Aug. 6, 1946. K. R. HORTON 2,405,255

VENETIAN BLIND

Filed March 5, 1945

Fig. 2

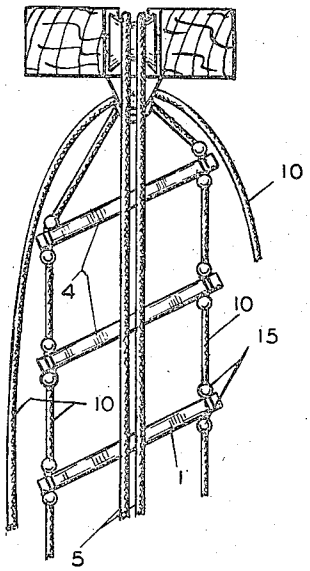
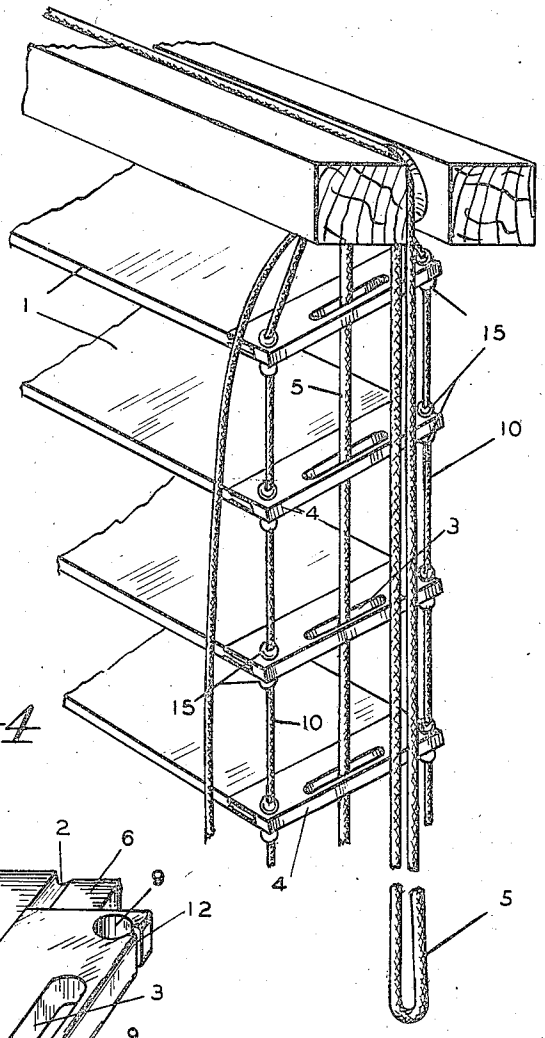


Fig. 1



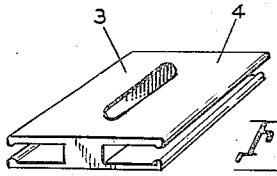


Fig. 4

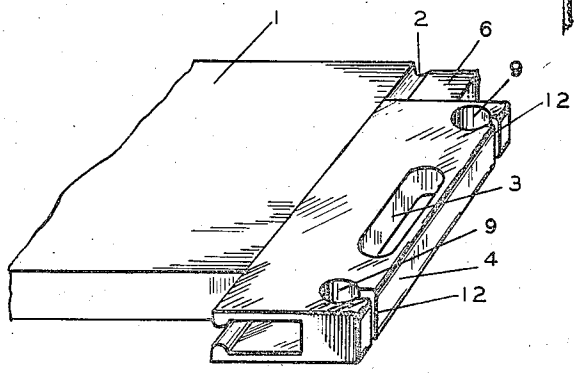


Fig. 3

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VENETIAN BLIND

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5 Claims. (Cl. 160—173)

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This invention relates to a slat mounting for Venetian blinds. Slats for Venetian blinds must be so mounted that they can be lifted, from the bottom upwards, by what has always been cords working through slots in the slats. Also the slats must be so mounted and arranged that they can be tilted in either direction; which function is carried out by what is called a "ladder case," there being two, controlled by a pair of cords such as the pair identified by numeral 5 in Fig. 1 of the accompanying drawing.

The object of the present invention is to so mount the slats of Venetian blinds that individual slats can be readily dismounted and removed for washing, which is not the case with the well known blind with its slats, each having a pair of cross-slots spaced alike from opposite ends of the slats and usually, the ladder case composed of rather wide braids of special fabric connected together by narrower doubled short pieces of braids to form the "ladder." The slats rest between the short pieces. The lifting cords with their slots are also partly or wholly concealed behind the wider outside braid.

Since the slats are always enameled with a washable paint of the enamel type, they can be cleaned to some extent by damp wash rags, but getting one against the braids leaves its mark. The difficult proposition of keeping a Venetian blind clean is so well known that it seems to need no further description.

