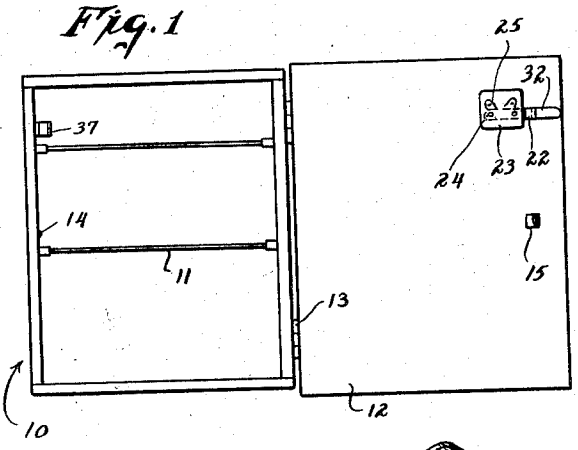
March 24, 1959 J. R. NEWCOMER, JR., ET AL 2,879,123

CONCEALED LATCH FOR MEDICINE CABINETS

Filed Feb. 26, 1958

Fig. 1



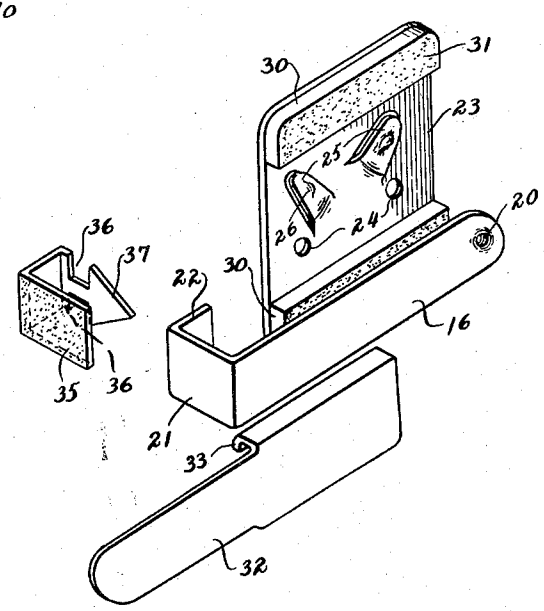


Fig. 2

Fig. 4

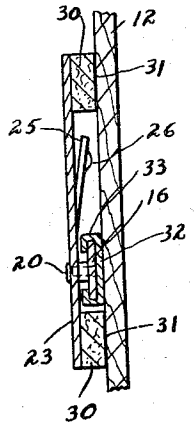
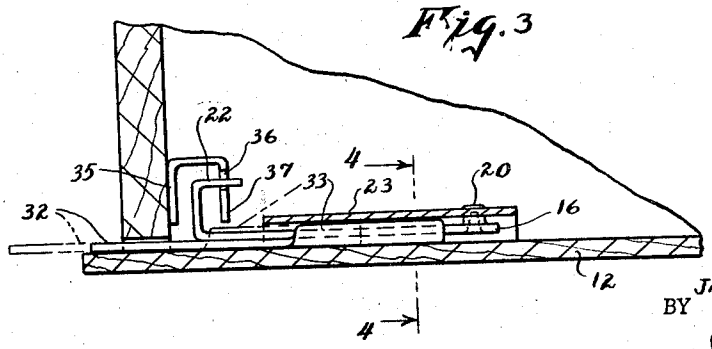


Fig. 3



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CONCEALED LATCH FOR MEDICINE CABINETS

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6 Claims. (Cl. 312—209)

This invention relates to a safety lock for medicine cabinets of the type which are recessed into a bathroom wall and relates more particularly to a novel latching element and keeper therefor, which is mounted on the back of the hinged door of the cabinet and is concealed from view.

An important object of the invention is to provide a hinged latch which can be released without any noticeable movement during normal opening of the hinged door so as to prevent the door from being opend by a small child to whom access to the cabinet should be denied. In other words, the act of releasing the latch is so casual that a child will be unaware that a latching device is present, much less, that one is bein actuated.

