Aug. 29, 1967 E. C. STEWART 3,338,649

COLOR INSERT PLATE

Filed May 13, 1966 2 Sheets-Sheet 1

FIG. 1

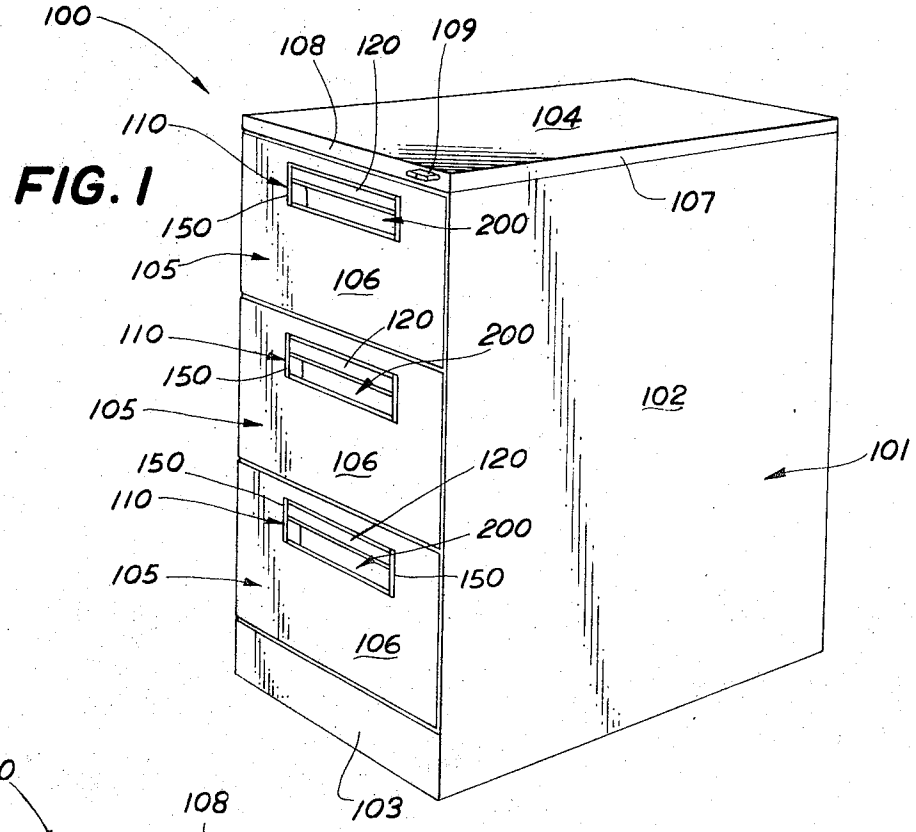
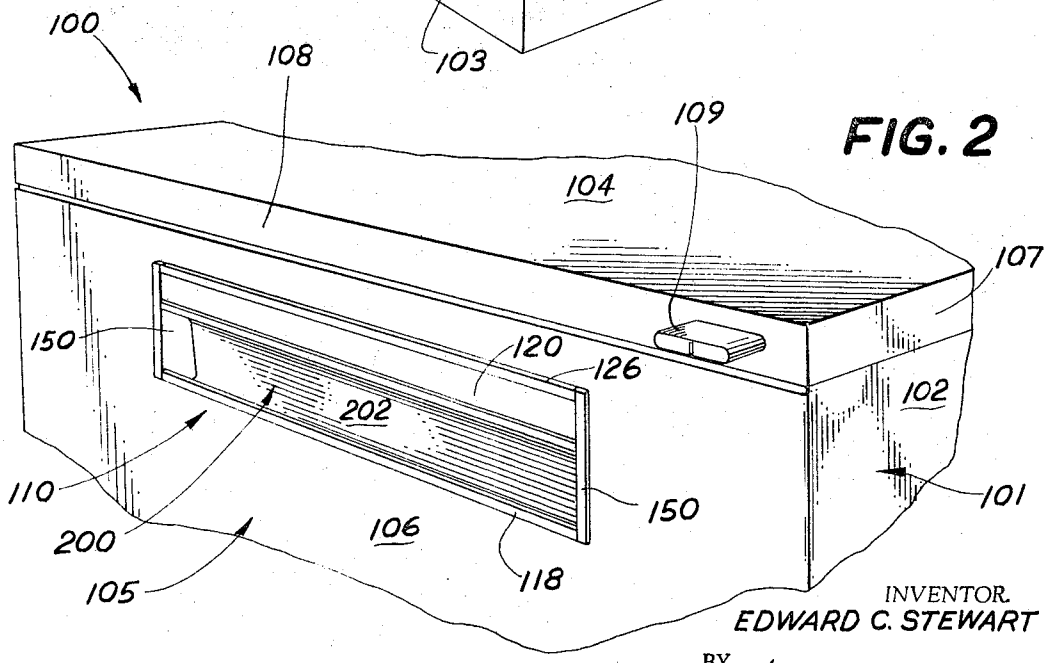


