

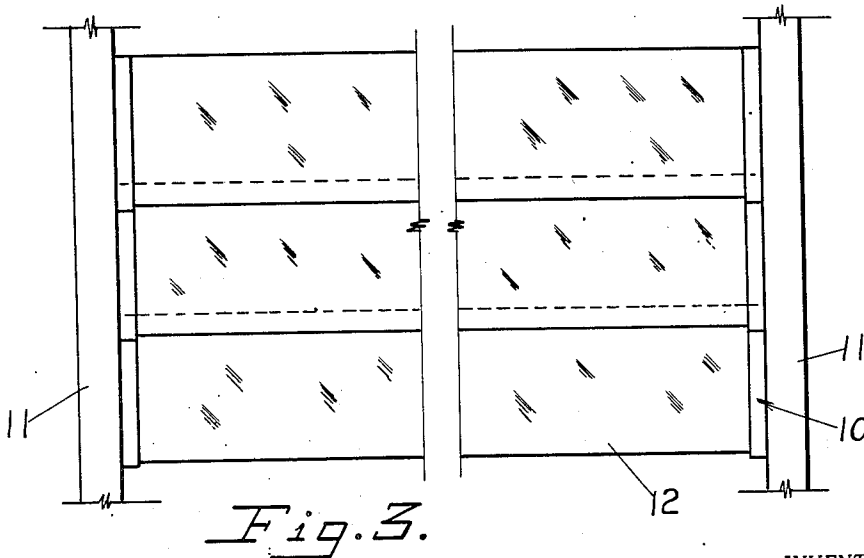
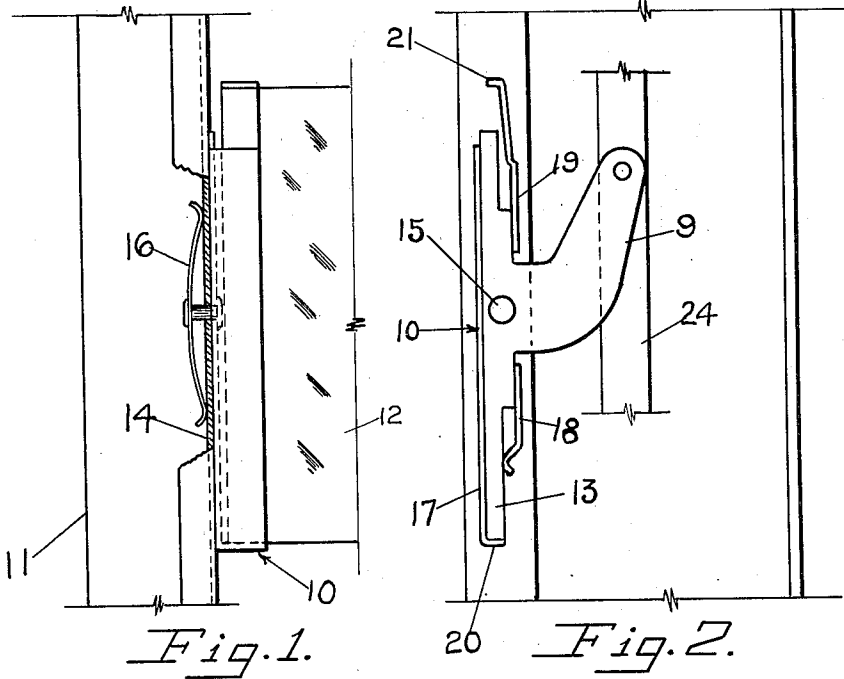
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C. SILVERS
JALOUSIE WINDOW

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2 Sheets-Sheet 1



INVENTOR.
CHARLES SILVERS.

BY
Salvatore G. Militano
ATTORNEY.

