Jan. 24, 1956 H. E. HUTZELMAN 2,732,240

COMBINED HANDLE AND DRAWER LATCH

Filed Aug. 17, 1953 2 Sheets-Sheet 1

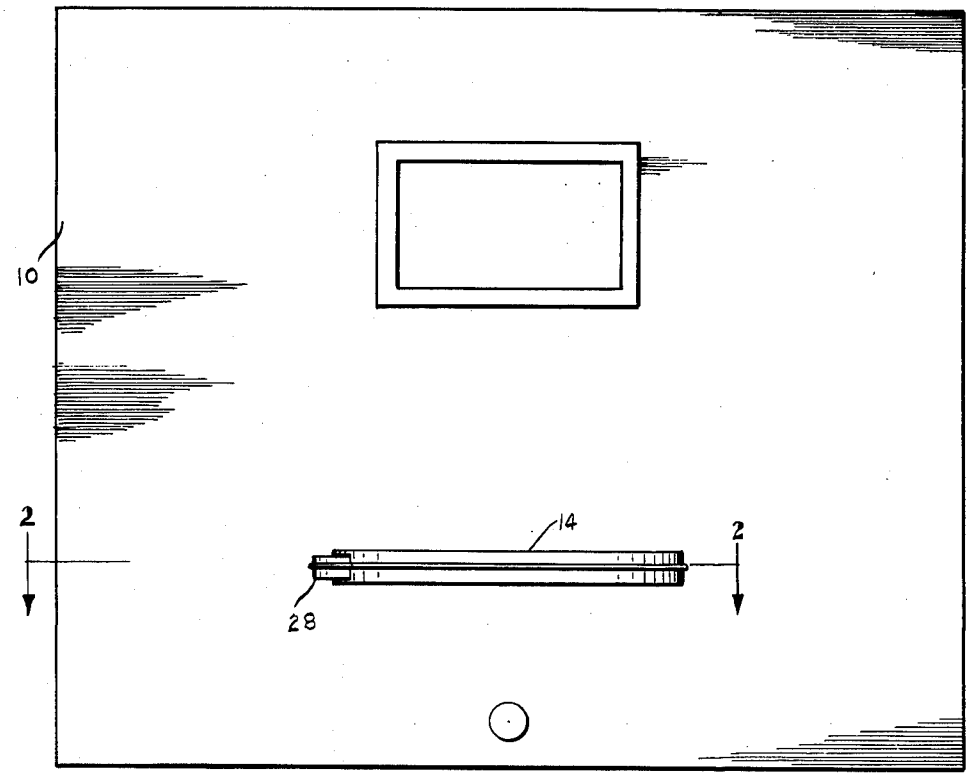


Fig. 1

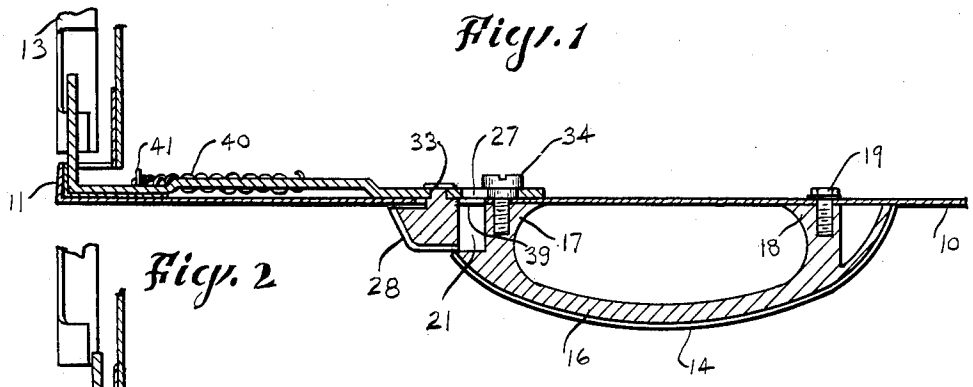


