Feb. 7, 1933. F. BOLHUIS 1,896,346

DRAWER GUIDE

Filed May 12, 1930

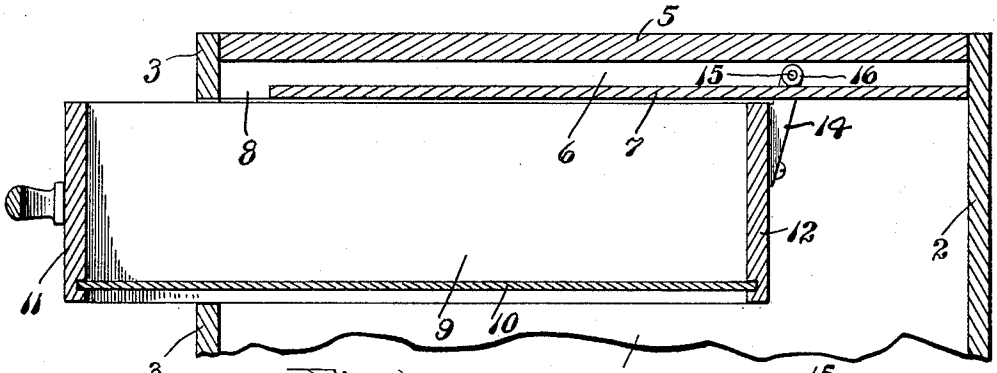


Fig. 1.

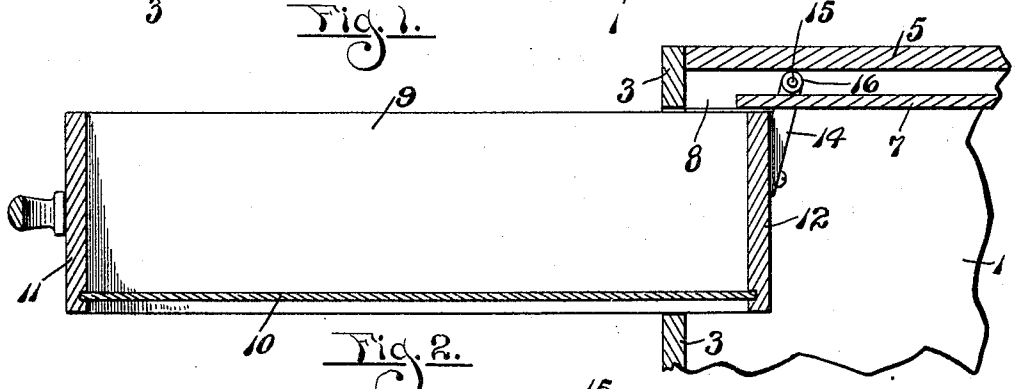


Fig. 2.

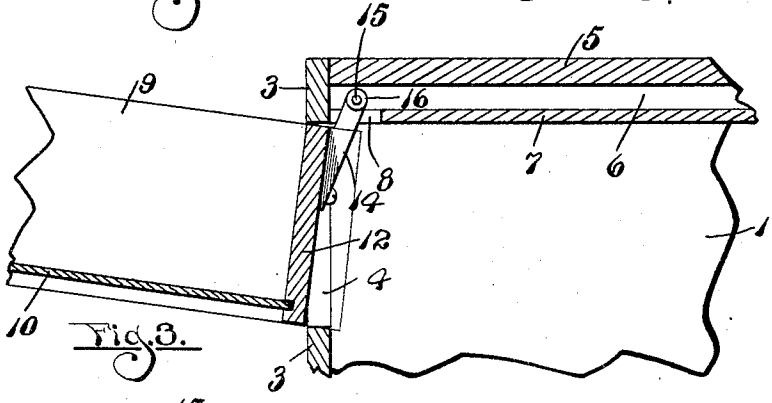


Fig. 3.

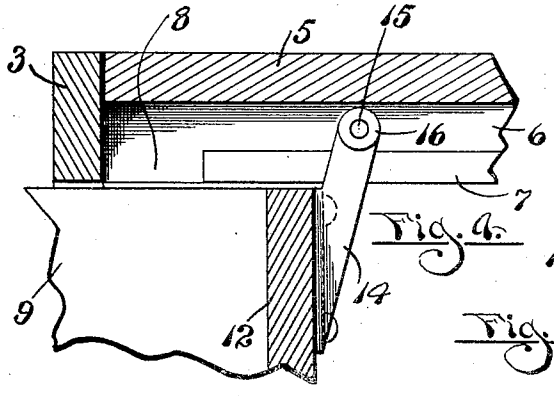


Fig. 4.

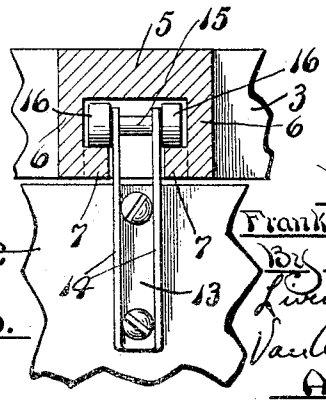


Fig. 5.

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UNITED STATES PATENT OFFICE

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DRAWER GUIDE

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This invention relates to a drawer guide and is concerned with a particularly practical, simple and effective guide for drawers with which easy insertion or removal of the drawer in the case or cabinet in which it is mounted may be had, yet accidental engagement is insured against and at the same time a full depth of drawer and utilization of the entire space therein may be had through the construction of guide which I have produced.

