Sept. 4, 1956

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2,761,185

BLIND OR LIKE SLAT OR LOUVER ASSEMBLY
AND METHOD OF ASSEMBLING
Filed Oct. 24, 1955

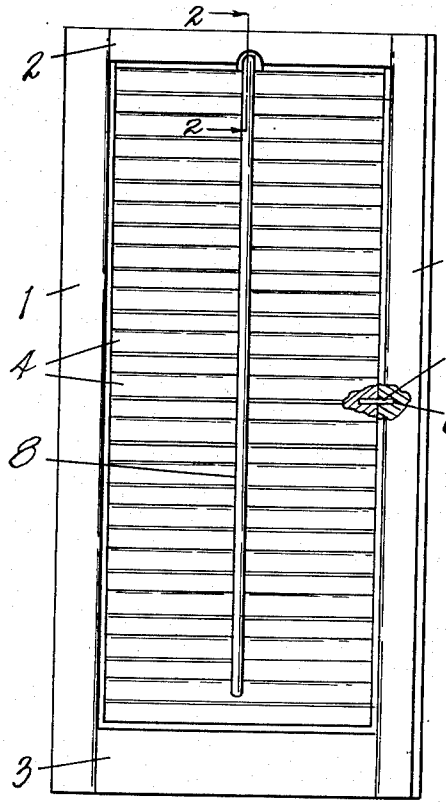


FIG. 1.

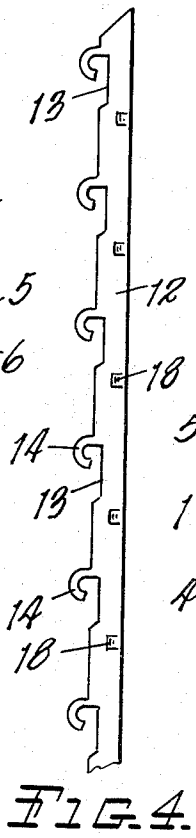


FIG. 4.

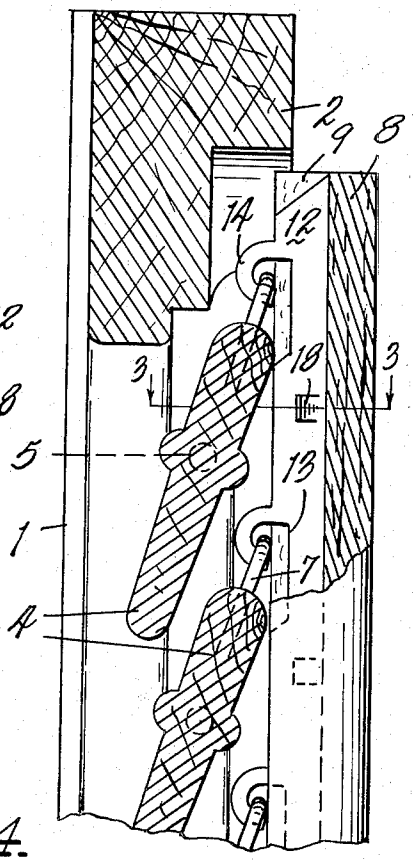


FIG. 2.

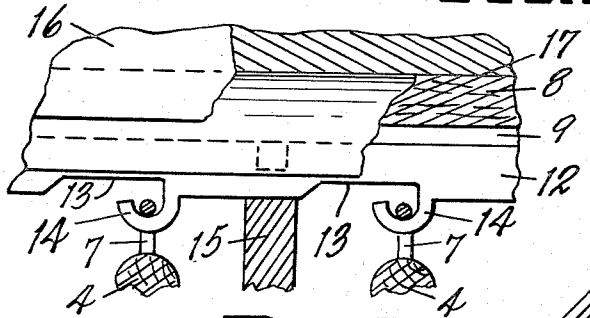


FIG. 6.