FIG. 2



INVENTOR.
EDWARD C. STEWART

BY Prangley, Baird, Clayton, Miller & Vogel
ATTY'S.

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FIG. 3

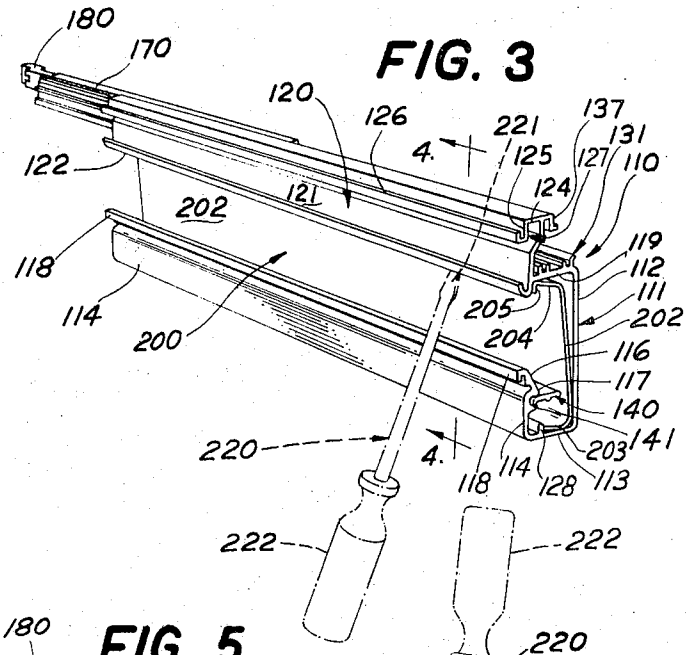


FIG. 4

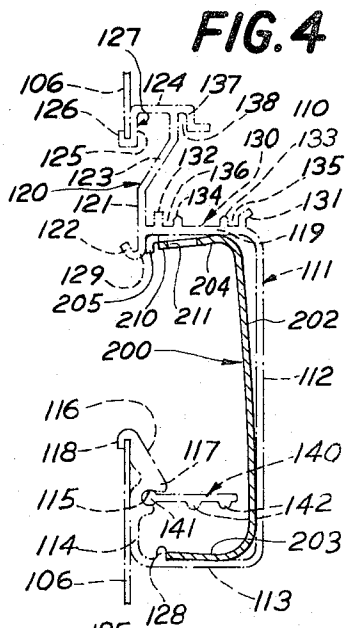


FIG. 5

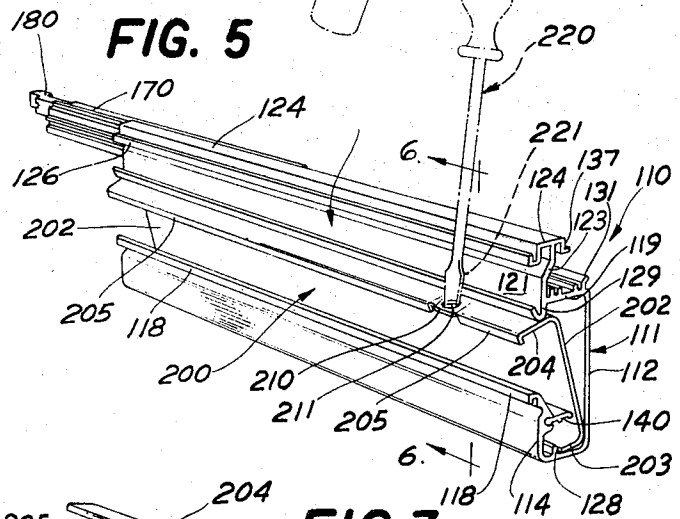


FIG. 6

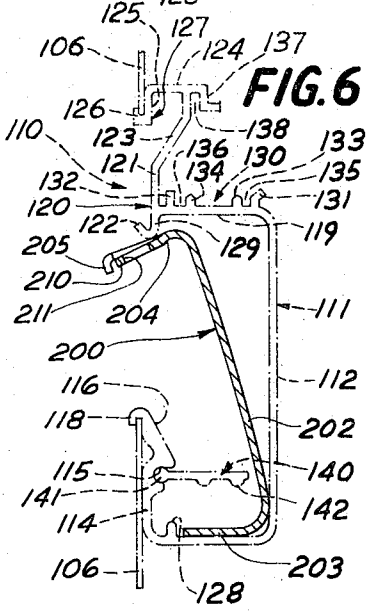
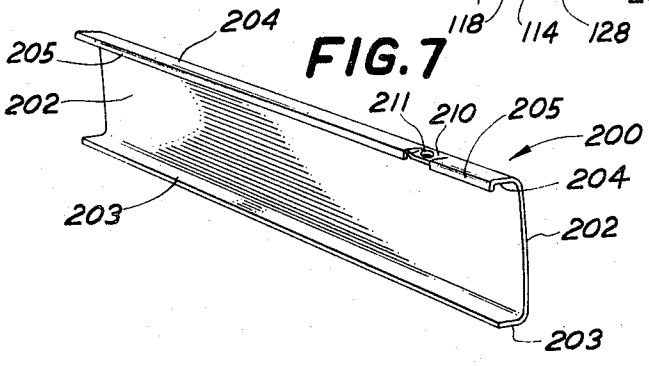


FIG. 7



United States Patent Office 3,338,649 Patented Aug. 29, 1967

3,338,649

COLOR INSERT PLATE

Edward C. Stewart, Aurora, Ill., assignor to Lyon Metal Products, Incorporated, Aurora, Ill., a corporation of Illinois

Filed May 13, 1966, Ser. No. 549,918
11 Claims. (Cl. 312—204)

The present invention relates to latch housings on drawers of filing cabinets or the like, and specifically to color insert plates for placement in such latch housings.

The color insert plate of the present invention is generally useful in all drawer latch housings, but for the sake of convenience the invention will be described as applied to a latch housing on a drawer in a filing cabinet.

It is an important object of the present invention to provide in a drawer for a filing cabinet or the like, wherein the drawer includes a drawer head having an opening arranged at the front thereof, the combination comprising a latch housing mounted in the opening and extending rearwardly with respect thereto and substantially closing the same and providing a pull for the drawer, the latch housing including a generally vertically arranged main wall disposed to the rear of the associated opening, a bottom wall extending forwardly from the lower edge of the main wall and to the lower edge of the opening, a top wall extending forwardly from the upper edge of the main wall and to the upper edge of the opening, a pair of housing end walls respectively disposed at the opposite ends of the latch housing and closing the areas bounded by the main wall and the bottom wall and the top wall, an upstanding abutment flange on the bottom wall extending the length thereof, a downturned retaining flange on the top wall extending the length thereof, and a color insert plate mounted in the latch housing and extending between the housing end walls, the plate including a main panel disposed toward the main wall and extending the length thereof and covering the main wall, a bottom panel integral with the lower edge of the main panel and extending forwardly therefrom to the abutment flange and covering the portion of the bottom wall disposed between the main wall and the abutment flange, a top panel integral with the upper edge of the main panel and extending forwardly therefrom to the retaining flange and covering the portion of the top wall disposed between the main wall and the retaining flange, the color insert plate being formed of resilient material whereby it may be inserted in and removed from the latch housing without disassembly thereof.

Another object of the invention is to provide the combination of a latch housing and an improved color insert plate of the type set forth, wherein the latch housing is formed from a section of a continuous aluminum extrusion and the color insert plate is formed of sheet steel, the side of the color insert plate disposed away from the latch housing preferably having a color different from that of the latch housing.

