ABSTRACT

A guide for the locking bar of an over-head garage door, or the like, is adjustably mounted on the door to permit the end of the bar adjacent the edge of the door to be moved into a position wherein it will register with an opening in a stationary member adjacent the door in various positions of the door with respect to the stationary member.
ADJUSTABLE GARAGE DOOR LOCK

FIELD OF INVENTION

It is usual practice to provide over-head garage doors with one or more locking bars which are movable outwardly through a guide fixedly mounted on the door and into engagement with a stationary member, such as a track for the door, to lock the door in a closed position. However, the lowered and closed position of the door is usually determined by the position of the floor or sill below the door. As a result, if the sill is raised or lowered by heaving of the cement or resurfacing of the garage floor, the locking bars will no longer register with the opening in the track or stationary member which they previously entered to lock the door in its closed position. As a result it has herefore been necessary to remove and reposition the guide for the locking bar in order to bring the end of the bar again into registry with the opening in the stationary member. This operation is time consuming and expensive and sometimes requires removal and replacement of the entire locking assembly.

In accordance with the present invention, an adjustable guide for the locking bar of an overhead garage door is provided which is simple and inexpensive to produce and use and which can be moved from one position to another without the use of tools to assure proper locking of the door at all times. For this purpose a simple spring metal element is slidably movable vertically along a member fixed to the door adjacent the edge of the door. The element is releasably held in any position to which it is moved for registry with an opening in the track or stationary member and serves to guide the locking bar as it moves into and out of a locking position.

THE DRAWING

FIG. 1 is a perspective illustrating one typical embodiment of the present invention as applied to an overhead door.

FIG. 2 is a horizontal sectional view of a portion of the assembly shown in FIG. 1, and

FIG. 3 is a perspective of the construction shown in FIG. 2.

PREFERRED EMBODIMENT

In that form of the invention chosen for purposes of illustration in the drawing, an overhead door 2 is provided with a conventional locking means including locking bars 4 and 6 which are connected to the opposite ends of an actuating means 8 adapted to be rotated by a handle 10. Rotation of the handle 10, serves to move the locking bars 4 and 6 into and out of positions wherein the ends 12 thereof will project beyond the opposite edges of the door and into openings 14 in door tracks or other stationary members 16 extending vertically adjacent the edges of the door to receive the door guiding rollers 17. The operating means is provided with a recess 18 for receiving the bolt 20 of a conventional lock 22 or the like to lock the door in a lowered and closed position.

Since the lowered and closed position of the door may vary due to heaving of the sill or resurfacing of the floor engaged by the door when closed, the position of the ends 12 of the locking bars with respect to the openings 14 in the tracks or stationary members 16 may change sufficiently to prevent proper locking of the door. In order to overcome this situation, the application provides the assembly with support means 24 for the ends of the locking bars adjacent the edges of the door which are readily adjustable to any selected vertical position along a strip or rod 26 mounted on the door 2. In this way it is possible to bring the ends 12 of the locking bars into registry with the openings 14 in the tracks or stationary members 16 in any lowered position of the door.

As shown in the drawing the support means 24 are preferably in the form of spring metal stampings, or the like, which are generally V-shaped in vertical cross section and have upper and lower arms 28 and 30 which have free ends 32 that may be pressed toward each other from the normal full line holding position thereof as shown in FIG. 3 to the dotted line release position. Each arm of the support member has a slot 34 therein through which the strip or rod 26 passes. Further, an elongated slot 36 extends through the connected end 38 of the arms 28 and 30 of the V-shaped member and for a suitable distance lengthwise of each arm to provide for the movement of the locking bar 6 or 8 longitudinally therethrough without restriction.

The arms 28 and 30 of the member 24 are inclined with respect to the stationary strips or rods 26 on the door and the ends of the slots 36 present edges 40 remote from the connected ends 38 of the arms which frictionally engage the strip and securely hold the supporting members in place when the members are in their normal sprung and inclined full line position of FIG. 3. However, when the ends 32 of the holding member are pressed together, the ends and edges 40 of the slots 34 will be moved out of engagement with the strip 26 so as to permit the support member to be easily moved up or down along the strip 26 to any selected new position required to bring the end 12 of the locking bar into registry with the opening 14 in the stationary member 16 adjacent the edge of the door.

Accordingly, when the door is first installed the position of the ends 12 of the locking bars can be readily established to assure registry thereof with the openings 14 in the stationary members 16 to permit proper locking of the door in its lowered position. On the other hand, if the position of the door when lowered should change, due to heaving of the sill, resurfacing of the garage floor, or for any other reason, the support member 24 can be easily moved upwardly or downwardly along the strip 26 to a new position as required to again bring the ends 12 of the locking bars 6 and 8 into proper position to enter the openings 14 in the stationary members 16 at the opposite sides of the door.

Such adjustments can be made at any time without the use of tools or skilled workmen and without removing or resetting the locking members or other elements of the assembly. At the same time, the cost of the supporting means and the strips they engage is negligible and the usual means provided heretofore for supporting and guiding the ends of the locking bars in conventional installations can be eliminated.

Whereas, one preferred embodiment of the invention has been shown in the drawing and described above, it should be apparent that numerous changes may be made in the form, construction, and arrangement of the various elements of the combination. In view thereof, it should be understood that the particular embodiment of the invention disclosed is intended to be illustrative only.
I claim:
1. An overhead door assembly having a locking bar mounted thereon and movable outwardly to a position wherein an end of the bar projects beyond an edge of the door for holding the door in a fixed position, a stationary member located adjacent said edge of the door and having an opening therein for receiving said projecting end of the locking bar, an elongated member mounted on the door and extending parallel with said edge of the door, a support for said end of the locking bar slidably movable along said elongated member, said support consisting of a generally V-shaped spring metal strip provided with aligned slots in the diverging sides thereof through which said elongated member extends, the ends of said slots releasably engaging said elongated member to hold said support in a selected position to which it may be moved, the converging ends of the V-shaped strip defining a slot through which said projecting end of the locking bar extends, the diverging sides of the support being yieldably movable to release said support for movement lengthwise of said elongated member to bring the projecting end of the locking bar into alignment with the opening in said stationary member.
2. An assembly for adjustably supporting the end of a locking bar carried by an overhead door to bring said end into alignment with an opening in a stationary member adjacent the door, said assembly comprising an elongated member adapted to be mounted on the door parallel to an edge thereof beyond which the end of the locking bar is movable, and a support for the locking bar in the form of a V-shaped spring metal strip provided with aligned slots in the diverging sides thereof through which said elongated member extends, the converging ends of said V-shaped strip having a slot therein for receiving the end of a locking bar, the ends of the aligned slots in the diverging sides of said support normally having a sprung engagement with said elongated member and serving to hold said support in a selected position relative to said elongated member but being movable toward each other to permit movement of said support to a different selected position.

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