Fig. 2

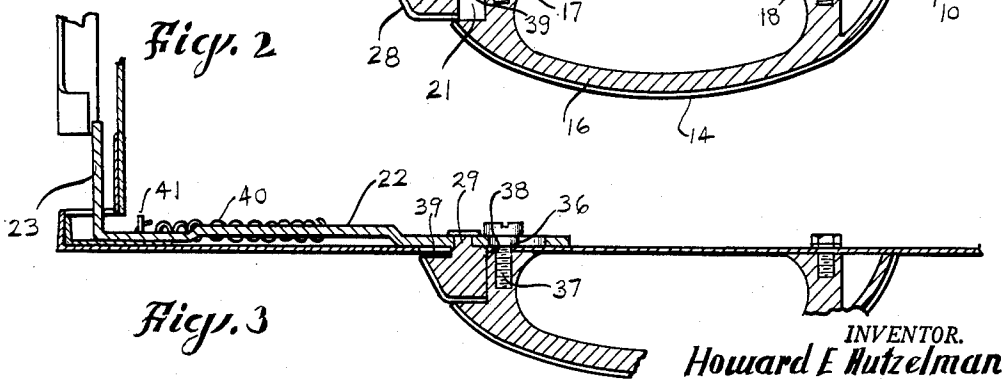


Fig. 3

INVENTOR.
Howard E Hutzelman
BY
Richmond S. Hayes
ATTORNEY

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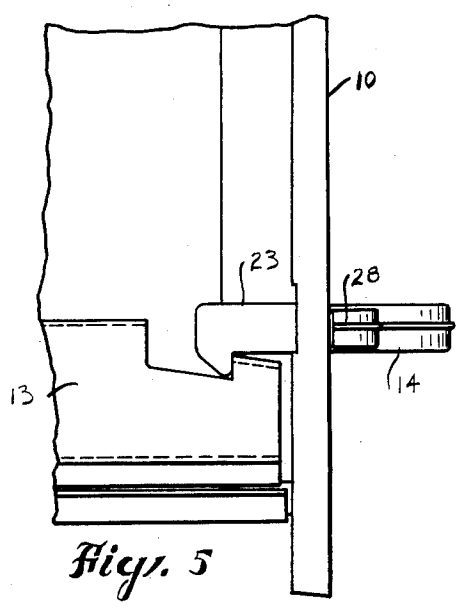