Recessed medicine cabinets normally project one or two inches from the wall. The hinged door has slightly larger dimensions than the rectangular side wall structure of the cabinet and the door is usually not provided with a pull handle. When a person desires to open the door he places his fingers behind the flanged door section extending outwardly from the cabinet and pulls the door open. This opening movement is resisted slightly by a friction catch. The novel latching device of the present invention is arranged so as to be raised and therefor released without any visible effort on the part of the adult yet when the child tries to open the door, imitating the apparent movements of the adult, he finds it to be locked.

The latch of the invention lies in contact with the rear face of the door so that when the fingers of the user engage this rear face and move upwardly less than an inch the latch is released.

Another object of the invention is to provide a latch and keeper therefor which can be readily installed in the cabinet in a permanent fashion without the aid of tools and without any but the most elemental mechanical skill. For this purpose the attaching faces of the latch and keeper may be provided with a quick-drying, fast sealing adhesive and to assure against incorrect placement a simple cardboard template, which forms no part of the invention, is furnished with a kit comprising the component parts of the latch and installation instructions.

A further object of the invention is to provide an improved latch and keeper of this character which can be used on a medicine cabinet door having either a right or a left hand hinge and which provides means for frictionally retaining the latch in disengaged position when no useful purpose is served by locking the door.

In the drawing:

Fig. 1 is a front elevation of a medicine cabinet showing the door in open position and showing the latch and keeper installed.

Fig. 2 is an exploded perspective view showing the component parts of the structure.

Fig. 3 is a broken horizontal section through the cabinet and door and showing the latch and keeper mounted therein.

Fig. 4 is a broken section taken on line 4—4 of Fig. 1.

A medicine cabinet is shown in Fig. 1 and has a rectangular side and top wall structure 10 and shelves 11. The door 12 is hinged at 13 in this instance on the right hand side of the cabinet and is held in closed position by a two-part friction catch 14–15.

The latching member 16 is stamped out from sheet metal and at one end a button-shaped projection 20 is pressed outwardly to form a pivot element. At its opposite end the latch has right angular extensions 21 and 22. A mounting bracket for the latch comprises a square sheet metal plate 23 having two spaced openings 24 to receive the pivot element, either one of which openings can be used, depending upon whether the hinge is at the right or the left of the cabinet. This plate also has two generally U-shaped stamped-out portions 25 formed without removing any metal which form spring-urged retainers to hold the latch in raised or unlatching position when desired. Each retainer is dimpled at 26 to form a shoulder to hold the latch in said position.

Means for mounting the plate on the rear face of the door may comprise upper and lower resilient strips 30 cemented thereto and the outer face of each strip has a coating of an adhesive 31 which can be moistened and then applied to the door. After a few seconds the now tacky adhesive is set.

It will be noted from Fig. 1 that the dimensions of the door are a few inches greater than the rectangular cabinet side wall structure so there is an overhang of the door when it is closed. A sheet metal latch handle 32 has trackways 33 which enclose the edges of the latch 16 and slidingly mount the latch handle. After the parts have been mounted on the door the latch handle is moved inwardly or outwardly until the free end of the handle is flush with but does not project beyond the edge of the door so that it is concealed when the door is closed.

The keeper is a U-shaped sheet metal stamping having an adhesive coated end 35 for securement to the cabinet and an opposite end having upper and lower notches 36 and a pointed terminal forming cam surfaces 37. One notch or the other is used to receive latch portion 22, depending on which side of the cabinet the keeper is mounted.

It will be apparent from the foregoing that when the door is being closed the latch portion rides up the inclined edge 37 of the keeper and falls in the uppermost slot 36. A person desiring to open the cabinet simply grasps the projecting flange of the door in the same fashion as he would if no latch were present, moves the fingers up slightly and releases the latch, and opens the door. A child watching the operation would not be aware of the unlatching operation.

The latch structure is shown as mounted near the upper end of one side wall to make it relatively more inaccessible to a child. It can, of course, be mounted on an upper wall or elsewhere.