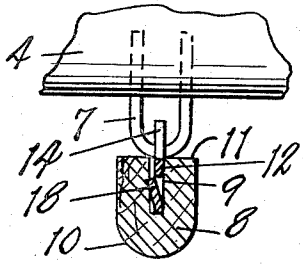


FIG. 3.

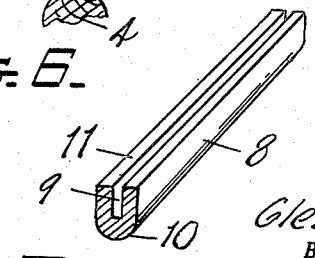


FIG. 5.

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United States Patent Office 2,761,185 Patented Sept. 4, 1956

2,761,185

BLIND OR LIKE SLAT OR LOUVER ASSEMBLY AND METHOD OF ASSEMBLING

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Application October 24, 1955, Serial No. 542,337

11 Claims. (Cl. 20—62)

This invention relates to a blind or like slat or louver assembly and in the method of assembling.

The main objects of this invention are:

First, to provide a blind or louver assembly which may be very economically produced and at the same time one which is attractive in appearance and well adapted for use as an inside blind or louver assembly.

Second, to provide a structure of this type in which the parts are so formed and arranged that they may be very economically produced and assembled and at the same time the structure is relatively strong and rigid.

Third, to provide a method of assembling slats or louvers which greatly facilitates the production thereof.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a front elevational view of a blind embodying my invention partially broken away to show the pivotal mounting of the slats.

Fig. 2 is an enlarged fragmentary view partially in vertical section on a line corresponding to line 2—2 of Fig. 1.

Fig. 3 is a fragmentary view partially in transverse section on a line corresponding to line 3—3 of Fig. 2.

Fig. 4 is a fragmentary side elevational view of the coupling bar for connecting the slats or louvers to the slat rod.

Fig. 5 is a fragmentary inside perspective view of the slat rod.

Fig. 6 is an enlarged fragmentary view partially in longitudinal section similar to that of Fig. 2 illustrating certain of the assembling steps.

The embodiment of my invention illustrated is a blind adapted as an inside blind although it should be understood that my invention may be incorporated in an outside blind and in other forms of slat or louver structures in which the slats or louvers are adjustably mounted or supported.

In the embodiment of my invention illustrated 1 represents the stiles, 2 the top bar and 3 the bottom bar of the frame of a blind. The joints of these frame pieces are not illustrated as they form no part of my present invention although certain steps of assembling in relation to the slat unit will be hereinafter pointed out.

The slats 4 are provided with pivots 5 which engage suitable bores 6 provided therefore in the stile 1. These slats 4 are disposed in uniformly spaced parallel relation and are provided with staples 7 which are driven into corresponding edges thereof to constitute eyes.

The slat rod 8 is provided with a longitudinal kerf like slot 9 opening at its inner edge. This slot is of substantial depth. In the preferred embodiment illustrated the rod 8 is of flattened section having a rounded outer edge 10 and a flat inner edge 11, the slot 9 being centrally disposed in this inner edge.

To connect the slat rod to the slats I provide a coupling bar 12 which is desirably formed of sheet metal and

is provided with a plurality of uniformly spaced recesses 13 in its inner edge and a plurality of hooks 14 facing in the same direction and located at corresponding ends of the recesses with the bills of the hooks overhanging the recesses.

In assembling the slats 4 of the unit are supported in a suitable jig or rack in upright parallel relation as shown in Fig. 6 with the staples or eyes 7 projecting upwardly and in alignment. The coupling bar is partially inserted in the slot 9 as is shown in Fig. 6 and the hooks engaged with the eyes as is also shown in Fig. 6. This may be done by a downward and longitudinal movement of the slat rod with the coupling bar inserted therein as shown in Fig. 6. Thus engaged the assembled parts are positioned on supports 15 which may be the bed of a press and the locking bar pressed to fully seated position within the slat rod in which position the hooks are closed by the inner edge of the slat rod as is shown in Figs. 2 and 4.

