July 10, 1951 H. C. FOSBERG 2,560,428

FOLLOWER FOR FILING DRAWERS

Filed Oct. 17, 1946

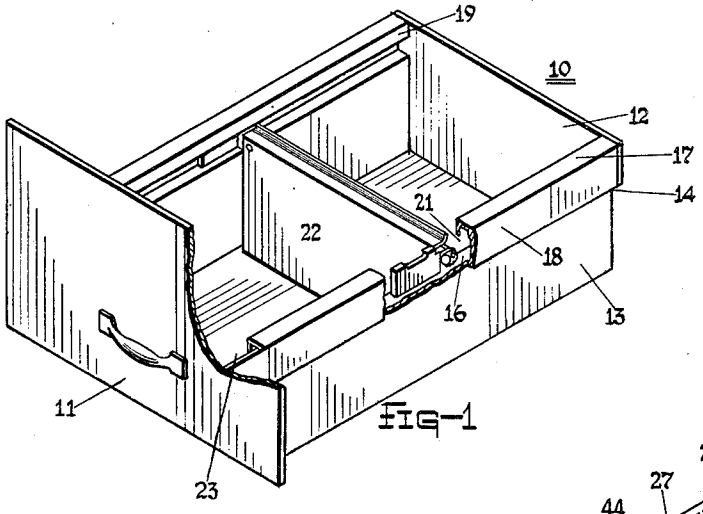


Fig-1

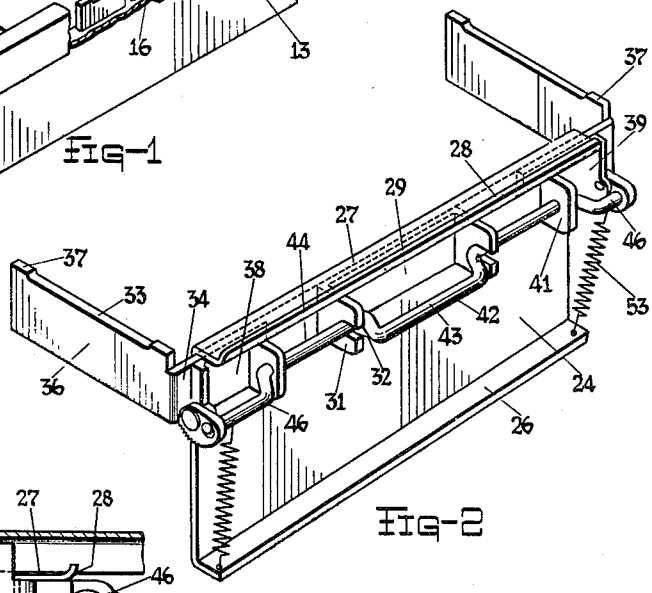


Fig-2

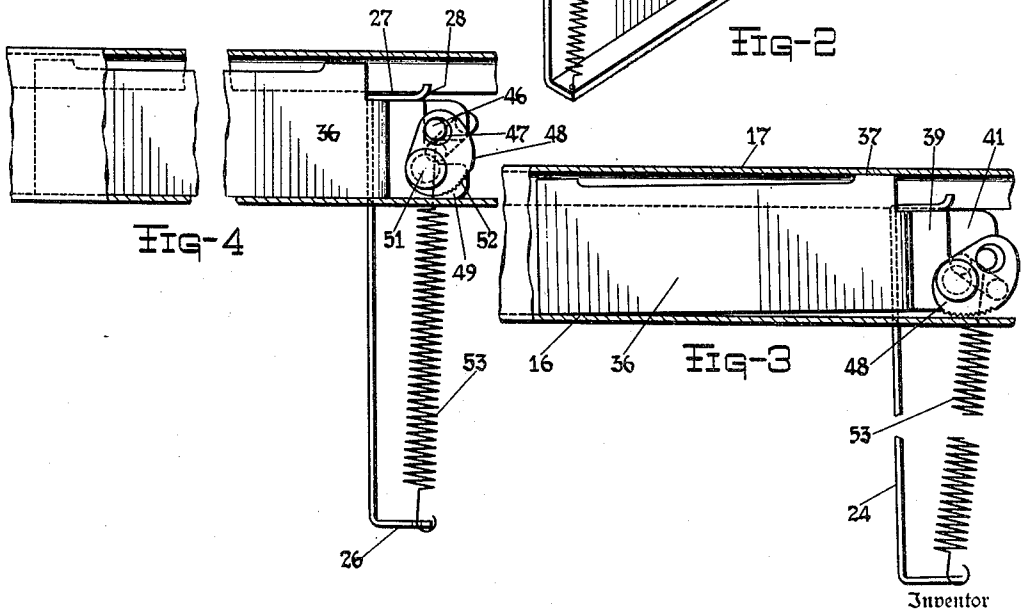


Fig-4

Fig-3

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Patented July 10, 1951

2,560,428

UNITED STATES PATENT OFFICE

2,560,428

FOLLOWER FOR FILING DRAWERS

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Application October 17, 1946, Serial No. 703,741

2 Claims. (Cl. 129—30)

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This invention relates to an improvement in followers for the drawers or compartments of a filing cabinet or the like, being intended to maintain the drawer or compartment contents in a compact, substantially upright position.

It is an object of the invention to provide a drawer follower which is normally held in any given fixed position and from which it can be quickly and easily released and moved into another position.

Another object of the invention lies in the provision of a drawer follower that includes means by which to effect a locking engagement, in one direction, with the conventional, longitudinally extending side channels of a drawer or compartment.

A further object of the invention lies in the provision of a drawer follower that includes a pair of rotatable cam members normally urged into engagement with corresponding flanges of the drawer channels.

A still further object of the invention lies in the provision of a drawer follower that includes a simple locking mechanism and is comprised of relatively few, easily constructed, operative parts, which renders it susceptible to economical manufacture.

Other objects and advantages of the invention will be more fully understood and appreciated from a consideration of the following specification, taken in conjunction with the accompanying drawing; and in which

Fig. 1 is a perspective view of a file drawer in which a follower embodying one form of the invention is mounted, parts being broken away to illustrate certain of the drawer and follower details;

Fig. 2 is an enlarged perspective view of the follower, showing the relationship of the guide shoes, locking cams, and releasing lever;

Fig. 3 is an enlarged fragmentary view, showing the follower in end elevation with the locking mechanism in position of engagement with a flange of the drawer channel, parts being broken away to more clearly show the structural details; and

