Aug. 9, 1949. F. CONLEY 2,478,247

DRAWER PULL WITH TRIGGER LATCH

Filed Jan. 3, 1947

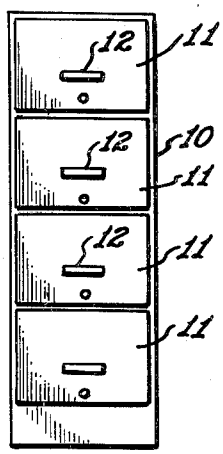


FIG. 1.

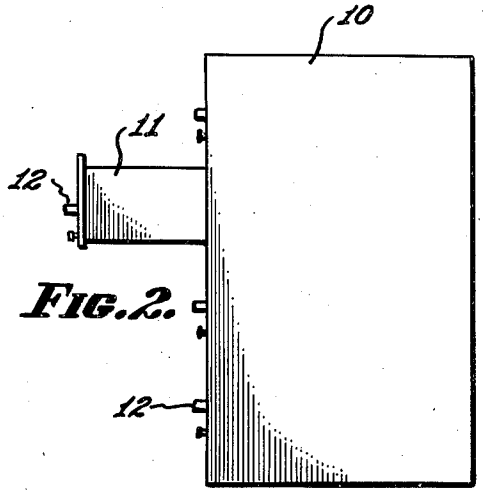


FIG. 2.

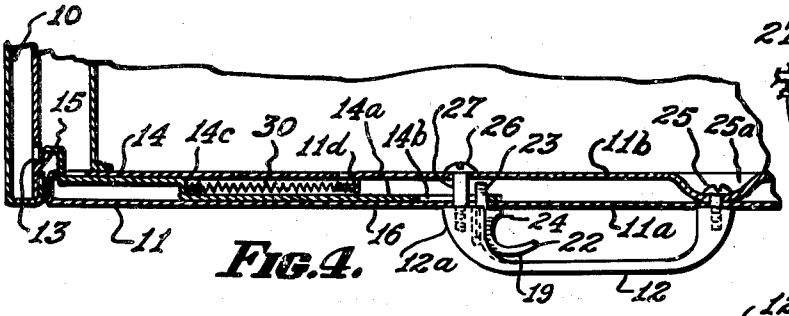


FIG. 4.

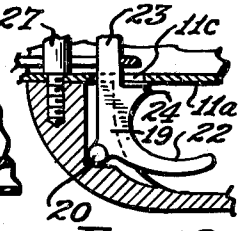


FIG. 8.

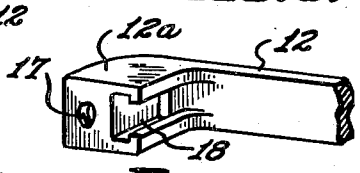


FIG. 5.

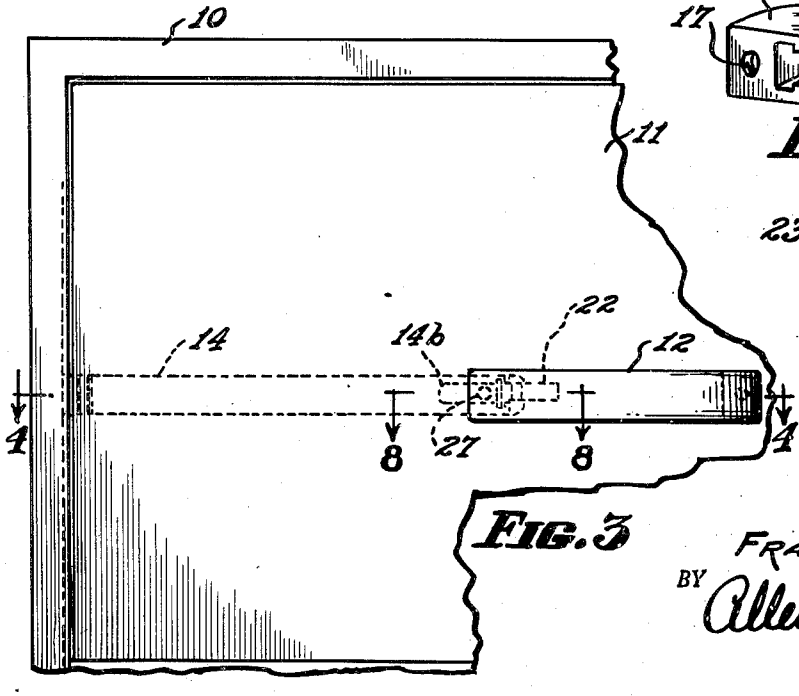


FIG. 3

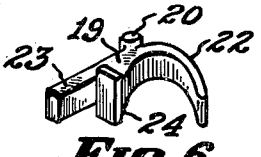


FIG. 6.