In Fig. 6, the numeral 16 represents the ram or head member of a press which is desirably actuated with a predetermined stroke. The member 16 is provided with a longitudinal groove 17 in which the slat rod is disposed so that it is effectively supported.

To insure that the coupling bar will be securely retained within the slat rod, even though there is considerable tolerance in the slot or kerf 9, the bar 12 which is desirably of flat sheet metal stock is provided with laterally projecting lugs 18 which are embedded in the walls of the slot as is shown in Fig. 3. This insures that the slat rod will not be pulled off the coupling bar in manipulating the slats.

A highly satisfactory practice is to assemble the frame with the slat unit while the slats are still supported in the rack or jig. This may be done by positioning top and bottom members 2 and 3 at the ends of the units and positioning the stiles to engage the slat pivots with the bores 6 of the stile. The frame members thus positioned are fixedly secured together and to facilitate that adhesive may be applied to the frame members 2 and 3, the frame parts being held in a suitable press while screws, if used, are inserted through the stiles and into the ends of the members 2 and 3.

I have not illustrated the details of the press and other assembling mechanism as they form no part of this invention.

While I have illustrated my invention as embodied in a blind it is desired to point out that the slat assembly may be assembled with other supporting means and the frame including stiles as illustrated. I have not illustrated such an adaptation as various types of slat or louver structures are known in the art.

I have not attempted to illustrate or describe other embodiments or adaptations of my invention as it is believed this disclosure will enable those skilled in the art to embody or adapt my invention as may be desired.

Having thus described the invention, what is claimed as new and is desired to secure by Letters Patent is:

1. A blind or the like comprising a frame, a plurality of slats pivotally mounted in said frame and having aligned staples on corresponding edges thereof, a slat rod having an inwardly opening longitudinal slot in its inner edge, and a coupling bar of flat section seated in said slot and having a plurality of longitudinally spaced recesses in its inner edge and hooks projecting inwardly from its inner edge and positioned at corresponding ends of said recesses with the bills of the hooks in overhanging relation to the recesses facilitating the engagement of the hooks with the staples prior to seating of the coupling bar within the slot, the bar having a plurality of laterally projecting lugs in retaining engagement with the walls of the slot when the coupling bar is seated therein in which

position the hooks are closed by the adjacent edge of the slat rod.

2. A blind or the like comprising a frame, a plurality of slats pivotally mounted in said frame and having aligned staples on corresponding edges thereof, a slat rod having an inwardly opening longitudinal slot in its inner edge, and a coupling bar of flat section seated in said slot and having a plurality of longitudinally spaced recesses in its inner edge and hooks projecting inwardly from its inner edge and positioned at corresponding ends of said recesses with the bills of the hooks in overhanging relation to the recesses facilitating the engagement of the hooks with the staples prior to seating of the coupling bar within the slot, in which position the hooks are closed by the adjacent edge of the slat rod.

3. A blind or the like comprising a frame, a plurality of slats pivotally mounted in said frame and having aligned eyes on corresponding edges thereof, a slat rod having an inwardly facing longitudinal slot in its inner side, and a coupling bar seated in said slot and having a plurality of longitudinally spaced hooks facing in the same direction and engaged with said eyes, the bar having a plurality of laterally projecting lugs in retaining engagement with the walls of the slot when the coupling bar is seated therein in which position the hooks are closed by the adjacent surface rod.

4. A blind or the like comprising a frame, a plurality of slats pivotally mounted in said frame and having aligned eyes on corresponding edges thereof, a slat rod having an inwardly facing longitudinal slot in its inner side, and a coupling bar seated in said slot and having a plurality of longitudinally spaced hooks engaged with said eyes, the hooks being closed by said rod when the bar is seated therein.