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2 Sheets-Sheet 2

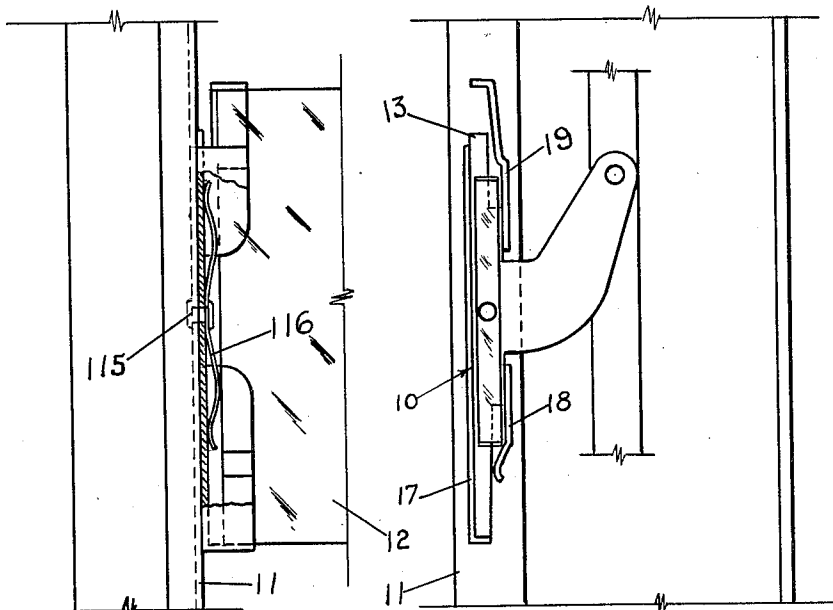


Fig. 4.

Fig. 5.

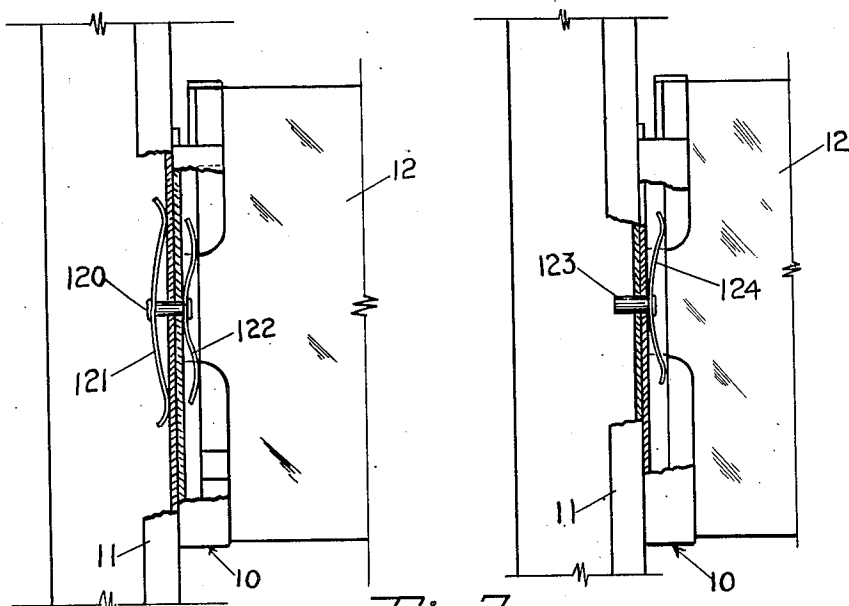


Fig. 6.

Fig. 7.

INVENTOR.
CHARLES SILVERS.

BY
Salvatore G. Militana
ATTORNEY.

UNITED STATES PATENT OFFICE

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JALOUSIE WINDOW

Charles Silvers, Miami Beach, Fla.

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5 Claims. (Cl. 20-62)

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The present invention relates to a jalousie window construction and is more particularly directed to jalousie clips and the mounting of the clips on a frame in weather tight fashion which clips are adapted to receive and retain louver slats securely and to permit the ready removal of the slats.

Therefore, it is a primary object of the present invention to provide an improved clip for jalousies with a slat retaining means which permits the ready installation of the louvers after the clips have been mounted on the frame and the removal of the louvers from the clips without distorting the retaining means.

A further object of the present invention is to provide an improved manner of mounting louver retaining clips on a frame so as to effect a weather tight engagement of the clips to the frames, thereby preventing the ingress of rain, wind, etc. therethrough when the louvers are in a closed position.

A further object of the present invention is to provide pivot clips for receiving and retaining louvers in a tight endwise position notwithstanding variations in the dimensions of the individual louvers.

In accomplishing these and other objects of the invention, as hereinafter described, I have provided improved details of structure, the preferred forms of which are illustrated in the accompanying drawings, wherein:

Figure 1 is a fragmentary front elevational view partially broken away of a louver construction embodying the present invention.

Figure 2 is a side elevational view of the structure shown in Figure 1.

Figure 3 is a fragmentary front elevational view of an assembled jalousie window.

Figure 4 is a view similar to that of Figure 1, showing a modified form of the clip engaging structure.

Figure 5 is a side elevational view of the structure shown in Figure 4.

Figure 6 is a view similar to that of Figure 1 showing a further modified form of the clip engaging structure, which structure is substantially that of Figure 1 and of Figure 3 (slightly modified) combined.