Yet another object of the invention is to provide in the combination of a latch housing and a color insert plate of the type set forth, a mounting tab on the top panel of the color insert plate, the mounting tab having an opening therein for receiving a tool to assist in removing the color insert plate from the latch housing.

A further object of the invention is to provide an improved color insert plate of the type set forth.

Further features of the invention pertain to the particular arrangement of the parts and the interconnection thereof whereby the above-outlined and additional operating features thereof are attained. The invention, both as to its organization and method of use, together with further objects and advantages thereof, will best be understood by reference to the following specification taken in connection with the accompanying drawings, in which:

FIGURE 1 is a perspective view of a file cabinet incorporating therein a latch housing having an improved color insert plate therein, all in accordance with and embodying the principles of the present invention;

FIG. 2 is an enlarged fragmentary view of the upper front portion of the filing cabinet of FIG. 1;

FIG. 3 is a perspective view of the latch housing and certain associated parts illustrated in FIG. 2 and having mounted therein a color insert plate of the present invention;

FIG. 4 is an enlarged view in vertical section through the assembly of FIG. 3 along the line 4—4 thereof;

FIG. 5 is a view similar to FIG. 3 and showing the color insert plate partially removed from the associated latch housing;

FIG. 6 is an enlarged view in vertical section through the assembly of FIG. 5 along the line 6—6 thereof; and

FIG. 7 is a perspective view of the color insert plate of the present invention.

Referring now to the drawings, and particularly to FIGS. 1 and 2 thereof, there is illustrated a filing cabinet **100** in which the color insert plate of the present invention is particularly useful, it being understood the color insert plate of the present invention is useful in other types of furniture having drawers therein with latch housings on the front thereof. For purposes of illustration, the filing cabinet **100** has been illustrated as having three drawers therein, the filing cabinet **100** including a case **101** having a pair of parallel side walls **102** generally rectangular in shape and joined at the rear by a rear wall (not shown). There is provided at the front of the case **101** at the bottom thereof a base **103** and there is provided to cover the top of the case **101** a top **104**. Disposed between the base **103** and the top **104** are three drawers **105** each provided with a front wall **106**. As illustrated, the top **104** further has a pair of side flanges **107** overlying the upper edges of the side walls **102**, a rear flange (not shown) and a front flange **108** extending downwardly therefrom and carrying therein a lock **109** useful in locking the drawers **105** in the closed positions thereof.

In accordance with the present invention, each of the drawers **105** is provided with a combined pull and latch and label holder **110** generally centrally thereof and adjacent to the upper edge of the front wall **106** thereof, the holder **110** fundamentally comprising a latch housing **111** that is mounted in a generally rectangular opening in the drawer front wall **106**. As illustrated best in FIGS. 3 to 6 of the drawings, it will be seen that the latch housing **111** is formed as sections of continuous metallic extrusions, the preferred material being aluminum, the extrusions being cut to fit within the vertical side edges of the rectangular opening in the drawer front wall **106**. More particularly, there is provided a main housing wall **112** arranged vertically and spaced rearwardly from the drawer front wall **106**, the main wall **112** being generally rectangular in shape. Integral with the lower edge of the main wall **112** is a bottom wall **113** also extending the entire width of the opening in the drawer front wall **106**, the juncture between the main wall **112** and the bottom wall **113** being curved as illustrated. Integral with the forward edge of the bottom wall **113** is an upstanding lower front wall **114** that extends upwardly from a point below the lower edge of the opening in the drawer front wall **106** upwardly to a point slightly thereabove and being provided on the upper edge thereof with a forwardly directed and down turned flange **118** which overlies the lower edge of the opening in the drawer front wall

106. The lower front wall 114 also has formed intermediate the upper and lower ends thereof and on the inner surface thereof a pivot groove 115 that extends the width of the latch housing 111 and is adapted to receive a latch bar as will be described more fully hereinafter. There further is provided a stop flange 117 immediately adjacent to the pivot grooves 115 to limit the upward movement of the associated latch bar. There further is provided on the upper inner surface of the lower front wall 114 an upwardly and outwardly inclined pull surface 116 that is adapted to be contacted by the hand of a user in moving the associated drawer 105 between the open and closed positions thereof. Finally, there is provided extending upwardly from the bottom wall 113 an abutment flange 128 extending the entire length of the bottom wall 113 and disposed forwardly toward the lower front wall 114 and generally beneath the stop flange 117.

