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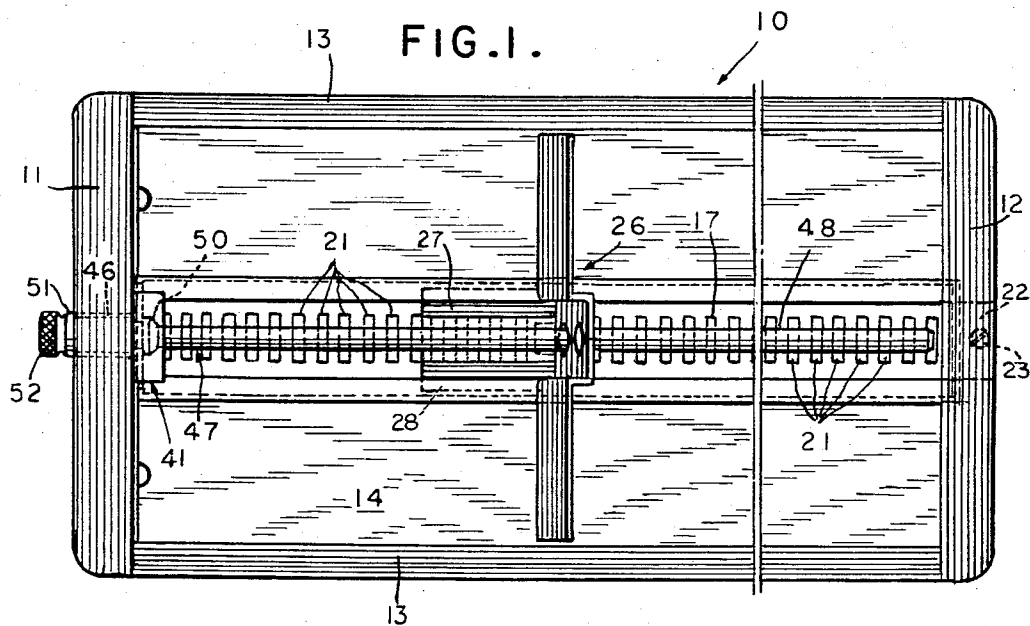
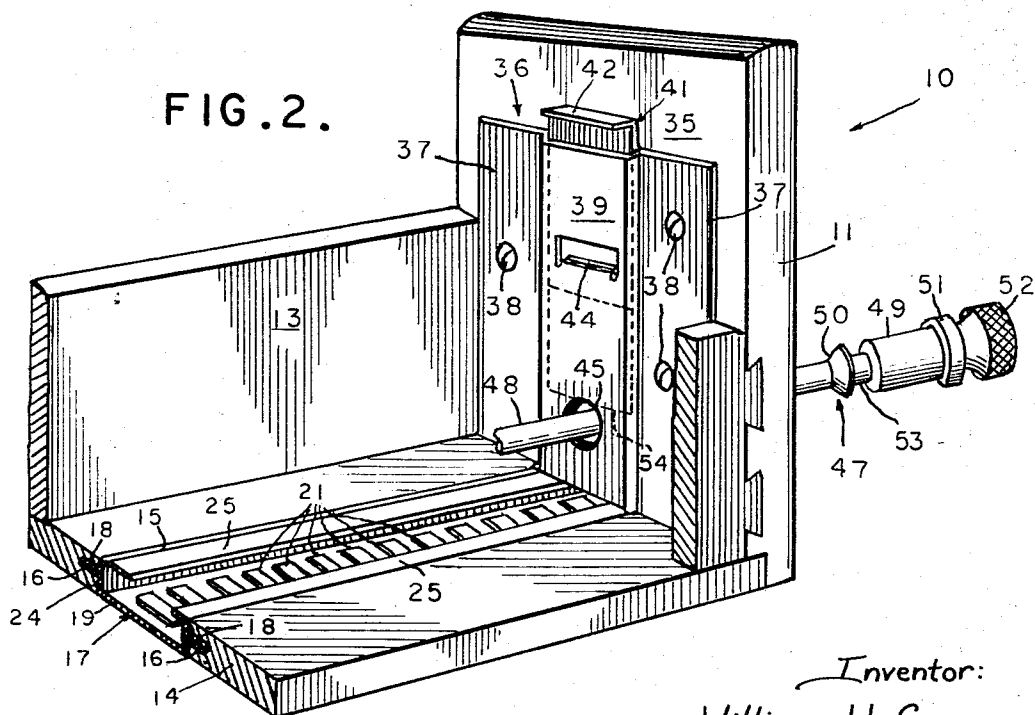
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3,370,591