FIG. 7.

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Patented Aug. 9, 1949 2,478,247

UNITED STATES PATENT OFFICE

2,478,247

DRAWER PULL WITH TRIGGER LATCH

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Application January 3, 1947, Serial No. 720,089

3 Claims. (Cl. 292—173)

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This invention relates to a drawer pull with trigger latch. In various installations, it is desirable that a drawer be provided with a latch to hold it in closed position. The latch must be released in order to open the drawer. Such construction has been almost universal in connection with filing cabinets, such as are used in offices. The suspensions of these drawers are usually so arranged that a slight gravity impulse is given to the drawer during about the last inch of its closing movement. Latches have been provided on drawers of this type so that it is only necessary to give the drawer a slight push, i. e. enough to come within about an inch of closing it, whereupon the construction of the suspension causes the drawer to shut completely so that the latch can snap to closed position.

On conventional drawers of this type, there has been provided a button slidably mounted in the drawer face, by means of which the latch could be withdrawn, so that the drawer could be opened. It has been usual to locate this button on a line with the drawer pull, and somewhat to the left, so that a person grasping the drawer pull with the right hand could operate the latch button with the right thumb by sliding the button toward the drawer pull.

This construction has a number of disadvantages, among which is the fact that it produces an unsymmetrical appearance of the drawer face, and the fact that such an arrangement is extremely awkward for a left handed person. A left handed person will usually use two hands—one to unlatch the latch—and the other to pull out the drawer.

With these considerations in mind, it is an object of my invention to provide a drawer pull construction having all the advantages of structures known heretofore, while eliminating objections mentioned above. It is an object of my invention to provide a drawer pull having a trigger latch within the confines of the drawer pull, so that an unbalanced or unsymmetrical appearance of the drawer face is avoided. It is another object of my invention to provide a construction, whereby a person grasping the drawer pull with either hand will automatically engage the trigger latch, so that the drawer may be opened as readily by a left handed person, as by a right handed person.

It is a further object of my invention to provide a structure as outlined above, which will not require extensive redesign of present latch mechanism and which will not add substantially to the cost of production. A further object of my invention is to provide a structure as outlined, which is extremely simple and not likely to get out of order.

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These and other objects of my invention, which will be pointed out in more detail hereinafter, or which will be apparent to one skilled in the art upon reading these specifications, I accomplish by that construction and arrangement of parts of which I shall now describe an exemplary embodiment.

Reference is made to the drawing forming a part hereof and in which:

Fig. 1 is a front elevation of a file cabinet to which my invention may be applied,

Fig. 2 is a side elevational view of the same.

Fig. 3 is an enlarged fragmentary front elevation of a corner of the cabinet and a part of a drawer face.

Fig. 4 is a cross sectional view taken on the line 4—4 of Fig. 3.

Fig. 5 is a fragmentary perspective view of the inside of one end of a drawer pull.

Fig. 6 and 7 are perspective views of the operating element.

Fig. 8 is an enlarged fragmentary cross sectional view taken on the line 8—8 of Fig. 3.

My invention may be applied to the drawers of any conventional file cabinet, such as the one illustrated at 10 in Figs. 1 and 2. The particular cabinet illustrated, has four drawers 11, each of which is provided with a pull 12. It is conventional in such cabinets to provide, usually in the left side wall of the cabinet, struck out tongues 13 which constitute a latching abutment, and it is also conventional to provide on the back of the drawer face, or within the drawer face, if it is a doubled walled structure, a slidable member 14 having a latch element 15 and spring urged toward the left of Fig. 4. With this structure, the drawer being opened, closing movement of the drawer causes the latch member 15 to move toward the right of Fig. 4 as it rides up the latching abutment 13, until when the drawer is closed, it snaps back behind the abutment 13 to latch the drawer.

Instead of providing a latch button at some point, as for example, indicated at 16 in Fig. 4, for retracting the latch member 15, I provide a trigger member mounted on the drawer pull and disposed within the confines of the drawer pull, as will now be described in more detail.

