

Aug. 5, 1952

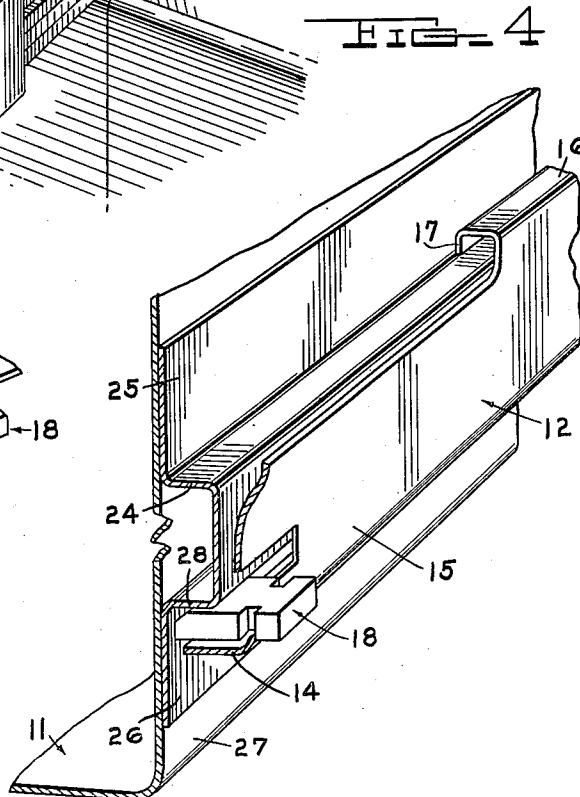
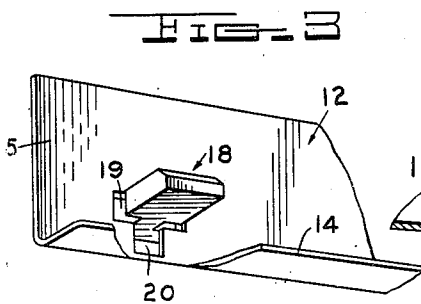
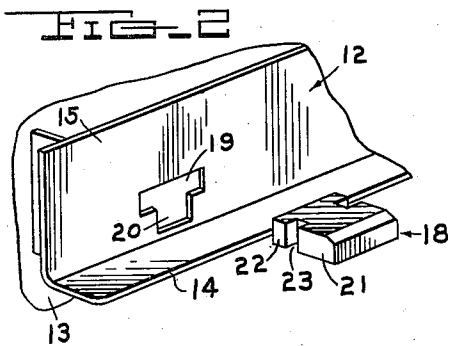
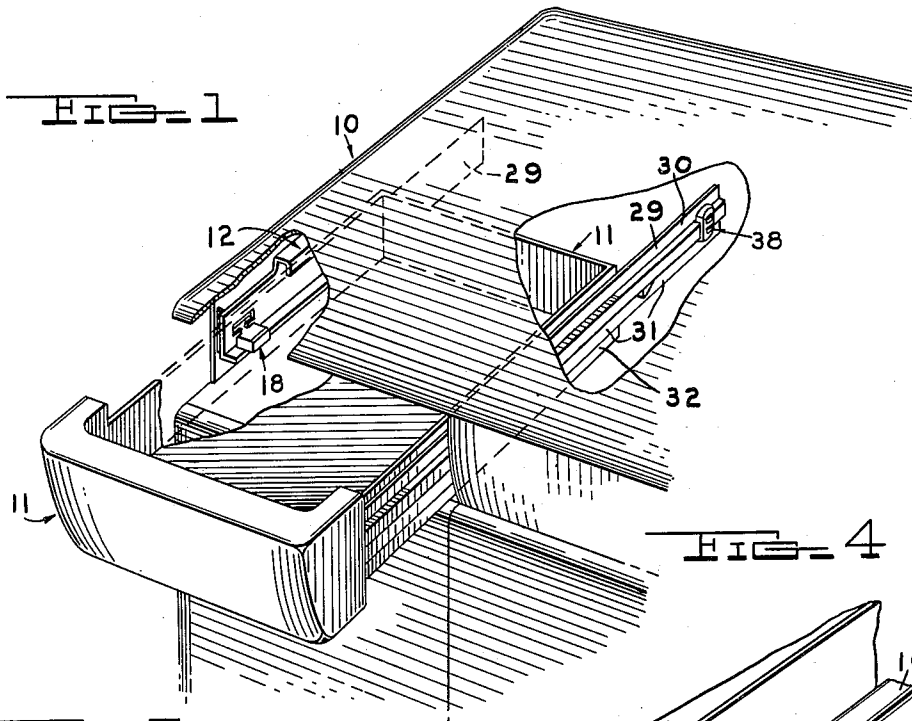
L. G. BUCHY ET AL

