SLIDING MOUNT FOR KITCHEN IMPLEMENTS AND THE LIKE

George H. Stell, Elmhurst, Ill., assignor to Precision Metal Workers, Chicago, Ill., a partnership of Illinois

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5 Claims. (Cl. 248—298)

This invention relates to a sliding mount for kitchen implements and the like.

An inverted channel having offset portions constituting a track is mounted on the underside of a cupboard and has stops near its forward and rearward ends respectively engageable by a carriage slidably along the way provided by the track. The carriage has a special form of spring latch with a depending handle whereby it may readily be manipulated laterally from the position in which it normally comes to rest. The latch has a slotted margin which receives the stop at the forward end of the track to lock the carriage against movement either forwardly or rearwardly when thus engaged. The normally oblique position of the latch is such that the latch is cammed aside as the carriage moves forward the forward end of the track, snapping into engagement with the stop when the slot registers therewith.

A depending mounting plate attached to the carriage has apertures of various shapes and in various positions to receive a wide variety of implements, whereby such implements may be mounted in the carriage to be pushed back under the cupboard when not in use and held in an advantageous position for use when desired.

In the drawings:

Fig. 1 is a view of a device embodying my invention as it appears in side elevation, portions of a cupboard and wall being fragmentarily illustrated in section.

Fig. 2 is a view of the device in front elevation.

Fig. 3 is a bottom plan view of the track member.

Fig. 4 is a top plan view of the carriage, the coacting stop member being diagrammatically illustrated in horizontal section.

Fig. 5 is an enlarged fragmentary detail view showing the latch member and stop in an intermediate position of the latch member.

Fig. 6 is a cross section taken on line 6-6 of Fig. 1.

The track member 7 comprises a channel having its side flanges 8 and 9 outwardly convex in cross section to provide ways upon which the complementary flanges 10 and 11 of the carriage 12 are reciprocable, the flanges 8 and 9 being receivable telescopically within the complementary carriage flanges 10 and 11.

Apertures 13 in the web 14 of the track member 7 receive mounting screws or the like whereby the track member may be secured to the bottom wall 15 of a cupboard 16 to extend outwardly from the building wall or partition 17. The shoulders 89 and 90 which offset the flanges 8 and 9 from the web 14 of the track member provide clearance for the complementary channel-shaped flanges 10 and 11 of the carriage. At the same time, it has been found that the arcuate form of the several flanges 8, 9 and 10 and 11 in cross section produces an extremely smoothly operable sliding fit with no unnecessary play.

The carriage 12 slides freely along the track member 7 from the retracted position shown in dotted lines in Fig. 1 toward the forward position of use shown in full lines. Connected with the carriage is a depending plate 20 which has numerous openings at 21 which are of such sizes and shapes and are so disposed as to receive a variety of implements commonly used in the kitchen, such as can openers, knife sharpeners, orange juicers, food grinders, etc. Most implements nowadays include a shoe which is designed for permanent mounting and from which the implement itself is detachable. No implement or shoe is illustrated, these being conventional.

It is understood that, instead of permanently mounting the implement to the plate 20, an implement-supporting shoe may be mounted to the plate and the implement may be removed and stored elsewhere, whenever desired.

Means is provided for fixing the carriage in the forward position to which it is advanced when it is desired to use an implement mounted on plate 20. The particular nature of the means for fixing the carriage position is an especial feature of the present invention. A latch lever 25 is pivoted to the bottom wall 26 of the carriage upon a shoulder stud 27 which also carries the coil 28 of a spring 29. The spring terminal 30 is anchored in an apertured flange 31 of the carriage. The free end 32 of the spring bears against the upstanding flange 33 or lever 25.

Another upstanding flange 34 on lever 25 is spaced from flange 33 to provide a slot at 35 into which an obliquely disposed fixed stop 36 is receivable, this stop being formed from the web 14 of the track forming channel member 7 as shown in Fig. 3 and Fig. 6. The stop is oblique because the lever is oblique to enable it to be cammed aside in the movement of the carriage toward its operative position. This is described hereafter.

