the adjacent end of said spindle carrying the adjustmentribbon rollers.

According to one embodiment of the invention, said roller is provided adjacent its end situated at the extreme end edge of the channel member with a diametrically 50 extending through-bore for receiving a control cord serving for rotating the roller.

Furthermore, the roller-end portions, being suitably reduced in diameter relative to the remaining portion of the roller, may be mounted in upwardly open recesses 55 formed in the end walls or limbs of the angle-piece.

One embodiment of the invention is illustrated by way of example in the accompanying drawing, in which:

FIGURE 1 is a view in side elevation and partly in section illustrating a Venetian blind assembly in accord- 60 ance with the invention,

FIGURE 2 is a top plan view on an enlarged scale illustrating an angle piece or bracket constructed in accordance with the invention,

FIGURE 3 is a view partly in elevation and partly <sup>65</sup> in cross section taken along the line III—III of FIGURE 2, and

FIGURE 4 is an end view of the roller mounted within the bracket or angle piece as viewed from the left hand end of FIGURES 2 and 3. 70

As shown in FIGURE 1, the Venetian blind assembly

includes a channel-shaped strip member S within which is journaled a longitudinally extending spindle 16 having secured thereto a plurality of rollers 17, 18 to which the ribbons 19 that serve for adjusting the inclination of the slats 20 are fastened.

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The bracket-shaped element or angle-piece A shown in the drawing is intended to be mounted within the channel-shaped strip member S with its right-hand end substantially coincident with the adjacent extreme edge of said channel member. The bracket comprises a bottom portion or web 1 adapted to rest on the bottom of the channel member, and having its edge remote from the end of the channel member integral with an upstanding wall or limb 2 extending at right angles to the bottom of said channel member and having formed in its lower portion an aperture 3 for passing the pull cords 21 serving for hoisting the slats 20 of the blind, said cords being adapted to be passed over a guide roller 4 rotatably mounted adjacent the end edge of the channel member, and thence substantially vertically downward through an aperture 5 opening towards the end edge of the bracket (see FIG. 3).

At the end of the bracket element opposite the wall or limb 2 thereof there is provided a second end wall or limb 6 in parallel relation to said first-mentioned wall or limb. An elongated roller 7, at its end portions 8 and 9 of reduced diameter is rotatably mounted in upwardly opening recesses or slots 10 and 11, respectively, formed in the walls or limbs 2 and 6, respectively. The roller 7 is provided in its end facing the interior of the channel member with an axially extending, non-circular recess 12 for receiving the adjacent end portion of the correspondingly non-circularly cross-sectioned spindle 16 for carrying the adjustment-roller spindle. An operating or control cord 22 serving for turning the roller 7, and thereby the adjustment-ribbon spindle, is intended to be wound around one end portion of the roller and to be anchored to the latter by passing the cord through a bore 13 drilled diametrically through the roller. From the roller 7, the two parts of the cord are intended to be passed downward through respective holes 14 drilled through the bottom portion 1 of the bracket adjacent either sides of the roller and extending substantially in tangential directions relative to the latter.

The roller 7 is provided between its end wall 6 and the hole 13 for the operating cord with an enlarged peripheral flange 15 adapted to eliminate the risk of jamming the operating cord between the edge of the recess 11 in the wall 6 and the end portion 9 of roller 7 journalled therein.

The invention is not restricted to the embodiment described hereinbefore and illustrated in the accompanying drawing by way of example only, the same being susceptible of modifications as to its details without departing from the scope of the invention. Thus, for instance, the roller 7 may be arranged to be turned by the use of any other kind of control than the control cord hereinbefore described.

What is claimed is:

1. A control mechanism for Venetian blinds, comprising an elongated channel-strip member for carrying the slat assembly, a longitudinally extending spindle journalled therein, a plurality of rollers carried by said spindle to which blind ribbons may be attached for adjusting the inclination of the slats, an angle-piece of sheet material disposed within said channel member adjacent one extreme end thereof, said angle-piece having a bottom portion flush with the bottom of said channel member with one end coincident with said extreme end of the channel member, a first upstanding wall at the opposite end of said bottom portion of said angle-piece, said wall having an aperture therethrough for passing pull cords of Vene-

tian blinds serving to hoist the slat assembly, said aperture extending longitudinally of the channel member, a guide roller for the pull cords rotatably mounted within the angle-piece and adjacent said extreme end of the channel member, said one end of said angle-piece including a 5 second upstanding wall opposing said first wall in spaced relation, a control roller being rotatably mounted in said spaced upright walls, said control roller being provided with an axially extending recess fixedly receiving the adjacent end of said spindle, said control roller having re- 10 duced end portions to facilitate mounting the roller in said walls, and said walls having upward opening recesses for receivably supporting said control roller, said control roller being provided with a diametrically extending through bore for receiving a control cord for rotating 15 said roller, and said angle-piece having two apertures on

either side of said control roller for receiving the respective portions of a control cord.

2. A control mechanism as claimed in claim 1, wherein said control roller is provided with an enlarged annular flange mounted at its one end immediately adjacent the diametrically extending through bore and disposed between the through bore and the reduced end portion and adapted to be received in said second upstanding wall of said angle-piece.

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