Figure 7 is a view similar to Figure 1 showing a still modified form of the clip engaging structure wherein a single leaf spring is utilized.

Referring now to the drawings wherein similar numerals are used to designate like parts, the numeral 10 refers to a pivot clip somewhat similar to the pivot clip described and claimed in my

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patent application Serial No. 221,890, filed April 19, 1951, but is an improvement thereon.

The pivot clips 10 are mounted on the side members 11 of a frame in a manner well known in the art so as to form tiers of horizontally disposed retaining members for the louvers 12. Each of the clips 10 consists of a base portion 13 abutting against and engaging a side wall 14 of the member 11 to which the clip 10 is pivoted by a rivet pin 15 extending through the side wall 14 and the base portion 13. A leaf spring 16 is mounted on the outer end of the pin 15 with its ends engaging the outer surface of the side wall 14 thereby maintaining the clip 10 at all times in close frictional engagement with the side wall 14.

In the stamping process by which the pivot clip 10 is manufactured from a flat piece of metal, an operating arm 9 extends upwardly and rearwardly from approximately the central portion of the base member 13, to which arm 16 a slide bar 24 is pivotally mounted in a manner well known in the art. On one side of the base member 13, flange 17 and on the other side segment flanges 18 and 19 are struck at right angle to the base member 13 thus forming a channel to receive the end portion of the jalousie slat 12. The end portions of each of the flanges 18 and 19 are cut away from the base member 13 and configured as shown in a direction toward the flange 17 to form resilient members adapted to exert a constant pressure against the surfaces of the slat 12 and thereby retain the slat in position therein. The lower portion 20 of the flange 17 is bent inwardly across the face of the base member 13 to engage the lower edge of the slat 12 to prevent the slat 12 from slipping downwardly, while the upper end portion 21 of the resilient member 19 is bent at right angle to the member 19 to engage the upper edge of the slat 12. The member 19 is sufficiently resilient to permit the slat 12 to be slipped into position in the clip 10 and removed therefrom, if desired, without distorting the member 19 or affecting the resiliency of this member. This construction is especially desirable when glass louvers or slats are used, for the reason that the window frames can be first installed and the glass louvers or slats 12 are slipped into their proper position in the pivot clips thereby reducing to a minimum the breakage of the slats which frequently occurs in the shipping of the completed units with the glass louvers already installed, which procedure is the common practice. Also, in the event a louver is to be replaced at a later date for any reason,

this construction permits the ready removal of an already installed slat 12 and placing another into the clips without the use of tools and without having to twist the louver engaging portion of the clip out of position and then back to its engaging position.

In the process of inserting a louver 12 in the clip 10, the lower edge of the louver 12 is inserted in the groove formed by the flanges 17 and 19. As the louver 12 slips downwardly in the clip 10, the upper side wall portion of the louver 12 will bear against the member 21 causing it to swing out of the path of the sliding louver until the lower portion of the louver 12 is resting on the stop 20, at which time the free end 21 of the member 19 will swing back into position to engage the upper edge of the louver 12. To remove the louver 12, it is a simple matter to apply pressure on the upper end portion 21 so as to disengage it from the upper edge of the louver 12 and permit the louver to be slipped upwardly out of the clip, the resilient member 19 then swinging back to its normal position.

Referring now to Figs. 4 and 5 the pivot clip 10 shown therein is identical in construction to that shown and described in Figs. 1 and 2, and mounted in the same manner as the latter construction by a pivot pin 115 on the frame 11. A leaf spring 116 is mounted on the pin 115 and extends longitudinally within the slot formed by the flanges 17, 18 and 19 of the clip 10. It is to be noted that the end portions of the leaf spring 116 engage and exert a yielding pressure against the base member 13 of the clip 10 thereby forcing the clip 10 into frictional engagement with the frame member 11. Also, the spring 116 will engage the edge portions of a slat 12 when the latter is inserted into position in the clip 10 and will maintain the slat securely endwise notwithstanding variations in length, within certain limits, or changes in those dimensions due to climatic conditions.

The modification shown in Fig. 6 is a combination of the spring mounting features of Figs. 1 and 4. In this device the clip 10 is pivotally mounted on the frame 11 by a rivet type pin 120. On either end of the pin 120 there is mounted leaf springs 121 and 122. The leaf spring 121 exerts a constant outward force on the pin 120 which maintains the clip 10 in tight engagement with the side wall member of the frame 11 while the leaf spring 122 engages the edge portion of the louver 12 so as to accommodate louvers having varying lengths as explained in detail hereinbefore.

