

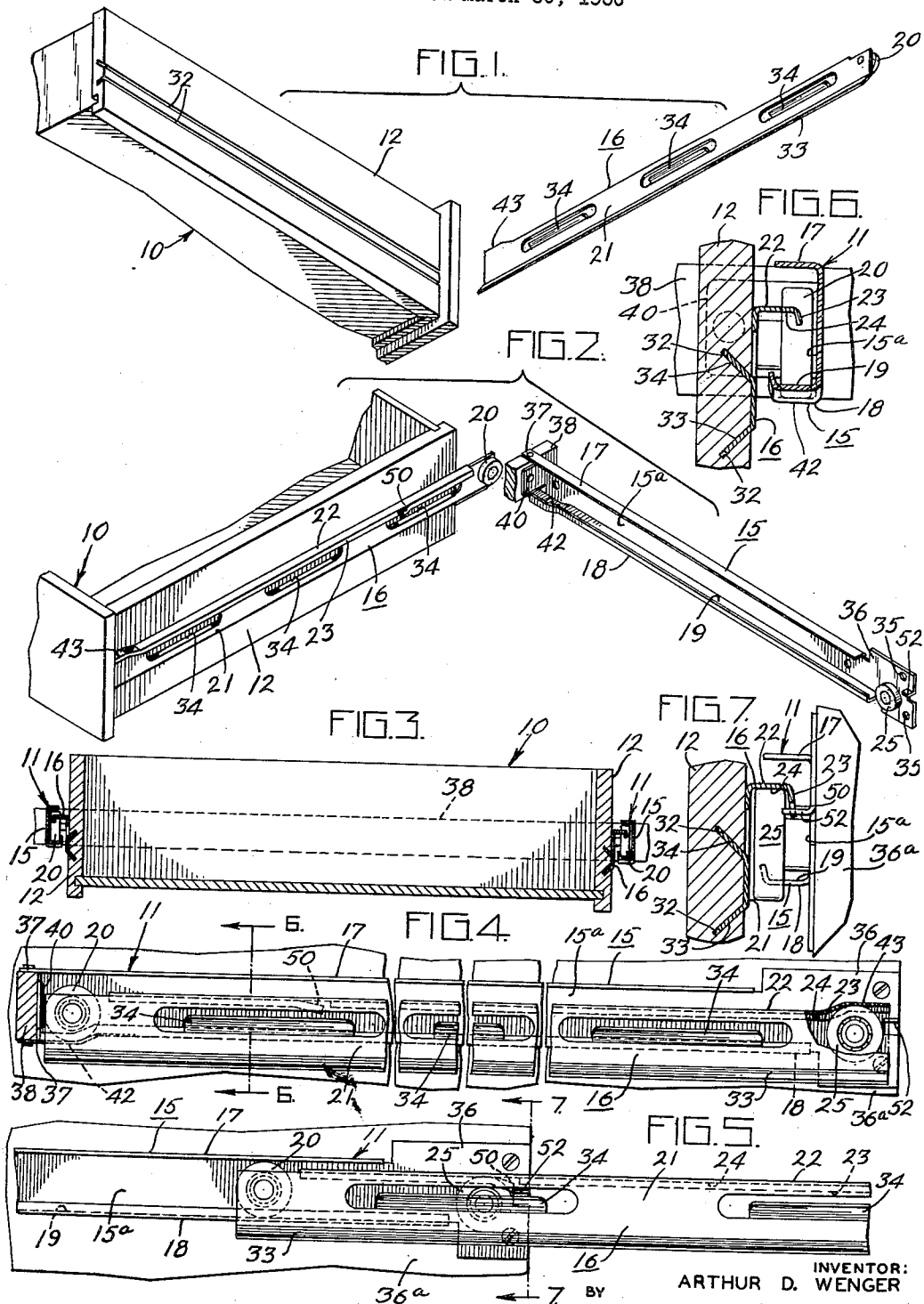
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A. D. WENGER

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DRAWER GUIDE

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INVENTOR:
ARTHUR D. WENGER

BY *Howson & Howson*

ATTYS

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DRAWER GUIDE

Arthur D. Wenger, Reading, Pa., assignor to Quaker Maid Kitchens, Inc., Temple, Pa., a corporation of Pennsylvania

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The present invention relates to drawer guides for slidably mounting drawers in a cabinet. More particularly, the invention relates to an improved drawer guide construction which permits easy, substantially friction-free insertion and withdrawal of a drawer from a cabinet.