RECEPTACLE AND FOLLOWER ASSEMBLY

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2 Sheets-Sheet 1



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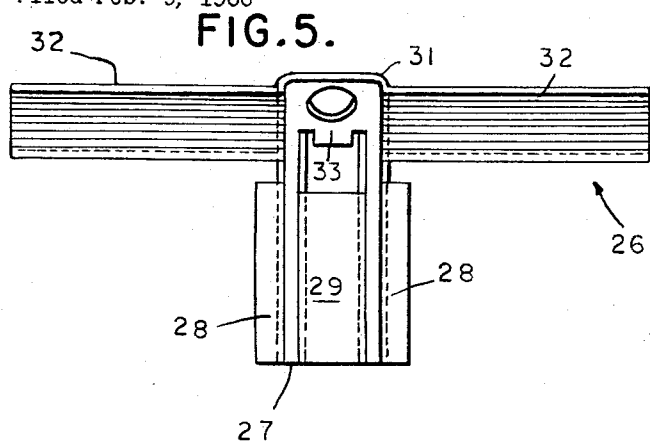
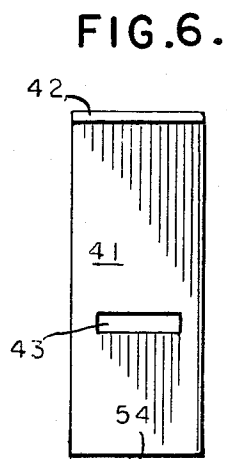
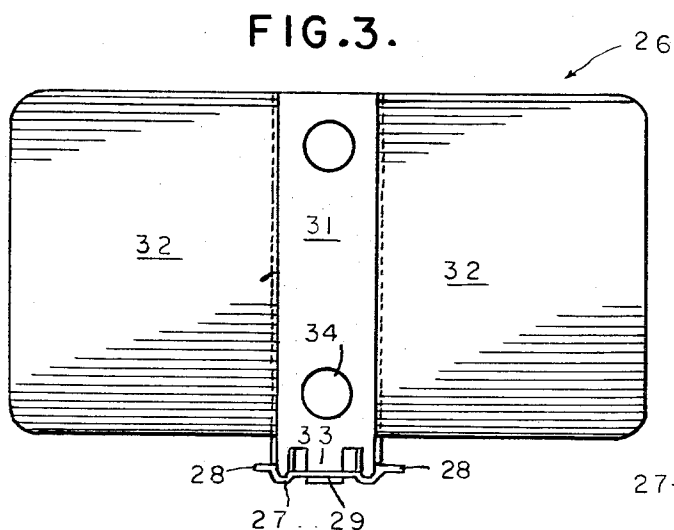
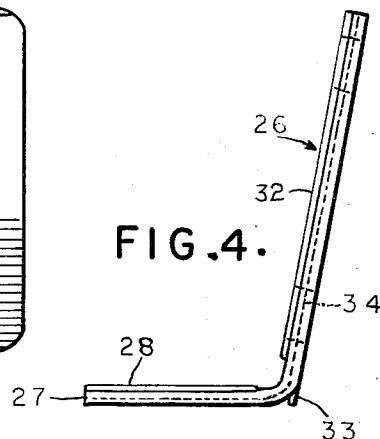
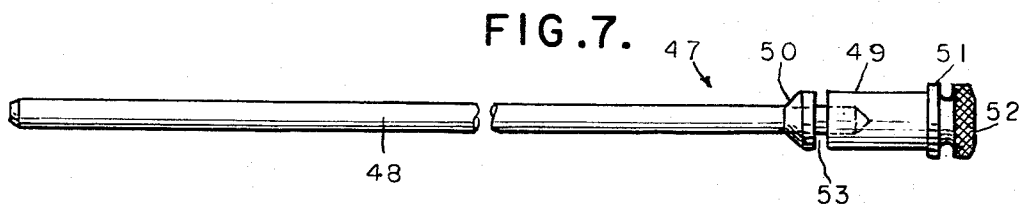
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RECEPTACLE AND FOLLOWER ASSEMBLY

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2 Sheets-Sheet 2



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RECEPTACLE AND FOLLOWER ASSEMBLY

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2 Claims. (Cl. 129—31)

The present invention relates to a file receptacle assembly for drawers and the like and more particularly to the novel hardware components to be used in a file drawer or other receptacle including a follower and its positioning arrangement, and a locking mechanism for the knob affixed to one end of a rod extending into the drawer and through openings adjacent the lower edge of suitable catalog or file cards or other articles.

