April 27, 1954 W. E. WOODIN 2,676,866

FILE DRAWER LOCK

Filed Feb. 28, 1950

FIG. 2

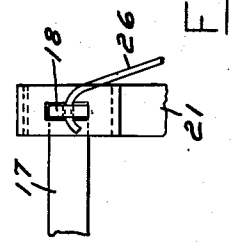
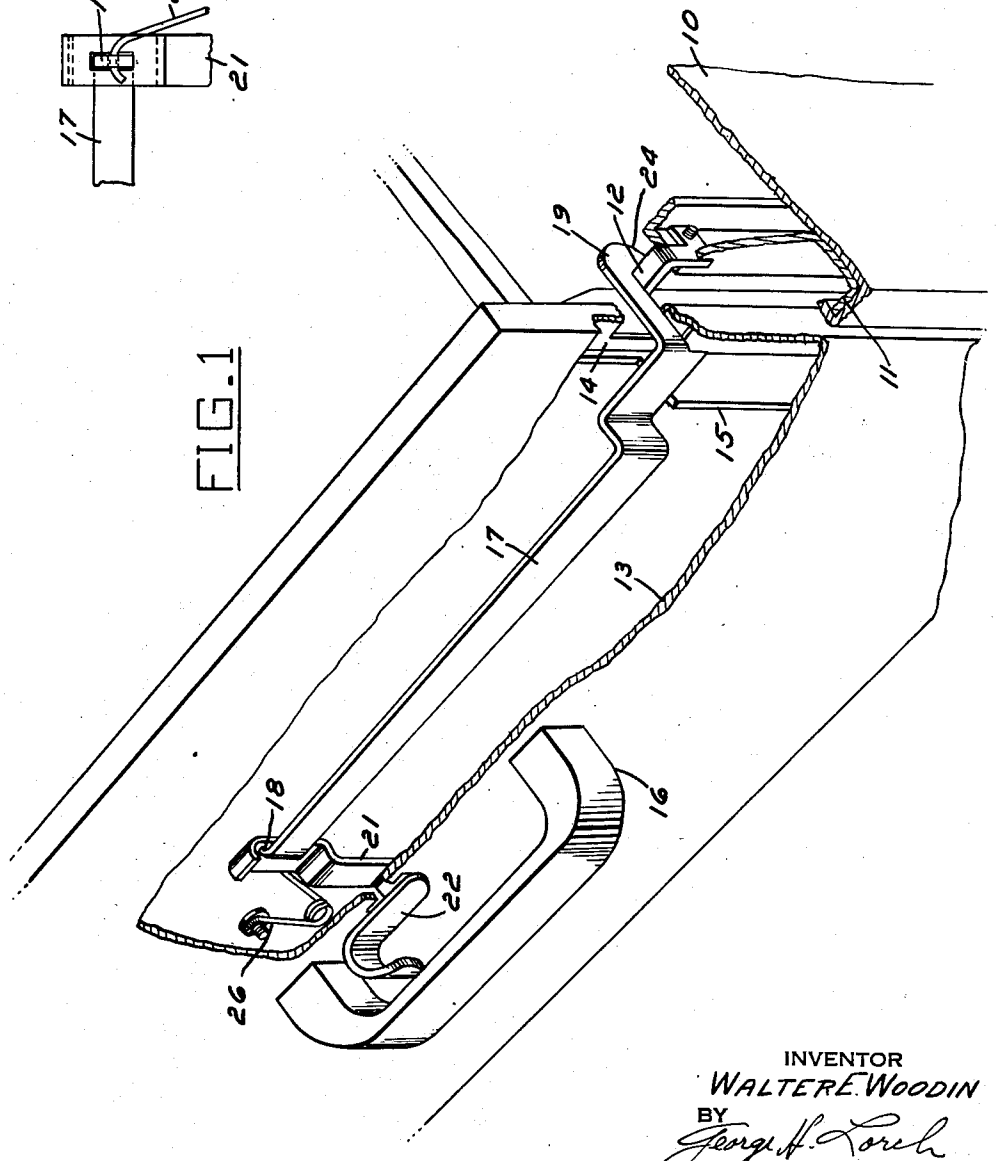


FIG. 1



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FILE DRAWER LOCK

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1 Claim. (Cl. 312—333)

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This invention relates to so-called thumb latches for file cabinet drawers, more particularly metal cabinets, and has for its general purpose the provision of an improved latch of this type. More specifically, this invention provides an improved latch of this character which is of simple and economical construction both as to number and configuration of parts, is easy to assemble and to operate, is pleasing in appearance, and completely conceals any openings through the drawer head.

A better understanding of this invention and its inherent advantages will be had from the following detailed description when read in connection with the drawings in which:

Fig. 1 is a perspective view of a portion of a drawer and file cabinet having a latch of this invention embodied therein; and

Fig. 2 is a rear elevation of a portion of the latch illustrating how the latch bar is retained in position by a single spring which is also the actuating spring for the latch.

Referring to the drawings, there is illustrated a portion of a metal file cabinet and a portion of a drawer, both the cabinet and the drawer being broken away, more clearly to illustrate the latch and keeper for securing the drawer in closed position. It will be understood that while one particular form of metal file cabinet has been illustrated the invention is not restricted to either the materials used or the type of cabinet construction shown. The drawer suspension is not illustrated because any of the well known types of drawer suspensions may be used.