My solution of this so far difficult problem is to form the ends of the slats so that they may be grippingly engaged by a clip member, preferably of moulded plastic, though it may be of any suitable material, the clip to either be provided with a slot, complete in its moulded body, or a surface that will form one side of a slot, the end of the gripped slat forming the other side. The clip is also arranged to be supported with its gripped slat by the ladder case or an adequate substitute. Obviously, the invention resides in the clip member per se and not in any especial positioning of the cross slot, or the manner in which the ladder case or a substitute may be arranged to properly space the slats and tilt them on occasion.

The accompanying drawing, which forms a part of this disclosure, shows what I consider at this time to be an adequate gripping arrangement and also proper positioning of slots with means for the "ladder" to properly cooperate with the slats.

In the drawing:

Fig. 1 is an end view, in perspective, broken off

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above, below and at the left hand end showing the ends of four slat and clip assemblies with the lifting cord for that end of the blind as will be hereinafter explained in detail;

Fig. 2 is the same end view shown in Fig. 1, but with the slats partially turned by the substitute I have shown for a ladder case;

Fig. 3 is an enlarged view of a clip, partially engaged with the pre-formed end of a slat; and

Fig. 4 is of a clip, made double, shown in perspective. When the trade desires to have a blind with the well known ladder case made of tape, the slats can be made in three pieces and in such case the lifting cords and ladder will remain unchanged from what they now are with a new set of slats, each with two center clips instead of end ones.

Further explaining the drawing: The blind will be composed of an adequate number of slats 1, spaced apart by suitable ladder case structures in laterally spaced and arranged pairs of a substitute for these elements somewhat as I have shown, each slat 1, being provided with a lifting cord slot 3, at each end but the slot will be formed in a clip 4, that grippingly engages the preformed end of the slat 1, as shown in Fig. 3, if, as is assumed, it is desired that the fact that there is a clip be made as inconspicuous as possible.

The slat 1, is shown to have a tenon portion 6, with grooves 7, and the clip has a counterpart, or complementary construction which, if well made and the parts enameled the same, will not be conspicuous. It is not intended that the clip shall be cemented or otherwise more or less permanently attached to the ends of the slats and quite obviously there are numerous other forms of engaging joints. The clip 4, is also shown to be provided with through holes 9, slotted out to the end of the clip 4. Then as an adequate substitute and cleaner arrangement than the braid constructed ladder case, an enameled cord 10 that will crowd snugly through the slot 12, in the end of the clip, can have permanent spacers attached such as the metallic balls 15, shown in Figs. 1 and 2, which can be so formed, as they already are in the well known ball and pin chain, that they can be permanently placed with a plier-like tool.

The upper part of the blind structure will not need to be changed in order to employ my invention and since it forms no part of the invention and is very well known, it has been omitted from the drawing as surplusage. The improvement, broadly speaking, is the slot containing clip, quite

easily detachable, yet secure, instead of the slot in the solid slat, which has heretofore prevented the slats from being removed, washed and/or re-enameled and replaced without a dismantling job quite beyond the capacity of the person usually available to do the job.

Having fully disclosed my invention so that those skilled in the art to which it appertains can make and use it, what I claim as new and desire to secure by letters patent, is:

1. A slat mounting for Venetian blind slats to render them removable from the lifting cord therefor, comprising a clip member slidably engageable with a slat in gripping relationship, the said clip provided with a transverse through slot adapted to receive a lifting cord therethrough without its preventing ready removal and subsequent replacement of the slat from and into the blind assembly.

2. A slat mounting for Venetian blind slats, comprising a clip for a slat having a preformed end, effective to grippingly engage said end of a slat and provided with a cross slot for a lifting cord, corresponding surfaces of the slat and clip mounted thereon being substantially flush with each other.

3. A cross slotted clip for a Venetian blind slat mounting comprising a reduced end on the slat, a clip wherein is formed a slat engaging portion that is a counterpart of the reduced end of the slat and the corresponding surfaces of the slat and clip mounted thereon being substantially flush with each other, the said clip provided with a cross slot for a lifting cord independent of the slat.

4. A slat and cord-clip combination for Venetian blinds comprising a slat portion having a reduced male end, a clip formed with a counterpart of the reduced male end of the slat and engageable therewith by lateral relative movement to grippingly receive the end of the slat and when in place forming a substantial continuation of the lateral and edge surfaces of the slat said clip being provided with a cross slot for a lifting cord independent of the slat.

5. A slat and cord-clip combination for Venetian blinds comprising a slat formed with a reduced end, a clip member formed with a counterpart of the reduced end of the slat and within which the reduced end may be forcibly inserted to hold the clip and the slat together, contiguous surfaces of the clip then being in substantial continuation with the lateral sides and edges of the slat, said clip being provided with a transverse slot between the ends thereof, for receiving a lifting cord, out of direct engagement with the slat portion.

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