An object of the present invention is to provide a drawer guide of simplified construction, which may be manufactured easily and economically, embodying novel features of construction and arrangement providing for easy assembly to the drawer and cabinet.

Another object of the present invention is to provide a drawer guide consisting of co-acting, complementary members including a stationary track secured to the cabinet and a slide member mounted on the drawer and adapted to be actuated longitudinally of said track, having means associated therewith for limiting the open position of the drawer, and also means for maintaining the drawer in the closed position.

A further object of the present invention is to provide a pair of angularly-extending flange members on the slide members which engage within similarly angularly disposed grooves in the side of the drawer to retain the slide member in the drawer without the need for fastening members such as nails or screws.

A further object of the present invention is to provide novel means for securing the track members to the cabinet, whereby the drawer may be easily positioned in the cabinet and fastened in the desired position.

A still further object of the present invention is to provide complementary channel portions in the stationary track and slide member for receiving the supporting rollers in a manner to limit side motion of the drawer, thereby insuring smooth and trouble-free actuation of the drawer.

The foregoing and other objects of the present invention and the various details of the construction and operation thereof are hereinafter more fully set forth and described with reference to the accompanying drawings, in which:

FIG. 1 is a perspective view of part of a cabinet drawer and slide member of the guide;

FIG. 2 is a perspective view showing the slide member assembled to the drawer and the stationary track member of the drawer guide;

FIG. 3 is a transverse sectional view of a drawer and guide of the present invention;

FIG. 4 is an enlarged side elevational view of the drawer guide when the drawer is in the retracted position;

FIG. 5 is a side view similar to FIG. 4, showing the drawer guide when the drawer is in the fully open position;

FIG. 6 is an enlarged sectional view taken along line 6—6 of FIG. 4; and

FIG. 7 is an enlarged sectional view taken along line 7—7 of FIG. 5.

Referring now to the drawings, FIG. 3 shows a drawer 10 adapted to be slidably supported in a cabinet on drawer guides 11 made in accordance with the present invention. As shown, the guides 11 are adapted to be used in pairs to support the drawer 10 along the spaced side panels 12 of the drawer. Since the components and construction of each of the drawer guides 11 are similar,

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only one is described hereinafter, and similar reference numerals are assigned to the other.

With reference to FIG. 2, the drawer guide of the present invention comprises a stationary track 15 adapted to be secured in the drawer opening of a cabinet, and a slide member 16 secured to the drawer along the length of the side panel 12 and adapted to be received in the track 15. The stationary track 15 comprises a side plate 15^a extending from the front to rear of a cabinet and secured thereto at its outer ends, and upper and lower flanges 17 and 18, respectively, projecting inwardly from the side plate 15^a. The lower flange 18 is turned upwardly along the length thereof to define a channel 19 within which a roller 20, mounted on the rear end of the slide member 16, travels. The slide member 16, as shown in FIG. 2, comprises a side plate 21 extending the length of the side panel 12 of the drawer, having an upper flange 22 which extends outwardly from the upper edge of the side plate 21 and terminates in a downwardly-extending ledge portion 23 to form a channel 24 within which a roller 25 carried by the forward end of the stationary track 15 travels. With this construction, the drawer may roll freely back and forth with the weight of the drawer being carried by the rollers 20 and 25 on the slide member and stationary track, respectively. The channels are provided to direct lateral movement of the drawer.

An important feature of the present invention is the provision of means for mounting the track to the cabinet, and the slide member to the drawer. To this end the slide member 16 is provided with angularly-extending support members 33, 34 which diverge outwardly from the side plate 21 of the slide member and are received in slotted openings 32 in the side panel 12 of the drawer. In the present instance, as shown in FIG. 1, the support members 33—34 consist of a lower flange 33 extending the length of the side plate 21 of the slide member 16, along its lower edge and projecting downwardly and rearwardly thereof at an angle, and upper segmental flange portions 34 spaced from the lower flange and projecting upwardly and rearwardly from the side plate 21 at an angle. The slotted openings 32 in the side panel 12 of the drawer which extend lengthwise of the side panel from the front to the back of the drawer, are spaced apart and diverge outwardly into the drawer at an angle similar to the divergence of the angularly projecting flange members 33 and 34 of the slide member. The slide member 16 is assembled to the drawer by sliding the flanges 33—34 into the slotted openings 32 so that the side plate 21 of the slide member 16 is flush with the side panel 12 of the drawer. It has been found that changes in the panels due to swelling or shrinkage locks the slide member in place on the drawer.