Among the objects of the present invention is the provision of a card file drawer or other receptacle having a follower therein which is positioned to retain any file cards or other articles in the drawer in a generally upright position without the use of springs or other tensioning means. The follower assembly includes a channel positioned in the bottom of the drawer having a series of raised stops therein. The follower includes an inclined support plate having a depending shoe or guide plate moving in the channel and straddling the stops; the support plate being equipped with a depending tab which engages the stops. The follower is lifted by a person to disengage the tab from a stop and allow the tabs to ride over the stops when moving the follower to the rear. By applying a light pressure to the back of the follower plate, the follower is readily moved forward.

Another object of the present invention is the provision of a knob locking mechanism without spring action in a catalog card or file drawer which, with its attendant rod, cannot be removed from the drawer unless the drawer is at least partially open. The knob locking mechanism includes a retaining plate secured to the inner surface of the front of the drawer and a slide or latch plate which is received in a channel in the retaining plate and held down only by gravity. The knob and rod are inserted into the drawer by passing through an aligned bushing in the front of the drawer and an opening in the retaining plate. The knob is provided with an annular channel or groove to be received and retained by the lower edge of the slide or latch plate to retain the knob and rod in the drawer. As the slide is mounted within the drawer, the drawer must be opened sufficiently to permit the slide to be manually grasped and lifted and thereby release the knob and rod.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly and operation, and such further objects, advantages and capabilities as will later more fully appear and are inherently possessed thereby.

In the drawings:

FIGURE 1 is a top plan view of a catalog or card file drawer embodying the novel follower assembly and knob locking mechanism of the present invention.

FIG. 2 is an enlarged fragmentary perspective view of the interior of the card file drawer with the drawer broken away to show the retaining plate and slide and the channel member for the follower.

FIG. 3 is a front elevational view of the follower utilized in the drawer.

FIG. 4 is a side elevational view of the follower.

FIG. 5 is a top plan view of the follower.

FIG. 6 is a front elevational view of the slide or latch plate.

FIG. 7 is a top plan view of the removable knob and rod for the drawer.

Referring more particularly to the disclosure in the

drawing wherein is shown an illustrative embodiment of the present invention, FIG. 1 discloses a card file or catalog drawer 10 having a front wall or face 11, rear wall 12, side walls 13 and a bottom 14. The bottom 14 is formed with a central longitudinally extending slot 15 and inwardly opening oppositely aligned grooves 16, the slot 15 receiving a formed metal channel member 17 having folded flanges 18 conformably received in the grooves 16.

The channel member 17 includes a base or bottom wall 19 having a plurality of raised stops 21 equally spaced apart and extending laterally to the longitudinal axis of the channel member 17. The stops 21 extend centrally along the longitudinal axis of the bottom 19 for the full length of the channel. At the rear end of the channel member 17, a rearwardly extending mounting flange 22 is upwardly offset from the bottom 19 and is anchored to the lower edge of the rear wall 12 by suitable securing means 23 extending through an opening in the flange 22. The channel member 17 also has side walls 24 incorporating the flanges 18 and terminating at their upper edges in turned flanges 25 defining a relatively narrow longitudinal and continuous channel.

Mated for longitudinal movement with the channel member 17 is a follower 26 which includes a horizontally disposed guide plate or shoe 27 movable in the channel member and having flanges 28 extending under the turned flanges 25 of the channel member to retain the follower therein. The shoe 27 has a raised central portion 29 adapted to straddle and move over the elevated stops 21 without obstruction. Integral with the shoe 27 and extending upward and rearward at an obtuse angle thereto is a support member 31 and a substantially rectangular back-up plate 32 against which lean the file cards in the drawer. Extending downwardly to a point below the raised central portion 29 of the shoe 27 and centrally positioned on the support member 31 is a locking tongue or engaging tab 33 which cooperates with the raised stops 21 to hold the follower in a predetermined adjusted position. The support member 31 also has an opening 34 therein positioned adjacent and above the tongue or tab 33.

Secured to the rear or inner surface 35 of the front wall 11 is a retaining plate 36 having spaced mounting flanges 37 with openings for suitable securing means, such as wood screws 38, and an offset central portion 39 forming a vertical channel between the portion 39 and the inner surface 35 of the front wall 11. An elongated slide or latch plate 41 is received in the channel for vertical movement; the slide having a lifting tab 42 at the upper end and a generally centrally located opening 43. The raised central portion 39 of the retaining plate 36 has a tongue 44 which extends rearwardly and inwardly into the opening 43 in the slide 41 limiting the extent of vertical movement thereof.