The form of the present invention shown by Figure 7 consists of a frame member 11, a pivot clip 10 and a slat 12, all having the identical construction as those shown in the various figures of the drawings. The clip 10 is pivotally mounted on the frame member 11 by a pivot pin 123 which is secured at one end to the clip 10 and is received by a bore in the frame member 11 to permit the pivotal movement of the clip 10 and slat 12 as hereinbefore described. A leaf spring 124 is mounted or otherwise secured to the head portion of the pivot pin 124 and extends longitudinally within the confines of clip 10 in abutting relationship with the edge portions of the slat 12. In this modification of the invention, slats of varying lengths may be positioned in the pivot clips 10 since the leaf spring 124 by its extended arm portions yieldingly bears on the edge portions of the slat 12. This resulting pressure causes the spring clip 10 to abut tightly against the side wall of the frame member 11. Also, this arrange-

ment permits the transportation and erection of the jalousie window in a completely disassembled condition. The frame 11 alone can be transported and erected, then the pivot pins 10 inserted into position on the frame after the erection of the frame 11, after which the louvers or slats 12 are inserted into the pivot clips 10. However, in those modifications shown by Figures 1, 4 and 6, the frame 11 and the louver retaining clips may be assembled at the factory and shipped separately of the louvers so that upon the erection of aforesaid frame assembly, the louvers may be slid into position in the clips as hereinbefore explained in detail.

Having now disclosed my invention and realizing that, in view of my disclosure, many other modifications in details and construction or design will readily occur to those skilled in the art, I do not choose to limit myself except as in the appended claims.

What I claim as new is:

1. A louver retaining clip for a jalousie window comprising an elongated base member, a flange extending along one side of said base member and disposed at substantially right angle to said base member, said flange extending substantially the full length of said base member, louver retaining means contained at the lower end of said flange, a second flange mounted along the lower portion of said other side of said base member substantially parallel to said first flange, said second flange having a portion extending along the side of said base member but free of said base member, said portion being flexed in a direction toward said first flange thereby being capable of exerting a pressure in a direction toward said first flange, a third flange mounted along the upper portion of said other side of said base member, said third flange having its upper portion extending along the side of said base member but free of said base member, said last named portion being flexed in the direction of said first flange member thereby being capable of exerting a pressure in the direction of said first flange, and louver retaining means contained at the free end of said last named portion and extending in a direction toward a plane passing through said first flange whereby upon slidably inserting a louver in said clip, said louver retaining means is swung out of the path of movement of the louver and returns to its normal louver retaining position when the louver is positioned in said clip.

2. An article of manufacture comprising a louver retaining clip having an elongated base member, flange members mounted along the elongated edge portions of said base member substantially perpendicular to said base member, a pivot pin mounted on said base member, and a leaf spring mounted on said pivot pin between said flange members, said leaf spring having arm portions extending in a direction away from said base member.

3. A louver retaining clip comprising an elongated base member, flange members mounted on said base member at substantially right angle thereto and extending in the same direction, a pivot pin mounted on said base member, a leaf spring, and means mounting said leaf spring on said pivot pin between said flange members, said leaf spring being substantially centrally positioned on said elongated base member and having arm portions extending in a direction away from said elongated base member.

4. A louver retaining clip comprising an elongated

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gated base member, flange members mounted on said base member at substantially right angle thereto and extending in the same direction, a pivot pin mounted on said elongated base member, and a leaf spring substantially centrally positioned on said elongated base member between said flange members, said leaf spring having arm portions extending in a direction away from said elongated base member.

5. The structure as set forth in claim 1 in combination with a frame, a pivot pin pivotally mounting said clip on said frame, and a leaf spring mounted on said pivot pin, said leaf spring having arm portions extending outwardly and in contact relation with said frame whereby said base member of said clip is yieldingly urged in a direction toward said frame.

CHARLES SILVERS.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
481,077	Stoeppelwerth	Aug. 16, 1892
1,480,095	Moller	Jan. 8, 1924
1,530,220	Thellman	Mar. 17, 1925
1,591,602	Barker	July 6, 1926
1,763,837	Vernet	June 17, 1930
2,556,695	Jansen	June 12, 1951
2,565,447	Andresen et al.	Aug. 21, 1951
2,601,707	Hyland	July 1, 1952

FOREIGN PATENTS

Number	Country	Date
523,116	France	Apr. 14, 1921
528,461	France	Aug. 17, 1921
599,567	Great Britain	Mar. 16, 1948