Formed integral with the upper edge of the main wall 112 and extending forwardly therefrom is a top wall 119, the top wall 119 extending forwardly to a position disposed substantially in vertical alignment with the associated drawer outer wall 106 and carrying on the forward edge thereof and extending thereabove a label holder generally designated by the numeral 120. The label holder 120 more particularly includes a top front wall 121 which has a portion extending downwardly below the top wall 119 to provide a retaining flange 129 and has on the lower edge thereof an outwardly and upwardly extending front flange 122 which is adapted to receive therein and to have supported thereby the lower edge of an associated label (not shown). The upper edge of the top front wall 121 carries a rearwardly and upwardly directed flange 123 which carries on the upper edge thereof an upper wall 124, the upper wall 124 extending forwardly to the inner surface of the associated drawer outer wall 106 and carrying on the forward edge thereof a downturned front wall 125 that in turn carries on the lower edge thereof an outwardly and upwardly directed flange 126, whereby the associated edge of the drawer front wall 106 is received between the wall 125 and the flange 126, the front wall 125 having an inner surface 127 against which is disposed the upper front portion of an associated label (not shown).

The top wall 119 further carries thereon latch guide mounting structure generally designated by the numeral 130 and including an integral upstanding rear flange 131 disposed forwardly a short distance with respect to the housing main wall 112 and a front flange 132 extending upwardly from the top wall 119 and spaced rearwardly a short distance from the top wall 121. Associated with the flanges 131 and 132 are beads 133 and 134, respectively, that extend upwardly from the top wall 119 and are spaced from the adjacent associated flanges a short distance to provide therebetween corresponding grooves 135 and 136. A portion of the latch guide mounting structure 130 is also carried by the upper wall 124 which has on the rear end thereof a downturned rear flange 137 which forms with the flange 123 a downwardly directed groove 138 therebetween. The grooves 135, 136 and 138 are useful in mounting an associated latch guide thereon.

There is provided within the latch housing 111 and pivotally mounted thereon a latch bar 140 in the form of an elongated continuous extrusion including a substantially flat body carrying on the edge thereof a partcircular hinge portion 141 adapted to be received in the pivot groove 115, whereby to mount the latch bar 140 on the latch housing 111. Reinforcement is provided for the latch bar 140 in the form of a pair of parallel reinforcing beads 142 disposed on the lower surface thereof and extending the length thereof.

The ends of the latch housing 111 are closed by a pair of housing ends 150, the housing ends 150 closing particularly the portion of the main housing 111 disposed above the latch bar 140. In the completed latch structure,

a latch guide 170 is also provided mounted on the grooves 135, 136 and 138 described above, the latch guide 170 being disposed to the left in FIGS. 3 and 5 and carrying thereon an outwardly extending latch 180, the latch 180 engaging a keeper (not shown) on the case 101 to hold the assocated drawer 105 in the closed position thereof, suitable mechanism (not shown) interconnecting the latch bar 140 and the latch 180 so that control of the latch 180 is achieved by means of the latch bar 140.

The above described parts of the file cabinet 100 including the case 101, the drawers 105, and the combined pull and latch and label holder 110, including the latch housing 111, the label holder 120, the latch bar 140, the housing ends 150, the latch guide 170 and the latch 180 are more fully described and illustrated in the copending application for United States Letters Patent Ser. No. 534,382, filed March 15, 1966, by Kenneth D. Schreyer for File Cabinet, the disclosure of that application being incorporated herein by reference.