Fig. 5

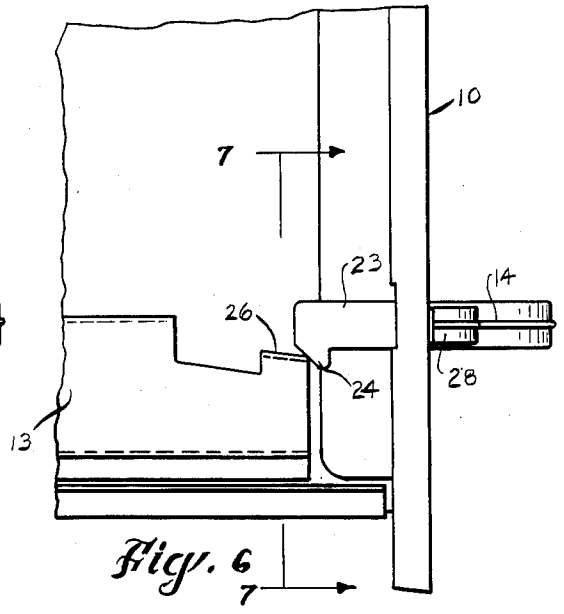


Fig. 6

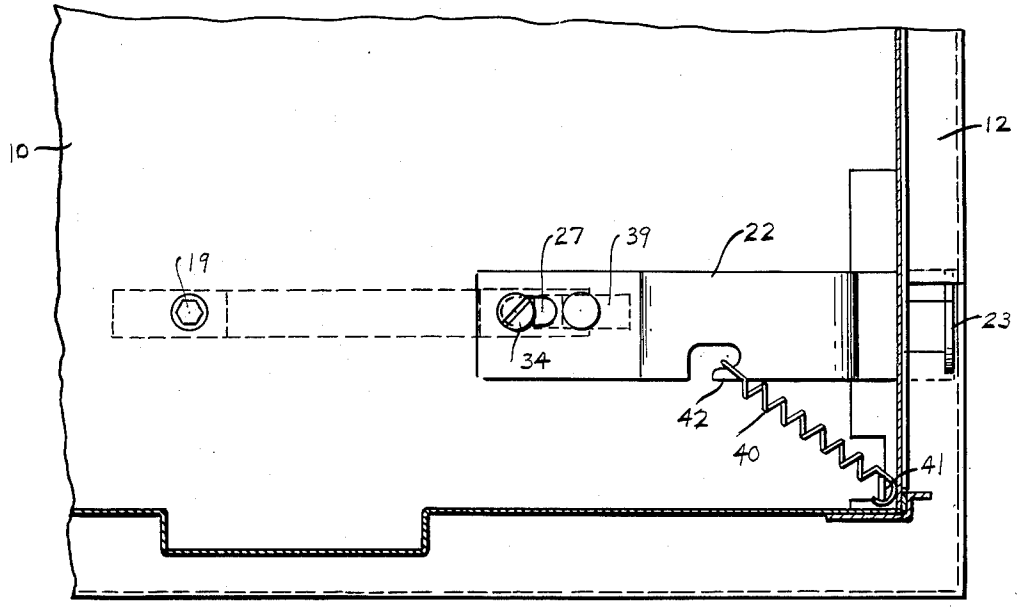


Fig. 7

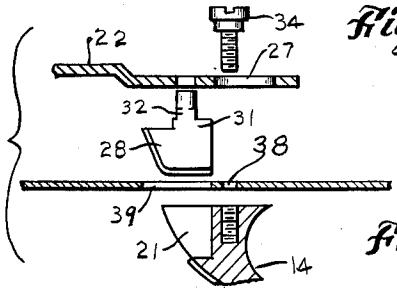


Fig. 4

INVENTOR.
Howard E Hutzelman
BY
Richmond S. Hayes
ATTORNEY

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COMBINED HANDLE AND DRAWER LATCH

Howard E. Hutzelman, Corry, Pa., assignor to Corry-Jamestown Manufacturing Corporation, Corry, Pa., a corporation of New York

Application August 17, 1953, Serial No. 374,534

2 Claims. (Cl. 292—175)

This invention relates to a handle or pull structure for sliding drawers or desks, cabinets and the like and is more particularly directed to a handle that incorporates a thumb member that is operable to actuate a latch mechanism by which to release a drawer for withdrawal from a closed or confined position.

It is well known that drawer latches heretofore devised have been made operable by a member located adjacent a handle or pull. The purpose of such a latch is to prevent inadvertent partial opening of a drawer that might occur as a result of vibration, too vigorous movement of a drawer into closed position, etc. By locating an operative latch member adjacent a drawer handle an operator could, with one hand, practically simultaneously release the latch and withdraw the drawer. Some objection has been raised with respect to combined handle and latch structures, namely that their general structure is such as to distract from rather than enhance the general appearance of a drawer front. This is due, in part, to the fact that the operative member rested against the face of the drawer front and repeated movement thereof scratched or completely wore off the paint or other finish, thus creating an unsightly blemish or scar. Additionally, the operative member has heretofore been so designed that at least in one position it failed to conceal an aperture in the drawer front through which connection was had with the concealed latch mechanism.

It is a purpose and object of the present invention to provide a drawer latch in combination with a handle and latch operating member that is of simple construction, easily operated and readily installable.

Another object of the invention lies in the provision of a drawer latch operative member that is so supported as to have operative clearance with respect to a drawer front, thus minimizing any possibility of drawer front surface damage.

Another object of the invention lies in the provision of a drawer latch operative member that, at all times, is held against twisting or turning in order to be fully effective to actuate a drawer latch.

A still further object of the invention lies in the provision of a drawer latch operative member that is installed at a point beyond its normal operative limits in order to conceal the aperture through a drawer front by which connection is had between the member and the drawer latch.