The drawer pull 12 may be of any desired construction, but will usually be generally C-shaped and will have threaded holes 17 by means of which it may be fastened to the drawer face. On the

inside of the arm 12*a* of the drawer pull 12, I provide a T-slot 18.

The trigger member which I prefer to use is shown in more detail in Figs. 6 and 7 and comprises a bellcrank element indicated generally at 19, and having intermediate its ends, pintles 20 and 21. If the trigger member 19 is a die casting, the members 20 and 21 may constitute a single transverse shaft like extension, as best seen in Fig. 7.

One arm of the member 19 is curved as at 22 to constitute a trigger finger, and the other arm at 23 is simply a straight extension of any desired configuration. The curved trigger finger 22 merges into an extension 24, the purpose of which will be pointed out hereinafter.

In assembly, the trigger member 19 is assembled to the drawer pull 12 with the pintles 20 and 21 riding in the T-slot 17 and with the trigger finger 22 extending within the confines of drawer pull 12. The front wall 11*a* of the drawer face will have perforations for the passage of fastening screws 25 and 25, by means of which the drawer pull is fastened to the drawer face. At the right hand side of Fig. 3, the rear wall 11*b* of the drawer face may be provided with a stamped depression 25*a* to provide a spacer between the walls 11*a* and 11*b*. At the left hand side however, it is not desirable to form a depression to constitute a spacer and therefore the screw 26 will have a larger unthreaded portion 27, which will constitute the spacer. The wall 11*a* will also have an aperture 11*c* for the passage of the member 23, and because the trigger member must have pivotal movement, the aperture 11*c* will have to be larger than the member 23.

The purpose of the extension 24 will now be apparent. This extension is of such extent that when the trigger member is in the position of Fig. 8, it covers the aperture 11*c*, which would otherwise be unsightly. The abutment 24 also serves to limit the movement, in a counterclockwise direction, of the trigger member.

Means must be provided for connecting the member 23 with the latch and these means may be of any desired form. I have shown for example, an extension 14*a* of the latch 14 provided with a slot 14*b* to accommodate the screw 27 and the member 23. The inner wall 11*b* of the drawer face may be provided with a struck down ear 11*d* and a compression spring 30 may be interposed between the ear 11*d* and the shoulder 14*c* of the member 14.

From the foregoing description, the operation of the device will be clear. When it is desired to open the drawer, either the right or left hand may grasp the drawer pull 12. With a right handed person, the index finger will normally come behind the trigger finger 22, and with a left handed person, the fourth finger will normally occupy that position. Upon pulling on the drawer pull, it will be natural to exert a small amount of tension either with the fourth or index finger on the trigger finger 22 which will cause the member 19 to rock in a counterclockwise direction about its pivot at 20, which in turn will pull the member 14 to the right against the compression of the spring 30, freeing the latch 15 from the abutment 13.

The drawer is closed in the usual manner and the latch operates in closing, just like any conventional present day latch.

It will be clear that numerous modifications may be made without departing from the spirit of my invention, and I therefore do not intend to limit myself otherwise than as pointed out in the claims which follow.

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

1. A drawer pull for use in a drawer having a latch which is normally spring urged to closed position, said pull having a gripping member spaced from the front of said drawer and an attaching member for securing said gripping member to the front of said drawer, a T-slot in said attaching member, a trigger member having pintles mounted on said pull with said pintles seated in said T-slot, said trigger member having a trigger finger extending within the confines of said pull, and means connecting said trigger with said latch.

2. A drawer pull for use in a drawer having a latch which is normally spring urged to closed position, said pull having a gripping member spaced from the front of said drawer and an attaching member for securing said gripping member to the front of said drawer, a T-slot in said attaching member, an operating member comprising a bell crank having pintles intermediate its end and one arm of said bell crank constituting a trigger member, said operating member being mounted with said pintles engaged in said T-slot with said trigger member extending within the confines of said pull, and means connecting the other arm of said bell crank with said latch.

3. The structure of claim 2 in which there is an aperture in the front of said drawer, and said other arm extends through said aperture, said aperture being enlarged to permit pivotal movement of said operating member, and there is an extension on said operating member of sufficient extent to cover and conceal the enlarged portion of said aperture when said operating member is in normal position.

FRANK CONLEY.

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