In accordance with the present invention there further is provided in the latch housing 111 a color insert plate 200 (see FIGS. 3 to 7, particularly). The color insert plate 200 fits within the latch housing 111 and extends the entire width thereof, i.e., from the inner surface of one of the housing ends 150 to the inner surface of the other one of the housing ends 150, and more specifically, covers the exposed surfaces of that portion of the latch housing 111 including the main wall 112, the bottom wall 113 disposed between the main wall 112 and the abutment flange 128 and the top wall 119 disposed between the main wall 112 and the retaining flange 129. More particularly, the color insert plate 200 includes a main panel 202 that is generally rectangular in front elevational view and completely covers the front surface of the main wall 112 and has a width equal to the distance between the facing surfaces of the housing ends 150, the main panel 202 being disposed in front of and generally against the front surface of the main wall 112 in use (see FIGS. 3 and 4). Formed integral with the lower edge of the main panel 202 is a bottom panel 203 extending the entire width of the main panel 202 and therefore the entire distance between the facing inner surfaces of the mounting end walls 150, the juncture between the main panel 202 and the bottom panel 203 being curved as illustrated. The bottom panel 203 extends forwardly to abut against the rear surface of the abutment flange 128 on the bottom wall 113, whereby the bottom panel 203 serves to completely cover that portion of the housing bottom wall 113 disposed between the main wall 112 and the abutment flange 128.

Formed integral with the upper edge of the main panel 202 and extending forwardly therefrom is a top panel 204, the top panel 204 extending forwardly to a position disposed against the rear surface of the retaining flange 129 when the parts are in the assembled position, see FIGS. 3 and 4. It will be seen that the top panel 204 extends the entire length of the associated latch housing 111 and more specifically the entire length of the top wall 119, thereby to conceal that portion of the forwardly directed surface of the top wall 119 disposed between the main wall 112 and the retaining flange 129. In order to impart additional strength to the color insert plate 200 there is provided on the forward edge of the top panel 204 a downturned flange 205, the forward surface of the flange 205 engaging the rear surface of the retaining flange 129.

In order to facilitate the removal of the color insert plate 200 from the latch housing 111 without disassembly of the latch housing 111, there is provided on the top panel 204 a mounting tab 210 (see FIGS. 5 to 7), the mounting tab 210 more specifically being struck from the top panel 204 and being essentially rectangular in shape. Preferably the mounting tab 210 is formed flat or planar and is inclined downwardly with respect to the

plane of the top panel **204**, all of which is best seen in FIG. 6 of the drawings. Finally, there is provided in the mounting tab **210** a circular opening **211** that can be engaged by a tool such as the screwdriver **220** diagrammatically illustrated in FIGS. 3 and 5, the opening **211** more particularly receiving the blade **221** of the screwdriver **220** after which a user grasping the handle **222** can readily remove the color insert plate **200** from the latch housing **111**. If further is pointed out that there is no downturned flange **205** on the mounting tab **210** or in front thereof, whereby the screwdriver blade **221** can readily be inserted under the retaining flange **129** and over the top of the mounting tab **210** due to the downward inclination of the mounting tab **210** and thus into the opening **211**, after which, a simple upward pivotal movement of the screwdriver handle **222** from the position illustrated in FIG. 3 to that illustrated in FIG. 5 serves to disengage the top panel **204** from the retaining flange **129** thereby permitting the color insert plate **200** to be easily removed from the latch housing **111**.

In order to insert the color insert plate **200** into the latch housing **111** and to remove the color insert plate **200** from the latch housing **111** without disassembly thereof, it is necessary that the color insert plate **200** be formed of resilient material, and to this end the color insert plate **200** is preferably formed of a 30 gauge steel sheet that is half hard, whereby to accommodate the necessary bending of the color insert plate **200** during the insertion and removal thereof with respect to the latch housing **111**. More specifically, in order to install the color insert plate **200** in the latch housing **111**, the bottom panel **203** is first put through the opening between the pull surface **116** and the front flange **122** and is passed downwardly behind the latch bar **140** and to the position illustrated in FIG. 6, wherein the forward edge of the bottom panel **203** is spaced rearwardly a short distance from the abutment flange **128** and the top panel **204** bears against the lowermost surface of the retaining flange **129** and specifically bears against the juncture between the front flange **122** and the retaining flange **129**. The color insert plate **200** can be moved from the partially removed position illustrated in FIG. 6 to the fully assembled position illustrated in FIG. 4 by the user placing his thumbs upon the main panel **202** adjacent to the top panel **204** and pushing inwardly until the downward flange **205** snaps behind the retaining flange **129**. In so moving the parts, it will be appreciated that the juncture between the main panel **202** and the bottom panel **203** must be flexed with the parts moving toward each other, and likewise the juncture between the main panel **202** and the top panel **204** must be flexed with the parts moving toward each other, and after the downturned flange **205** clears the lower edge of the retaining flange **129**, the resiliency of the color insert plate **200**, and specifically the resiliency of the junctures between the main wall **202** and the bottom panel **203** on the one hand and the top panel **204** on the other hand causes the parts to assume the positions illustrated in FIG. 4. From FIG. 4 it will be seen that when installed the color insert plate **200** has at least the lower portion of the main panel **202** disposed against the forward surface of the main wall **112**, the forward edge of the bottom panel **203** is disposed against the rear surface of the abutment flange **128**, and the forward surface of the downturned flange **205** is disposed against the rear surface of the retaining flange **129**.