Other objects and advantages of the invention will be more fully understood from a consideration of the following specification taken in conjunction with the accompanying drawings, in which

Fig. 1 is a front elevational view of a drawer front on which is mounted one form of a handle and drawer latch operative member embodying the invention;

Fig. 2 is an enlarged fragmentary vertical sectional view taken substantially as indicated by the line 2—2 of Figure 1 and shows the latch and latch operative member in position to secure the drawer;

Fig. 3 is a view similar to Figure 2 and shows the latch and latch operative member moved to a position to release the drawer for withdrawal;

Fig. 4 is an exploded fragmentary horizontal sectional view, showing the manner of assembling the latch operative member and handle on a drawer front;

Fig. 5 is an enlarged fragmentary side elevational view of the forward end of a drawer with the latch in operative position;

Fig. 6 is a view similar to Figure 5, showing the position of the latch after release from operative position; and

Fig. 7 is a fragmentary rear elevational view of the drawer front and latch mechanism, being taken substantially on the line 7—7 of Figure 6.

Referring more particularly to the drawings, the reference numeral 10 is employed to generally designate a conventional drawer front to which the present invention is applied. It will be understood that a considerable portion of the latch structure is normally concealed by an inner plate but that this plate is not shown in order that the structure of the invention may more readily be discerned. All four edges of the front are return bent as suggested at 11 to provide marginal shallow recesses, the return flange 12 thereof constituting a surface to which an inner closing plate may be applied. To simplify the disclosure no portion of a cabinet or pedestal in which to house the drawer is shown, it being considered sufficient to disclose the front portion of one of the drawer guides 13.

The structure embodying the invention consists of a handle 14 having a grip portion 16 and mounting legs 17 and 18. Leg 18 is drilled and tapped and secured to the front 10 by screw 19 substantially as shown. Leg 17 is formed with a recess 21 that opens both in the direction of the outer end surface of the handle and toward the drawer front. A latch bar 22 is located against the inner face of the drawer front and at one end terminates in a right angle flange 23 from which depends a hook 24. This hook is intended to engage a keeper flange 26 formed at the forward end of the guide 13. As hereinafter brought out, the latch bar has lateral movement and the keeper 26 is so designed that when the drawer is moved into closed position it will force the latch bar laterally until the hook passes the keeper and the drawer is fully closed (see Figures 5 and 6).

The other end of the latch bar is provided with a horizontal elongated slot 27. Adjacent this slot a thumb member 28 is provided. The finished surfaces of the member 28 correspond generally in contour and specifically in design with the handle 14. The thumb member is of a width to project into the opening 21. Extending from the base of the thumb member is a pin 29, the base of which being a rectangular shoulder 31. Above this shoulder is a further rectangular portion 32 that is offset from the center of the shoulder 31. The pin proper extends from and is on center with the portion 32. A small rectangular opening 33 is made in the bar 22 adjacent the opening 27. This rectangular opening receives the rectangular portion 32 and allows the shoulder 31 to abut the outer face of the bar. That portion of the pin extending beyond the inner face of the bar is headed over to permanently secure the thumb member to the bar. By reason of the rectangular interfitting of the thumb member with the bar, said member cannot twist out of desired operative plane. The shoulder 31 serves to space the base of the thumb member a distance from the outer face of the bar that is slightly greater than the thickness of the drawer front. A screw 34 is provided with an annular shoulder 36 directly beneath the head thereof. The threaded portion 37 of the screw extends from the shoulder 36. The shoulder 36 is intended to fit within the slot 27 of the bar

22 and in this manner the screw 34 limits lateral movement of said bar. The threaded portion 37 projects through an opening 38 in the front and has threaded engagement with the walls of an opening in leg 17. Immediately adjacent the opening 38 of the drawer front is a further opening 39. This last mentioned opening is rectangular and of a size to permit projecting the thumb member 28 through the drawer front.