2,606,091

DRAWER SKID FOR SINK CABINETS AND BASE CABINETS

Filed May 5, 1948

2 SHEETS—SHEET 1



INVENTOR.
LOUIS GEORGE BUCHY
HENRY MARION
BY
Alden D. Redfield
ATTORNEY

Aug. 5, 1952

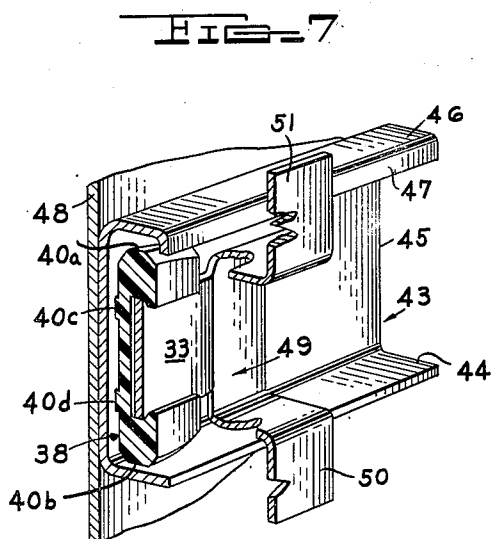
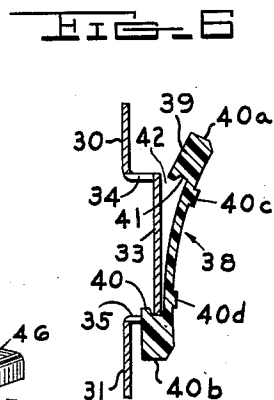
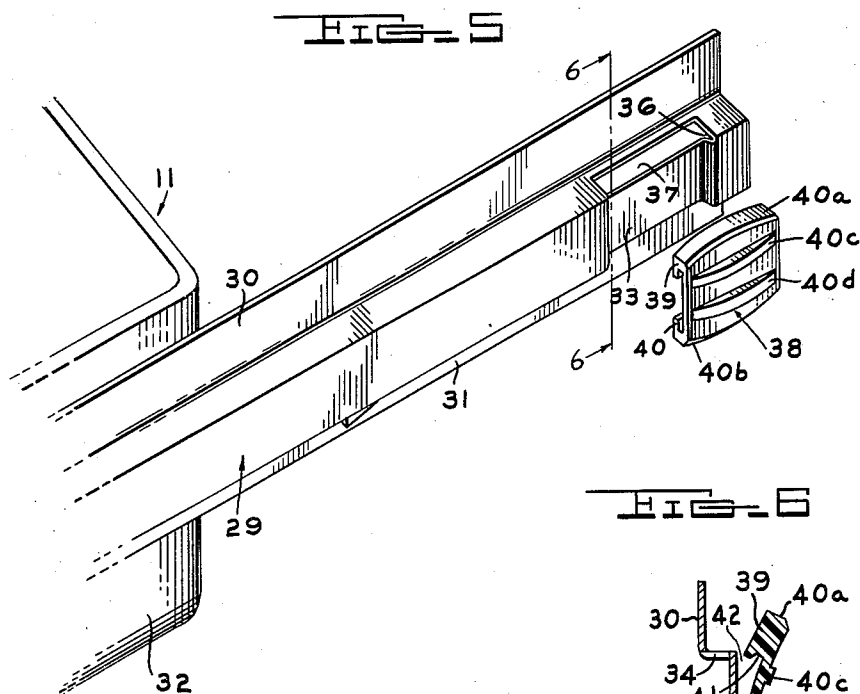
L. G. BUCHY ET AL

