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PUSH-PULL TYPE FURNITURE HANDLE

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My invention relates to handle mechanisms which are attachable to drawers of articles of furniture and the like.

An important object of my invention is to produce a push-pull handle mechanism of the aforementioned character which is flush with the front surface of a drawer to which it may be attached, and which requires a preparatory pushing action to set the handle element thereof for either pulling or pushing to open or close the said drawer.

Another object of my invention is to provide a handle mechanism of the aforementioned character which maintains the handle in flush and concealed position, and which is actuated by a spring actuating plate mechanism so as to bring the handle forward for grasping the same with the fingers.

A further object of my invention is to provide a handle mechanism of the aforementioned character which after being released by the fingers will automatically drop into concealment.

A still further object of my invention is to provide a handle mechanism of the aforementioned character which is simple in construction and economical to manufacture in quantity production.

Other objects, advantages and features inherent in my invention will become apparent from an examination of the accompanying drawings, bearing further elucidation in the ensuing description, wherein like symbols are used to designate like parts, and in which:

Fig. 1 is a perspective view of my invention with certain portions thereof broken away, showing also in dotted or phantom lines the actuated position of the handle mechanism for setting it in readiness for operative performance.

Fig. 2 is a longitudinal cross-sectional view taken through the median line of Fig. 1, showing the actuating plate mechanism pushed inwardly so as to bring upwardly the handle to operative and useful position.

Fig. 3 is an enlarged fragmentary view, partially in cross section, showing the manner in which the handle element is secured to the enclosure or casing provided therefor.

Referring to the various views, my invention is, generally, designated 4 and consists of a case 5 having the interior confines 18 to act as a housing for the additional mechanism utilized. At the top face of the case 5 slotted portions 6 are provided in order to receive in articulate and anchoring relationship the lugs 13 at the terminal portions of the strip portion 12 emanating from the plate actuating element 11.

It will be noted that the plate actuating element 11 is cut out at 16 to form pushing shoulders to actuate the ends 26 of the handle element 19 which is of U-shaped construction. The actuating plate element 11 is undercut at 17 in order to provide an enclosure for the top of the casing 5, simultaneously the portion 17 and the confines 18 defining the operative U-shaped slotted cut-out portion for concealing the handle element 19.

The actuating plate element 11 is retained normally in the position indicated in full lines in Fig. 1 and is held in that position by the U-shaped spring element 14 which is riveted at 15 to the back portion of the casing 5, its remaining leg being in intimate contact interiorly with the actuating element 11. The handle element 19 is provided with reamed out and countersunk holes 21 in order to be secured to the indentations 20 brought out from the sides of the casing element 5. The said handle may

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be made of a resilient material so that it could be snapped into engagement, or out of engagement, with the indentations 20, the countersunk portions 21 thus facilitating the assembly or removal of the handle with respect to the casing 5 or the indentations 20.

The entire mechanism is secured within a mortised portion 9 in a drawer or like article 22, the top surface being rabbeted as indicated at 10 above the mortise portion 9, so that the perimetrical flange 7 will be flush with the front surface 25 of the drawer.

It will also be noted that the handle portion 24 is presented to the fingers 23 ready for grasping the same to pull the drawer outwardly, or push it back inwardly. By pushing with slight pressure the fingers 23 against the actuating plate element 11 the shoulders 16 are caused to motivate the handle portions 26, pushing it rearwardly, thus presenting the bail portion 24 of the handle forwardly to be grasped by the fingers 23 and the drawer 22 can thus be actuated.

The entire mechanism may be fastened by screws 8, or any other suitable fastenings, preferably flat head screws, so that the entire front surface 25 of a drawer or like article to which the handle mechanism may be attached will remain smooth, flush and maintain the handle 19 concealed at all times.

In order to operate the mechanism, the illustration of Fig. 2 indicates that the fingers 23 depress slightly the actuating plate element 11. The shoulders 16, by virtue of their intimate contact with the extended and concealed handle portions 26 motivate the handle 19, so as to present the bail portion 24 thereof to be readily engaged by the fingers 23 and held until released. When the handle bail 24 is released, the spring 14 urges the actuating plate 11 back to normal, flush, closed position, in turn permitting the handle element 19 to be brought back into confinement within the defined U-shaped recess between the confines 18 of the case and the undercut portion 17 of the actuating plate element 11. The handle 19 articulates about the trunnion-like indentations 20, fitting into the countersunk openings 21 of the handle element 19.

The entire device may be readily removed from the drawer 22 by removing the screws 8, should it be required to inspect or repair the same.

It is to be noted that the actuating plate element, by virtue of the extension strips 12, terminating in anchoring lugs 13, fastened through the slots 6, provide suitable anchorage therefor, and in concert with the U-shaped spring 14 maintain the same in operative, or inoperative, positions, maintaining the handle element 19 at all other times concealed.

Although the drawings and the above specification disclose the best modes in which I have contemplated embodying my invention, I desire to be in no way limited to the details of such disclosure, for in the further practical application of my invention many changes in the form and construction thereof may be made as circumstances require or experience suggests without departing from the spirit of the invention as expounded within the scope of the appended claims.

Having thus described and revealed my invention, what I claim as new and desire to secure by Letters Patent is:

1. A push-pull type of handle adapted to be secured to maintain a flush relationship with the surface of a drawer and the like to which it may be secured, comprising a casing having a top face a bottom face a back face and two side faces defining an open end and provided with a perimetrical flange at the said open end and adapted to be secured to a drawer surface, means for securing the said flange to the said surface, slotted portions on the said top face of the said casing, an actuating plate element adapted to substantially close the said open end of the said casing and having a reduced plate portion at its lower section defining handle pushing shoulders at its upper section and a U-shaped recess between the said plate portion and the said open end, the said actuating plate element being further provided with a pair of right angular strip portions formed at the top edge thereof and terminating in lug portions articulately secured to the said slotted portions, trunnion portions projecting interiorly of the said side faces of the

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said casing, a spring element secured interiorly to the back face of the said casing in intimate contact with the said actuating plate element and adapted to urge the said actuating plate element normally to flush position with the open end of said casing, and a U-shaped handle element provided with countersunk holes adjacent the termini of its upright legs and adapted to be articulately operative in concert with the said trunnion portions resulting in extensions positioned behind and in intimate contact with the said handle pushing shoulders.

2. A push-pull type of handle adapted to be secured to maintain a flush relationship with the surface of a drawer and the like to which it may be secured, comprising a casing having a top face a bottom face a back face and two side faces defining an open end and provided with a perimetrical flange at the said open end and adapted to be secured to a drawer surface, means for securing the said flange to the said surface, slotted portions on the said top face of the said casing, an actuating plate element adapted to substantially close the said open end of the said casing and having a reduced plate portion at its lower section defining handle pushing shoulders at its upper section and a U-shaped recess between the said plate portion and the said open end,

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the said actuating plate element being further provided with a pair of right angular strip portions formed at the top edge thereof and terminating in lug portions articulately secured to the said slotted portions, trunnion portions projecting interiorly of the said side faces of the said casing, a spring element secured interiorly to the back face of the said casing in intimate contact with the actuating plate element and adapted to urge the said actuating plate element normally to flush position with the open end of said casing, and a U-shaped handle element provided with countersunk holes adjacent the termini of its upright legs and adapted to be articulately operative in concert with the said trunnion portions resulting in extensions positioned behind and in intimate contact with the said handle pushing shoulders, the said U-shaped handle element normally being positioned within the said U-shaped recess.

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