The mounting means for the latch components consisting of an adhesive is desirable in cases where the latch is installed on an existing cabinet. If it is to be applied to a new cabinet it may be preferable to use rivets or screws or it may be expedient to weld the parts.

What we claim is:

1. A concealed latch and keeper for a hinged door on a cabinet having a wall structure of smaller dimensions than the door and comprising a latch lever with a pivot at one end and an angular extension at its other end received in the keeper, an extensible latch handle mounted on the latch lever, a bracket for mounting on the rear face of the door and having an opening to receive the latch lever pivot, the keeper being of substantially U-shape and having one leg for attachment to the cabinet side wall and a notch in the other leg for receiving the angular extension of the lever, said latter leg having a cam surface for raising the lever during closing of the

door, and an adhesive on the mounting surfaces of the bracket and keeper for securing the parts to the door and cabinet.

2. The combination with a cabinet having a side wall structure and a door hinged on one side wall thereof and being of larger dimension than the side wall to provide an edge section extending beyond a second side wall, of a concealed latch for securing the door in locked condition, the latch comprising a latch lever provided with a pivot element at one end thereof, and a bracket secured to the rear face of the door and provided with pivot means complementary to the lever pivot element to pivotally mount the lever, the lever being provided with a substantially L-shaped extension with right-angular corners and providing a bolt section parallel with the lever and being disposed inwardly of the door for coaction with a keeper mounted within the cabinet, and a lever handle slidably mounted on the lever to position the outer end of said handle substantially flush with said edge section of the door, whereby the lever handle is concealed when the door is closed and can be raised by sliding the user's hand up the inner face of said edge section.

3. The combination with a cabinet having a side wall structure and a door hinged on one side wall thereof and being of larger dimension than the side wall to provide an edge section extending beyond a second side wall, of a concealed latch for securing the door in locked condition, the latch comprising a latch lever provided with a pivot element at its inner end and a bracket secured in spaced relation to the rear face of the door and provided with pivot means complementary to the lever pivot element to mount the lever for hinged action between the door and bracket, the lever being provided with a substantially L-shaped extension and providing a bolt section parallel with the lever and extending inwardly of the door for cooperation with a keeper secured internally of the cabinet, and a lever handle slidably mounted on the lever and forming an extension thereof to position the outer end of said handle substantially flush with said edge section of the door, whereby the lever handle is concealed when the door is closed and can be raised to release the lever from the keeper by sliding the user's hand up the inner face of said edge section.

4. The combination with a cabinet having a side wall structure and a door hinged on one side wall thereof and being of larger dimension than the side wall to provide an edge section extending beyond a second side wall, of a concealed latch and keeper for securing the door in locked condition, the latch comprising a latch lever provided with a pivot element at one end thereof, and a bracket secured on the rear face of the door in spaced relation thereto and provided with pivot means complementary to the lever pivot element to pivotally mount the lever, the lever being provided with a substantially L-shaped extension with right-angular corners and providing a bolt section parallel with the lever and being disposed inwardly of the door, the keeper being of substantially U-shape with one leg thereof secured to said second side wall, the other leg having a cam surface along its upper edge to raise the lever upon closing of the door and a notch to receive the bolt section to lock the door, and a lever handle slidably mounted on the lever to position the outer end of said handle substantially flush with said edge section of the dor, whereby the lever handle is concealed when the door is closed and can be raised by sliding the user's hand up the inner face of said edge section.

5. The structure recited in claim 4 wherein two of said pivot means are provided on the bracket in spaced relation to permit pivotal mounting of the lever along either edge of the door, and notches are provided along upper and lower edges of the second leg of the U-shaped keeper.

6. The structure recited in claim 4 wherein the attaching faces of the bracket and keeper are provided with an adhesive for securing said faces to the door and side wall.

References Cited in the file of this patent

UNITED STATES PATENTS

823,786	Hutton	June 19, 1906
1,152,404	Eldridge	Sept. 7, 1915
2,233,699	Gorrell	Mar. 4, 1941
2,683,049	Van Der Spek	July 6, 1954