Fig. 4 is a view similar to Fig. 3, showing the locking mechanism released from engagement with the drawer channel flange.

Referring to the drawing, the reference numeral 10 is employed to generally designate a drawer or compartment with which the follower embodying the invention is adapted to be associated. The drawer illustrated includes the usual front wall 11, rear wall 12, and side walls

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13. It is common practice to rigidify the side walls by providing longitudinally extending channels 14 therein. In the present disclosure, each of these channels is formed with lower and upper sides 16 and 17, connected by the offset, upstanding flange 18. The upper side 17 may terminate in the depending flange 19 shown, to present a finished appearance to this part of the drawer structure. The space 21 within the channels is adapted to mount the guides and certain of the operative parts of a follower 22. In the event the rear wall 12 is the full height of the sides 13, the upper side 17 of the channels may be cut away at the forward end of the drawer, substantially as indicated at 23, to facilitate installation and removal of the follower.

The follower 22 comprises an upstanding plate 24, having an unbroken frontal surface for contact with the file contents of the drawer. The lower edge of this plate terminates in a rearwardly directed flange 26. The upper edge thereof is also formed with a rearwardly directed flange 27 that terminates along its rear edge in an upwardly rolled lip 28. A generally U-shaped bracket 29 is secured to the rear face of the plate 24 directly beneath the flange 27. The side flanges 31 of this bracket are formed with aligned, open-ended slots 32, the purpose of which will hereinafter be set out. A pair of guide shoes 33 are attached to the upper rear corners of the plate 24 along their flanges 34. These shoes each include arms 36 that extend forwardly of the face of the follower and are laterally spaced from the follower ends to whatever extent may be necessary for them to enter and move within the space 21 of the drawer channels 14. The upper edges of the arms 36 may be formed with slightly upstanding lugs 37 which serve to reduce the frictional contact of the shoes with the surfaces of the channels.