In order to remove the installed color insert plate **200** from the latch housing **111** the blade **221** of the screwdriver **220** is inserted beneath the front flange **122** in alignment with the mounting tab **210** and pushed upwardly over the upper surface of the mounting tab **210** and into the opening **211** therein, after which the handle **222** is moved from the position illustrated in FIG. 3 to that illustrated in FIG. 5, thereby to move the top panel **204** outwardly to a position disposed substantially in front of the retaining flange **129**. In order to accommodate such movement of the parts, it is necessary again to flex the juncture between the main panel **202** and the bottom panel **203** on the one hand and the juncture between the main panel **202** and the top panel **204** on the other hand. Once the parts are in the position illustrated in FIGS. 5 and 6, the user by grasping the exposed top panel **204** can readily remove the color insert plate **200** from the latch housing **111**.

In accordance with the present invention, at least the forward exposed surfaces of the color insert plate **200**, i.e., the forward exposed surfaces of the main panel **202**, the bottom panel **203**, the top panel **204** and the downturned flange **205** are painted or otherwise given a pleasing and colorful finish to provide the novel feature of a color match between the color insert plate **200** and the outer surface of the case **101**, or on the other hand a sharp color contrast therewith. This provides not only for a highly decorative file cabinet **100**, but also permits the drawers **105** thereof to be color coded. Due to the ready removability of the color insert plate **200** from the associated latch housing **111**, the decor presented by the file cabinet **100** can be readily changed and likewise color coding of the drawers **105** may be readily changed. It further is pointed out that in the preferred form of the invention, the various parts of the latch housing **111** are formed of extruded pieces of aluminum metal having the surfaces thereof anodized thereby as will be appreciated from FIGS. 1 and 2 of the drawings, the flanges **118** and **126** together with the housing end walls **150** and the label holder **120** form a frame around the color insert plate **200**, further to enhance the decorative effects thereof.

From the above description it will be seen that there has been provided an improved latch housing on drawers of file cabinets or the like, and specifically a color insert plate for placement in such latch housings, which fulfill all of the objects and advantages set forth above. While there has been described what is at present considered to be the preferred embodiment of the invention, it will be understood that various modifications may be made therein, and it is intended to cover in the appended claims all such modifications as fall within the true spirit and scope of the invention.

What is claimed is:

1. In a drawer for a filling cabinet or the like, wherein the drawer includes a drawer head having an opening arranged in the front thereof, the combination comprising a latch housing mounted in the opening and extending rearwardly with respect thereto and substantially closing the same and providing a pull for the drawer, said latch housing including a generally vertically arranged main wall disposed to the rear of the associated opening, a bottom wall extending forwardly from the lower edge of said main wall and to the lower edge of the opening, a top wall extending forwardly from the upper edge of said main wall and to the upper edge of the opening, a pair of housing end walls respectively disposed at the opposite ends of said latch housing and closing the areas bounded by said main wall and said bottom wall and said top wall, an upstanding abutment flange on said bottom wall extending the length thereof, a downturned retaining flange on said top wall extending the length thereof, and a color insert plate mounted in said latch housing and extending between said housing end walls, said plate including a main panel disposed toward said main wall and extending the length thereof and covering said main wall, a bottom panel integral with the lower edge of said main panel and extending forwardly therefrom to said abutment flange and covering the portion of said bottom wall disposed between said main wall and said abutment flange, and a top panel integral with the upper edge of said main panel and extending forwardly therefrom to said retaining flange and covering the portion of said top wall disposed between said main wall and said retaining flange, said color insert plate being formed of resilient material

whereby it can be inserted in and removed from said latch housing without disassembly thereof.