The invention for the attainment of the ends stated may be understood from the following description, taken in connection with the accompanying drawing, in which,

Fig. 1 is a vertical section longitudinally through the drawer and through the guide therefor, a portion of a case or cabinet to receive the drawer being shown.

Fig. 2 is a view similar to that shown in Fig. 1 with the drawer further projecting from the cabinet.

Fig. 3 is a fragmentary section, similar to Figs. 1 and 2, illustrating the manner in which the drawer is inserted in the cabinet and removed therefrom.

Fig. 4 is a fragmentary section, similar to that shown in Fig. 2, showing the parts in a larger scale and with the section through the drawer guide at a slightly different plane, and

Fig. 5 is a fragmentary rear end elevation and section of the construction shown in Fig. 4.

Like reference characters refer to like parts in the different figures of the drawing.

The case or cabinet which contains a drawer or a number thereof may be of any conventional construction including vertical sides 1, a back 2 and a front 3 through which an opening 4 for the passage of the drawer is made. It is of course to be understood that the illustration showing the mounting for the drawer and one opening for the passage of the drawer is all that is required to disclose the invention, and that the construction about to be described may be duplicated as many times as may be desired in a case or cabinet for mounting a plurality of drawers all in the same manner.

The drawer guide which is located entirely above the plane of the upper side of the opening 4 comprises a horizontal bar which is routed out at its underside and at its interior making a heavy web 5 at the upper side of the bar, downwardly extending side flanges 6 and inwardly extending tracks 7 from the lower parts of the sides 6, the tracks 7 being separated by a longitudinal slot. These track portions 7 extend the full length of the bar from its rear end to its front end where it joins the front 3 of the cabinet, except for a short distance at its front end, where the track portions 7 are cut away, as indicated at 8, leaving only the spaced apart sides 6 of the track at such point.

The drawer may be of any usual or conventional structure having spaced vertical sides 9, a bottom 10, a front 11 and a vertical back 12. It is of a cross sectional dimension to freely pass through the opening 4.

At the rear side of the back or rear end 12 of the drawer a bracket of either sheet or cast metal is located, comprising a vertical web 13 and upwardly and rearwardly extending flanges or arms 14 located at right angles to and positioned at the vertical edges of the web. The web lies flat against the rear side of the back 12 of the drawer and the bracket is permanently secured to the drawer by means of screws or other equivalent fastening devices which pass through the web and are driven into the back 12 of the drawer.

The upwardly and rearwardly extending flanges or arms 14 of the bracket extend a short distance above the upper edges of the drawer and are spaced apart proper distances so as to freely pass through the slot between the tracks 7 of the drawer guide described. A short shaft 15 extends through the upper

ends of the flanges or arms 14 and has a roller 16 at each end which rides on the tracks 7.

It is evident that, with the drawer in the position shown in Fig. 1, the rollers 16 ride on the upper sides of the track portions 7, and will continue to ride until the drawer has been pulled out far enough that its center of gravity passes by the front 3 of the cabinet whereupon, due to its tendency to tilt downwardly at its front portion, the rollers 16 will bear against the underside of the upper web portion 5 of the guide as in Fig. 2. The drawer may be drawn out as far as the rollers 16 will permit, that is, until they strike against the rear side of the front 3 of the cabinet. The weight of the drawer having a tendency to tilt the same downwardly at its outer end, there will be no downward passage of the rollers 16 through the space open at 8 and the lower edge of the back 12 will not pass by the lower side of the opening 4 through the front of the cabinet. It is, however, easy to remove the drawer when it has been drawn to its extreme forward position by lifting and tilting the drawer at its front end to a position, such as shown in Fig. 3, thereby carrying the lower edge of the rear side 12 of the drawer out of the opening 4; whereupon the rollers 16 may be moved downwardly through the opening left for such purpose at 8.

It is, of course, apparent that the reinsertion of the drawer into the cabinet is accomplished by merely reversing the movements used for taking the drawer therefrom. With this construction of drawer guide insurance against accidental disengagement from the cabinet is had and at the same time a convenient, removal and/or replacement of the drawer may be had. The entire drawer guide construction is above the upper edges of the sides and back of the drawer so that the drawer guide does not extend into the drawer space at all and the entire space of the drawer may be utilized. In addition the horizontal drawer guide member is a part readily and easily produced, while the bracket attached to the rear end of the drawer and which carries the rollers 16 is a particularly strong and durable, yet a simple and economically produced element of construction. The invention is very practical and serviceable and has so proved in practice. It is defined in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

I claim:

1. In combination, a cabinet having a drawer entrance opening in a side thereof, a drawer passing through said opening, a drawer guide bar located horizontally in the cabinet above the opening, said guide bar comprising an upper horizontal web section, downwardly extending sides and inturned track portions at the lower edges of said sides, a bracket secured to the rear end of the drawer extending upwardly and to the rear therefrom between said tracks, and rollers mounted at the upper end of the bracket to ride on the upper sides of said tracks or against the underside of said web.

2. A construction containing the elements in combination defined in claim 1, each of said track portions of the drawer guide bar at its front end portion immediately back of the drawer opening being cut away for a short distance for the passage of said rollers.

In testimony whereof I affix my signature.

FRANK BOLHUIS.