Attached to or formed integral with each of the shoe flanges 34 is a bracket 38. This bracket includes end flanges 39 and 41. Both flanges 41 are in the horizontal plane of the flanges 31 and are apertured on center with the slots 32 for the purpose of mounting an operating lever 42. This lever takes the form of a rod of circular cross section and includes an offset handle 43, adjacent which are portions 44 which project into slots 32 and through the apertures in the flanges 41. Beyond the flanges 41, the lever includes off center portions 46 which, at their ends, project into openings 47 in cams 48. These cams are aligned with the arms 36 of shoes 33 in order to be movable in and along the channels 14. It

will be noted that the direction of the offset of the handle 43 is somewhat different from the direction of offset of the ends 46 in order that said ends may cause the cams 48 to be in gripping position and the handle 43 sufficiently free of the plate 24 to permit manipulation thereof.

The flanges 39 of the brackets 38 include extensions 49 with which cams 48 are engaged for off center pivotal movement about pins 51. Each of the cams includes a serrated edge portion 52 adapted, when the locking mechanism of the follower is in operative position, to engage the lower flange 16 of the drawer channel 14. Suitable springs 53 connect the offset end portions 46 with the flange 26 of the plate and serve to normally retain cams 48, offsets 46, and handle 43 in the position shown in Fig. 2 of the drawing.

In operation the follower is first inserted in the forward end of the drawer, access of the guide shoes 33 being possible through the openings or cut-outs in the forward ends of the drawer channels. The follower is supported in its entirety by the guide shoes 33 and may be moved rearwardly of the drawer by merely rotating the handle 43 of the locking mechanism into the position shown in Fig. 4 of the drawing. It will be observed that upstanding portions of the flanges 39 serve as stops to predetermine the extent of rotation of the cams 48 and handle 43 in the released direction (compare Figs. 3 and 4). When the follower has been moved to the desired position within the drawer, the handle may be released and the lever 42 will rotate about its bearings which, in the present instance, consist of flanges 31 and 41 and, under tension of spring 53, cams 48 will rotate about their pins 51 to a position such that the serrations 52 thereof contact the lower flanges 16 of the channels 14. The springs 53 provide sufficient force to so rotate the cams that the rear portions of the shoe flanges 36 will be raised slightly from the flanges 16 of the drawer channels and the corresponding lugs 37 brought into pressure contact with the upper flange 17 of said channel. This action, of course, effects a slight tilting of the guide shoes and brings the forward, lower ends thereof into contact with the flanges 16 (Fig. 3).

It will be evident from an examination of the drawing that the follower may be moved from a rearward to a forward position without operating the handle 43, since such movement is in a direction that normally tends to rotate the cams 48 out of locking or wedging position into released position. It is, of course, recommended that the handle 43 be used when the follower is moved forwardly as there would otherwise be a dragging action of the serrated surfaces of the cams along the channel flanges. With the follower in any given position, such as illustrated in Fig. 1, it is evident that it cannot be moved rearwardly of the drawer without releasing the locking mechanism through rotation of the handle 43. Any attempt to move the follower rearwardly merely serves to supplement the force or action of the springs 53 and cause the serrated surfaces of the cams 48 to increase their locking effect.

Although applicant has shown and described only one modification of his invention as applied to a drawer, it will be understood that variations in the size and proportions of the parts may be made in adapting the invention to various types of drawers or compartments, and that such variations are contemplated as being within the spirit and scope of the invention insofar as they are set out in the annexed claims.

Having thus set forth my invention what I claim as new and for which I desire protection by Letters Patent is:

1. The combination with a drawer having side wall channels; of a follower, forwardly extending guide shoes on said follower projecting into said channels, cams mounted at the rear of said follower aligned with said shoes, said cams being rotatable in one direction to engage and have a wedging action with said channels, a rotatable shaft bracket mounted at the rear of said follower and including a central hand lever and end cranks, said cranks having operative engagement with said cams, and spring means normally urging said shaft to rotate in a direction to engage said cams with one wall of said channels and tilt said shoes into wedging engagement with both walls of said channels.

2. The combination with a drawer having side wall channels; of a follower, forwardly extending guide shoes on said follower projecting into and loosely fitting the side walls of said channels, cams mounted to the rear of said follower and aligned with said shoes, said cams being rotatable in one direction to engage and wedge one of the side walls of said channels and tilt said follower to engage said shoes with both side walls of said channels, a rotatable shaft, brackets on said follower mounting said shaft, said shaft including a central handle and end cranks, said cranks having operative engagement with said cams, spring means normally urging rotation of said shaft in a direction to wedge-engage said cams and said shoes with said channels, said handle being operable to rotate said cranks to release said cams.

HENRY C. FOSBERG.

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