2. The combination set forth in claim 1, wherein said top panel has a downwardly directed reinforcing flange on the forward edge thereof extending substantially the length thereof.

3. The combination set forth in claim 1, wherein said latch housing is formed from a section of a continuous aluminum extrusion, and said color insert plate is formed of sheet steel.

4. The combination set forth in claim 1, wherein the side of said color insert plate disposed away from said latch housing has a color different from that of said latch housing.

5. The combination set forth in claim 1, and further comprising an identification card holder integral with the upper portion of said latch housing and including structure for holding the upper and lower edges of an associated identification card therein.

6. In a drawer for a filing cabinet or the like, wherein the drawer includes a drawer head having an opening arranged in the front thereof, the combination comprising a latch housing mounted in the opening and extending rearwardly with respect thereto and substantially closing the same and providing a pull for the drawer, said latch housing including a generally vertically arranged main wall disposed to the rear of the associated opening, a bottom wall extending forwardly from the lower edge of said main wall and to the lower edge of the opening, a top wall extending forwardly from the upper edge of said main wall and to the upper edge of the opening, a pair of housing end walls respectively disposed at the opposite ends of said latch housing and closing the areas bounded by said main wall and said bottom wall and said top wall, an upstanding abutment flange on said bottom wall extending the length thereof, a downturned retaining flange on said top wall extending the length thereof, and a color insert plate mounted in said latch housing and extending between said housing end walls, said plate including a main panel disposed toward said main wall and extending the length thereof and covering said main wall, a bottom panel integral with the lower edge of said main panel and extending forwardly therefrom to said abutment flange and covering the portion of said bottom wall disposed between said main wall and said abutment flange, a top panel integral with the upper edge of said main panel and extending forwardly therefrom to said retaining flange and covering the portion of said top wall disposed between said main wall and said retaining flange, and a mounting tab on said top panel extending a short distance downwardly therefrom and having an opening therein for engagement by a tool, said color insert plate being formed of resilient material whereby upon engagement of a tool in said mounting tab opening said plate can be deformed so that it can be removed from said latch housing and can be inserted in said latch housing without disassembly thereof.

7. The combination set forth in claim 6, wherein said mounting tab is struck from said top panel and is disposed in a plane forming an acute angle with respect to said top panel and is hidden by said retaining flange.

8. The combination set forth in claim 6, wherein said mounting tab is located adjacent to one end of said top panel.

9. A color insert plate for use in a latch housing mounted in an opening in the front of a drawer head and extending rearwardly with respect thereto and substantially closing the same, the latch housing including a generally vertically arranged main wall disposed to the rear of the associated opening and a bottom wall extending forwardly from the lower edge of the main wall and a top wall extending forwardly from the upper edge of the main wall and a pair of housing end walls closing the ends of the latch housing and an upstanding abutment flange on the bottom wall extending the length thereof and a downturned retaining flange on the top wall extending the length thereof, said color insert plate comprising, a main panel disposed toward the associated main wall and extending the length thereof and between the associated housing end walls and covering the associated main wall, a bottom panel integral with the lower edge of said main panel and extending forwardly therefrom to the associated abutment flange and covering the portion of the associated bottom wall disposed between the main wall and the abutment flange, a top panel integral with the upper edge of said main panel and exending forwardly therefrom to the associated retaining flange and covering the portion of the associated top wall disposed between the main wall and the retaining flange, and a mounting tab on said top panel extending a short distance downwardly therefrom and having an opening therein for engagement by a tool, said color insert plate being formed of resilient material whereby upon engagement of a tool in said mounting tab opening said plate can be deformed so that it can be removed from the associated latch housing and can be inserted in the associated latch housing without disassembly thereof.

10. The color insert plate set forth in claim 9, wherein said top panel has a reinforcing flange thereon extending downwardly therefrom along substantially the entire length thereof.

11. The color insert plate set forth in claim 9, wherein the material of construction thereof is sheet steel.

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CASMIR A. NUNBERG, *Primary Examiner.*