For a clearer understanding of the invention, a brief description of the assembly and operation is set out. As has already been stated, the thumb member 28 is permanently attached in a predetermined position to the latch bar 22. The latch bar is first mounted by projecting the flange and hook 23, 24 through a suitable slot in the return bent flange 11 of the drawer front. The bar is swung toward the drawer front and adjusted to register the thumb member 28 with the rectangular opening 29. The thumb member is now moved through the drawer front to a point where the bar abuts said front and in order to prevent temporary displacement the bar is moved laterally to a position such that the end of the thumb member overlies said front, this being substantially the position of these parts as they appear in Figure 2. The handle is next applied to the drawer front with the thumb member located in the opening 21. Screw 19 is now inserted into the leg 18 of the handle. Following this, screw 34 is projected through the slot in the bar 32, opening 38 of the drawer front and into the leg 17. The annuiar shoulder 36 of screw 34 bears against the inner surface of the drawer front and when this screw is turned down the handle is rigidly secured in place. The shoulder 36 is of such depth that the head of this screw merely serves as a guide for this end of the latch bar and does not restrict free movement of the bar. A spring 40 is attached at one end to a lug 41 that is struck out adjacent the base of the drawer front. The other end of this spring is engaged with a finger 42 formed in the lower edge of the bar 22.

Attention is particularly directed to the fact that the opening 38 in the drawer front is so located that when the screw 34 is engaged with the leg 17 of the handle, the shoulder 36 of the screw has caused the bar 22 and attached thumb member 28 to be located slightly to the left of the original position of assembly. Examination of Figure 3 discloses that the purpose of this is to cause the thumb member 28, even in its extreme operative position, to cover slot 38 in the drawer front. Attention is also directed to the fact that the base of the thumb member, due to the depth of the shoulder 31, has complete operative clearance from the drawer front. In consequence of this structure, the thumb member, regardless of its repeated operation cannot mar or damage the paint or other finish on the drawer front. Also at no time in the manipulation of the thumb member is any opening in the drawer front exposed to view.

Although applicant has shown and described only one form of his invention it will be understood that modifications of the structure may be made in applying the invention to drawers other than the one shown and that such modifications are considered as being within the spirit and scope of the invention insofar as they are set out in the annexed claims.

Having thus set forth my invention, what I claim as new and for which I desire protection by Letters Patent is:

1. Latch structure for securing a drawer within an enclosure comprising a slidable bar located adjacent the inner face of the front of said drawer, a hook at one end of said bar adapted to engage a keeper on said enclosure, a drawer handle having one end fixed to the outer face of the drawer front and including an exposed recess at its other end, said recess registering with an aperture in the drawer front, a slidable thumb member projected through an opening in said front into and filling said recess and constituting an endwise continuation of said handle, a shoulder on the base of said member, a laterally offset pin extending from said shoulder and projecting into an opening in said bar and being permanently joined thereto, said shoulder serving to space the base of said member from said bar a distance greater than the thickness of said drawer front, and means projecting through an opening in said front and engaging and securing said other handle end to said front, a part of said means being within a slot at the other end of said bar to limit operative movement thereof and render said member incapable of movement to an extent to expose the aperture in said drawer front.

2. Latch structure for securing a drawer within an enclosure comprising a slidable bar located adjacent the inner face of the front of said drawer, a hook at one end of said bar adapted to engage a keeper on said enclosure, a drawer handle having one end fixed to the outer face of the drawer front and including an exposed recess at its other end, said recess registering with an aperture in the drawer front, a slidable thumb member projected through an opening in said front into and filling said recess and constituting an endwise continuation of said handle, a shoulder on the base of said member, a laterally offset pin extending from said shoulder and projecting into an opening in said bar and being permanently joined thereto, said shoulder serving to space the base of said member from said bar a distance greater than the thickness of said drawer front, a screw projecting through an opening in said front to engage and secure said other handle end to said front, a shoulder on said screw being within a slot at the other end of said bar to limit operative movement thereof and prevent movement of said member to a position to expose the aperture in said drawer front.

References Cited in the file of this patent

UNITED STATES PATENTS

1,223,455	Weiss	Apr. 24, 1917
1,391,812	Weiss	Sept. 27, 1921
1,934,397	Bales et al.	Nov. 7, 1933
1,963,954	Clark	June 26, 1934
2,478,247	Conley	Aug. 9, 1949