5. A louver structure comprising a plurality of tiltably supported slats having aligned eyes on corresponding edges thereof, a slat rod having an inwardly facing longitudinal slot therein, and a coupling bar of flat section seated in said slot and having a plurality of longitudinally spaced recesses in its inner edge and hooks projecting inwardly from its inner edge and positioned at corresponding ends of said recesses with the bills of the hooks in overhanging relation to the recesses facilitating the engagement of the hooks with the staples prior to seating of the coupling bar within the slot, the bar having a plurality of laterally projecting lugs embeddingly engaging the walls of the slot with the coupling bar seated therein in which position the hooks are closed by the slat rod.

6. A louver structure comprising a plurality of tiltably supported slats having aligned eyes on corresponding edges thereof, a slat rod having an inwardly facing longitudinal slot therein, and a coupling bar seated in said slot and having a plurality of longitudinally spaced recesses in its inner edge and hooks projecting inwardly from its inner edge and positioned at corresponding ends of said recesses with the bills of the hooks in overhanging relation to the recesses facilitating the engagement of the hooks with the staples prior to seating of the coupling bar within the slot in which position the hooks are closed by the slat rod.

7. A louver structure comprising a plurality of tiltably supported slats having aligned eyes on corresponding edges

thereof, a slat rod having an inwardly facing longitudinal slot therein, and a coupling bar of flat section seated in said slot and having a plurality of longitudinally spaced hooks on its inner edge engaged with said eyes, the bar having a plurality of laterally projecting lugs embeddingly engaging the walls of the slot with the coupling bar seated therein in which position the hooks are closed by the slat rod.

8. A louver structure comprising a plurality of tiltably supported slats having aligned eyes on corresponding edges thereof, a slat rod having an inwardly facing longitudinal slot therein, and a coupling bar seated in said slot and having a plurality of longitudinally spaced hooks on its inner edge engaged with said eyes in which position the hooks are closed by the slat rod.

9. The method of assembling a slat unit comprising a plurality of uniformly spaced tiltably supported slats having aligned eyes on corresponding edges thereof comprising, the steps of supporting the slats with their eyes in alignment, providing a slat rod having a longitudinal slot in its inner side, providing a coupling bar of flat section and having a plurality of longitudinally spaced recesses in its inner edge and hooks projecting inwardly from its inner edge and facing in the same direction with the bills of the hooks in overhanging relation to the recesses, partially inserting the coupling bar in said slot in said slat rod with its inner edge projecting therefrom and exposing the hooks and the recesses thereof, and with the slat rod and coupling bar thus partially assembled engaging the hooks with the aligned eyes of the slats and then forcing the coupling bar edgewise into the slot so that the adjacent wall of the slat rod constitutes a closure for the hooks.

10. The method of assembling a slat unit comprising a plurality of uniformly spaced tiltably supported slats having aligned eyes on corresponding edges thereof comprising, the steps of supporting the slats with their eyes in alignment, providing a slat rod having a longitudinal slot in its inner side, providing a coupling bar having a plurality of longitudinally spaced hooks projecting inwardly from its inner edge and facing in the same direction, partially inserting the coupling bar in said slot in said slat rod with its hook projecting therefrom and with the slat rod and coupling bar thus partially assembled engaging the hooks with the aligned eyes of the slats and then forcing the coupling bar into the slot so that the adjacent wall of the slat rod constitutes a closure for the hooks.

11. The method of assembling a slat unit comprising a plurality of slats having aligned eyes comprising, the steps of supporting the slats with their eyes in alignment, providing a slat rod having a longitudinal slot in its inner side, providing a coupling bar adapted to be inserted in the slot and having a plurality of hooks on its inner edge facing in the same direction, inserting the coupling bar in said slot in said slat rod with the bills of the hooks projecting therefrom, engaging corresponding hooks with the corresponding eyes of the slats, and then sealing the coupling bar in the slot of the slat rod and thereby close the hooks upon the eyes.

No references cited.