When the slotted margin 35 of the lever 25 is engaged with stop member 36, the carriage is securely locked against movement in either direction, as clearly appears in Fig. 4. However, the lever has a depending finger piece 38 by means of which the lever may be oscillated against the bias of spring 29 to clear the stop 36 of the track member 7. If the disengaging oscillation of lever 25 is just sufficient to free the flange 33 from the stop 36, the carriage may be pushed rearwardly. Flange 34 is offset a little further so that additional oscillation of the lever is required if it is desired to continue the carriage movement forwardly, as for removing it from the track member.

The oblique position to which the lever 25 is urged by spring 29 is defined by the engagement of the finger piece 38 with the lower margin 39 of the carriage.

At the rear of the track member there is another stop 40 which the carriage abuts to preclude it from going any farther to the rear. Nothing interlocks to retain the carriage in its rearward position. When the carriage is moved forwardly from its rearward position, the obliquely disposed flange 33 will strike the stop 36 as shown in Fig. 5 to cam the lever 25 aside, against the bias of the spring 29, until the slot 35 registers with the stop 36. Upon the free end 32 of the spring will force the lever sharply counterclockwise as viewed in Figs. 4 and 5 to interlock the lever with the stop and fix the position of the carriage as shown in Fig. 4.

1 claim:

1. In an implement support comprising a fixed track and a carriage slidably to and from an advanced position thereon, the track providing a stop, the combination therewith of means for positively locking the carriage fixed in its advanced position and including a lever pivoted on the carriage and laterally movable to and from a position in which it engages the stop when the carriage is in an operative position, a spring having its ends respectively connected with the carriage and the lever for biasing the lever toward its position of stop engagement, the lever being provided with a lateral slot closely
fitting the stop and in which the stop is receivable and having a depending handle by which the lever can be oscillated against the bias of said spring to free its slotted portion from stop engagement.

2. The device of claim 1 in which the lever is normally oblique, the stop being located adjacent one side of the carriage, and the lever being pivoted to the opposite side of the carriage, the lever having a surface engageable with said stop in the course of carriage movement to cam said lever laterally until said stop registers with said slot.

3. In an implement mounting comprising a track and a carriage slideable thereon, the combination with an oblique stop flange mounted on the track adjacent one side thereof and a complementary latch lever having pivotal connection with the carriage adjacent the other side of the track from said flange, whereby such connection is offset from the stop to accommodate carriage movement beyond the point of potential engagement of the latch lever and the stop, means biasing said lever toward a position in which it lies obliquely across the carriage, the lever having a lateral slot into which said flange is receivable, whereby the carriage may be locked against movement forwardly or rearwardly along the track, the said lever having a camming flange portion at one side of the slot and a terminal flange portion at the other side of the slot engageable with the stop flange of the track, the camming flange being adapted to engage the stop with camming action as the carriage approaches a position for registry of its lever slot with the stop, whereby the lever is thrust aside until reaching a position for such registry, the terminal flange being offset laterally beyond said camming flange, the said lever being provided with a handle for manually releasing its slotted portion from the stop, greater releasing oscillation of the lever being required to release the terminal flange of the lever from the stop for forward movement of the carriage than is required for releasing its camming flange from the stop to permit rearward movement of the carriage.

4. In an implement support comprising a fixed track and a carriage slideable to and from an advanced position of use thereon, the track providing a stop, the combination therewith of means for positively connecting the carriage to said stop in said position and including lever means pivoted on the carriage and having one surface engageable with the stop to arrest carriage movement at said position and having a second surface so spaced from said one surface as to engage the stop in a direction to preclude carriage movement from said position, the lever means being moveable to and from a position of engagement of said surfaces with said stop, and the said surfaces being adapted to fix said carriage against movement in either direction respecting the track until released from said stop by manipulation of said lever.

5. The device of claim 4 in which said lever has a handle projecting beneath said carriage, the lever being pivoted to the carriage and movable in a lateral direction to and from a position for engagement of its said surfaces with said stop.

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