According to the present invention the stationary track 15 is supported at opposite ends thereof in the cabinet and is so constructed that during assembly of the cabinet the track 15 may be readily adjusted to the desired position to receive the slide 16. As shown in FIG. 2, openings 35 are provided in the forward extension 36 of the side plate 15^a of the track to receive suitable fasteners securing the track at its forward end to a suitable support member 36^a formed as an integral part of the cabinet. The track 15 is attached to the rear of the cabinet by providing a pair of tabs 37 extending outwardly from the track which engage over a supporting strip 38 in the cabinet extending transversely of the drawer, and a flap 40 extending transversely of the tabs 37 adapted to be secured to the face of the strip. In the present instance, the tabs 37 are formed as integral rear extensions of the upper and lower flanges 17 and 18 of the track, and the flap 40 is an integral offset portion of the side plate 15^a of the track. By this construction, the tabs 37 may be moved along the

strip 38 until the track is in the desired position and then fastened to the strip by suitable fastening members such as screws or nails.

Another feature of the present invention is the provision of means in the guide members for maintaining the drawer in the retracted or closed position. This is accomplished by providing a stepped-down portion 42 on the rear end of the channel of the track member, and a corresponding stepped portion 43 at the forward end of the channel of the slide member. The stepped or offset portions 42, 43 in the channel members are disposed with respect to the rollers 20, 25 so that when the drawer is in the closed position (shown in FIG. 4) the drawer is displaced downwardly by the roller 25 of the track engaging within the stepped portion 43 of the slide member and the roller 20 of the slide member engaging within the stepped portion 42 of the track. In this position a slight locking effect is provided, whereby the drawer resists being withdrawn and is maintained in the closed position.

In accordance with the invention, means are also provided for limiting the outer or open position of the drawer. This means comprises a fixed stop which prevents further outward movement of the drawer when it has reached the fully open position. The fixed stop consists of a detent 50 projecting downwardly from the upper flange of the slide member, and spaced from the rear of the slide member a predetermined distance, and a lug 52 on the forward extension of the track projecting inwardly into the path of the detent and adapted to engage the detent 50 when the drawer is in its fully open position, as shown in FIG. 5.

In the assembled condition shown in FIG. 4, the roller 25 of the stationary track engages within the channel 24 of the slide member, and the roller 20 of the slide member engages within the channel 19 of the stationary track. In the retracted position shown in FIG. 4, the rollers 20, 25 engage within the offset portions 42, 43 of the respective members and maintain the drawer in the closed position. As the drawer is withdrawn from the cabinet, the rollers ride within their respective channels and permit withdrawal of the drawer until the slide member and stationary track are actuated to the position shown in FIG. 5. In this position the drawer is retained against further outward movement by the fixed stop member.

Accordingly it is apparent that the present invention provides an improved drawer guide having novel features of construction whereby a drawer may be easily and conveniently withdrawn and retracted, and wherein means are

provided for retaining the drawer in the closed position. The parts comprising the guide are comparatively simple, and may be easily and economically manufactured.

While a particular embodiment of the present invention has been illustrated and described herein, it is to be understood that changes and modifications may be incorporated within the scope of the following claims.

I claim:

1. A drawer guide for slidably mounting a drawer having side panels made of a non-metallic material in a cabinet or the like, comprising an elongated stationary track member, a flange on the track member extending lengthwise thereof and projecting outwardly therefrom having an upwardly extending edge defining a channel, a roller mounted on said track member adjacent one end thereof, support means for securing the track member to the cabinet, means defining at least one angularly extending slot in the side panel of the drawer, a slide member having a flange thereon extending toward said track member having a downwardly extending edge defining a channel within which said track roller is received, said slide member including a side plate having an angularly extending flange projecting outwardly therefrom which engages within said slot to secure the slide member to the drawer, a roller mounted adjacent one end of said slide member opposite the roller on said track member, said slide member roller engageable within said channel of the track member and movable therein upon actuation of the drawer between open and closed positions.

2. A drawer guide according to claim 1 wherein a pair of angularly extending slots are provided in the side panel of the drawer and said slide member has a continuous angularly extending flange projecting outwardly from the bottom edge thereof and a series of longitudinally spaced angularly extending flanges projecting from said side plate, said flanges engageable within said slot in the side panel of the drawer to secure the slide member to the drawer.

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