Spaced below the tongue 44 is an opening 45 in the central portion which is aligned with a bushing 46 in the front wall 11 of the drawer. A knob and rod assembly 47 extends through the bushing 46 in the front wall 11, opening 45 in retaining plate 36, and the opening 34 in support member 31 of the follower 26; the rear end of the rod 48 terminating adjacent the rear wall 12 of the drawer. The assembly 47 includes the elongated rod 48 which passes through aligned openings in the file cards, is staked or integral with an enlarged portion 49 joined by a bevel or camming surface 50, the enlarged portion terminating in a flange or stop 51 and knurled knob 52. The enlarged portion 49 includes an annular groove or channel 53 which, when the knob and rod assembly 47 is inserted in the drawer 10, is aligned with and receives the lower edge 54 of the slide 41 to releasably lock the assembly in the drawer.

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In the normal operational arrangement, the drawer 10 contains a plurality of file cards leaning against the upwardly and rearwardly inclined follower 26 with its tongue or tab 33 abutting the front surface or edge of a stop 21. The rod and knob assembly 47 is inserted in the drawer 10 with the stop or flange 51 substantially abutting the wall 11 and the rod 48 extending through an aligned opening adjacent the lower edge of each file card and through the opening 34 in the follower. The slide 41 is only held down by gravity and the lower edge 54 when engaged by the cam surface 50 is elevated and drops into the annular groove 53 to retain the assembly 47. To remove the rod and knob assembly 47 so that file cards may be removed therefrom or inserted thereon, the drawer 10 must be opened approximately one inch or more so that the slide 41 can be lifted by the lifting tab 42 with one or more fingers. Then the released knob 52 can be pulled outward.

The slide 41 may be released before the rod 48 is completely out of the drawer, and the slide need not be actuated when the rod 48 and enlarged portion 49 are inserted as the bevel 50 cams the slide upwardly over the enlarged portion 49 until the slide is aligned with and drops into the groove 53. To move the follower 26 toward the wall 11, forward pressure is applied to the rear surface of the support member 31. By lifting the follower 26 and tab 33 over the stops 21, the follower can be moved toward the rear in the channel member 17.

Although the present invention has been shown in the drawings and described in assembly with particular reference to its use in a file card drawer, this invention comprehends use in other drawers, such as kitchen cabinet drawers for storing and arrangement of small food packages or office desk drawers, card file boxes, book ends for book shelves, built-in book ends for desk tops, recipe boxes, display counters, etc., and I do not desire to be unnecessarily limited by virtue of the illustrative embodiment.

Having thus disclosed the invention, I claim:

1. In a receptacle for retaining a plurality of articles in generally upright position and having a central longitudinally extending slot therein, a follower assembly comprising a channel member secured in the slot and including

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a bottom surface having a plurality of spaced, raised, laterally extending stops and inwardly extending upper flanges, and at least one follower including a guide plate received in said channel member and having a raised central portion straddling the stops and outwardly extending raised flanges cooperating with said flanges in the channel member to retain and guide the guide plate therein, a support member integral with said guide plate and extending upwardly and rearwardly at an obtuse angle to the guide plate, a back-up plate integral with and extending outwardly from said support member and forwardly offset therefrom, said guide plate, support member and backup plate being formed from a single bent sheet and said guide plate and support member being of channel cross section throughout their length, and a central tab integral with said support member in the same plane thereof and depending therefrom into the channel member to a point below the raised central portion of the guide plate to cooperate with said stops.

2. In a receptacle and follower assembly as set forth in claim 1, in which the flanges on the guide plate are raised to a higher plane than the raised central portion thereof, and said channel member has opposite side walls each provided with an outwardly extending flange intermediate the bottom surface and the upper flange, the bottom of the receptacle defining the slot having complementary grooves receiving said last mentioned flanges.

References Cited

UNITED STATES PATENTS

547,163	10/1895	Woodruff	129—31
1,147,055	7/1915	Vick	129—27
1,160,104	11/1915	Bodenstein	129—31
2,116,373	5/1938	Williamson	129—16
2,669,236	2/1954	Straubel	129—28
2,758,602	8/1956	Anderson	129—31
2,860,643	11/1958	Senechal	129—31

FOREIGN PATENTS

1,316,830	3/1962	France.
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