In the illustrated form of this invention, a portion only of the left side of a metal cabinet is illustrated, this being all that is necessary to teach how the present invention is to be applied to a cabinet and drawer. The file cabinet is shown as having a right side panel 10 supported in part by a corner post 11 to which is also secured the keeper 12. The drawer is illustrated as comprising a head construction having an outer panel 13 and an inner panel 14 to which is secured the usual drawer body, one side member 15 only being shown in part. The drawer head is provided with the usual handle 16 secured to the outer surface of the front panel and is supported by any suitable drawer suspension (not shown) as is customary.

The drawer is held in closed position by a latch comprising a horizontal elongated latch bar 17 having a flanged or hooked inner end 18 and extending across the drawer to the right where it projects through an opening in the side

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of the drawer body, the lower edge of the opening serving to support the outer end of the bar, and terminates in a rearwardly projecting latch hook 19 for engagement with the keeper 12. The keeper and latch hook are so formed that sliding horizontal or lateral movement of the latch bar within the drawer head will free the latch hook from the keeper and release the drawer. The inner hooked end 18 of the latch bar 17 engages, i. e., projects into a slot formed in the upper end of a yoke member 21, and is detachably secured thereto by means later to be described, so that horizontal movement of the yoke member, will also move the latch bar horizontally. The lower end of the yoke is bent outwardly and projects through a slot formed in the outer panel of the drawer head. The latter panel is formed with an opening of sufficient size not only to permit insertion of the yoke from the front of the drawer into position between the two panels of the drawer head but also to permit of sufficient horizontal sliding movement of the yoke when in its assembled position to impart latching and unlatching movements of the latch bar.

Permanently secured to the forwardly projecting end of the yoke is a finger piece 22 which may be welded or otherwise secured to the yoke prior to assembly. The finger piece overlies the opening through the drawer head through which the yoke projects and extends sufficiently to the right and left to completely conceal the opening when the yoke and latch bar are in latched as well as unlatched position. For convenience in operation the finger piece is curved outwardly so that it may readily be grasped or engaged by the fingers of the hand when it is desired to release or unlatch the drawer. The finger piece may be formed of stainless steel or finished in any suitable manner to blend with the finish of the drawer and cabinet or the handle upon the drawer. The remaining parts of the latch being concealed need only be finished to prevent rust if indeed any finish at all is necessary. Thus, the finishing of latch parts is reduced to a minimum.

It is necessary that the latch be so formed and operable that opened drawers may be closed even though the latch is in locking or latched position. It is obvious that the outer hooked end of the latch bar could be formed so as to cause horizontal unlatching movement of the latch bar as the drawer is closed but it is preferred to mount the latch bar so as to permit substantially vertical slightly arcuate movement of the hooked latch and of the bar. For this reason

the outer end of the bar is provided with a rounded or cam-like surface **24** so as to cause the latch bar to be raised vertically as the drawer is closed and the opening through the drawer head or the opening in the yoke where it engages the inner hooked end of the latch bar is formed with sufficient clearance to permit the bar to pivot about its inner end to provide substantially vertical movement of the outer end of the latch bar.

A coil spring **26**, preferably a "grasshopper" type and preferably having one end engaging the screw which secures one end of the handle **16** to the drawer head and having its other end engaging in an aperture in the terminating inner end of the latch bar as shown more fully in Fig. 2 serves constantly to urge the latch bar to the right in latching position and also to lock or retain the latch bar assembled to or in engagement with the yoke.

From the foregoing it will be observed that this invention has provided an economically constructed latching mechanism that can be assembled very simply by inserting the yoke through the front panel of the drawer head, engaging the hooked inner end of the latch bar into the yoke, and securing it in position by means of the single spring which also serves to urge the latching mechanism to latched position. In other words, the single spring serves both to actuate the latch bar and secure the parts in assembled position without the necessity of miscellaneous bolts or nuts. The foregoing construction also provides a latching mechanism which is extremely easy to operate, both when it is desired manually to release a drawer and to reclose and relatch a drawer after it has been opened. The specific formation of the finger piece in combination with the yoke construction also permits complete concealment of the single opening through the front panel of the drawer head.

It will be obvious to those skilled in the art that variations may be made in the details of construction without departing from the spirit and scope of the invention as defined in the appended claim.

I claim:

In a metal file cabinet having a sliding drawer therein, a latch for said drawer comprising a movable latch bar having a hooked inner end mounted between the inner and outer panels of the drawer head, a yoke detachably engaging the hooked end of said bar, said yoke having a portion extending through the outer panel of said drawer head to the outer side thereof, the outer panel of the head being provided with an opening therethrough sufficient in size to permit passage and limited horizontal sliding movement of the yoke therein, the edge of said opening also serving as a fulcrum for vertical movement of the latch bar, a horizontally slidable finger release disposed upon the outer side of the drawer head and permanently attached to the extending portion of the yoke and overlying and concealing the opening through the outer panel of the drawer head with the latch bar in latched and unlatched positions, the outer free end of the latch bar extending beyond the side of the drawer and terminating in a latch book, a keeper secured to the cabinet in position to be engaged by the latch hook for latching the drawer in closed position, said latch bar and finger release being mounted for horizontal movement to permit engagement and disengagement of the keeper and said latch bar, and a spring urging said latch bar to latching position, said latch bar also being mounted for substantially vertical arcuate movement about said opening in said outer panel as a fulcrum to permit said drawer to be closed with the latch bar in latching position.

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