2,606,091

DRAWER SKID FOR SINK CABINETS AND BASE CABINETS

Filed May 5, 1948

2 SHEETS—SHEET 2



INVENTORS
LOUIS GEORGE BUCHY
HENRY MARION

BY

Alden D. Redfield
ATTORNEY

UNITED STATES PATENT OFFICE

2,606,091

DRAWER SKID FOR SINK CABINETS AND
BASE CABINETS

Louis George Buchy and Henry Marion, Connersville, Ind., assignors to Avco Manufacturing Corporation, Detroit, Mich., a corporation of Delaware

Application May 5, 1948, Serial No. 25,214

4 Claims. (Cl. 312-346)

1

This invention relates to cabinet and drawer apparatus and more particularly to a novel cabinet construction in which the cabinet drawer slide and drawer guide members are provided with a novel skid device which may be quickly and easily assembled in large scale production. By this invention there is provided a cabinet-drawer arrangement in which a skid member may be secured in a fixed position without the use of screws or rivets and which may be assembled in a fraction of the time heretofore necessary and may be constructed more economically than cabinets utilizing drawer skids now known in the art.

An object of this invention is to provide a cabinet-drawer assembly having drawer skids and which may be quickly and economically assembled.

Another object of this invention is to provide a novel drawer skid assembly in which the drawer skid may be retained in a fixed position in assembled relationship without the use of rivets, screws or other fastening means.

A further object of this invention is to provide a novel drawer-skid assembly in which the skid and skid retaining members each include relatively wide and relatively narrow portions which facilitate rapid assembly and in which the narrow portions of the skid and skid retaining members cooperate to retain the drawer skid in a fixed position without the use of screws or rivets.

The novel features that we consider characteristic of our invention are set forth in the appended claims. The invention itself, however, both as to its organization and method of operation, together with additional objects and advantages thereof, will best be understood from the following description of a specific embodiment thereof when read in conjunction with the accompanying drawings in which:

Fig. 1 is a perspective view partially in section of a portion of a cabinet illustrating a drawer assembly constructed in accordance with the principles of this invention.

Fig. 2 is a perspective view of a portion of a drawer guide and skid member in which the drawer guide and skid are shown in disassembled relationship.

Fig. 3 is a perspective view of the guide and skid of Fig. 2 in partially assembled relationship.

Fig. 4 is a partially sectional view of a portion of a drawer showing the drawer, drawer guide, drawer slide and skid member in fully assembled relationship.

Fig. 5 is a perspective view of a portion of a

2

drawer and drawer slide illustrating a drawer slide and a unitary skid in disassembled relation.

Fig. 6 is a sectional view taken along the line of 6-6 of Fig. 5, and showing the drawer slide and skid in partially assembled relationship.

Fig. 7 is a partially sectional view of the unitary skid shown in Fig. 5 in completely assembled relationship with a drawer guide.

Referring to Figs. 1 through 4, there is shown a cabinet 10 having a drawer 11 slidably mounted therein. A drawer guide 12 is secured to cabinet panel 13 in any suitable manner as by welding, riveting or by screws and brackets (not shown). Guide member 12 is preferably formed of a single sheet of metal and includes a horizontal flange or bottom wall 14, a vertical side wall 15, a horizontal flange or top wall 16, and a vertical flange 17 (see Fig. 4). As shown, a portion of wall 15 and flanges 16 and 17 are cut away near the front of the cabinet for a purpose hereafter more fully explained. While only a single drawer guide 12 is illustrated in Fig. 1, it will be readily understood that two similar guides are used and that such guides are disposed in the cabinet so that they extend in a direction from front to rear of the cabinet on opposite sides of drawer 11.

Figures 2 and 3 illustrate in detail the construction and method by which a skid member 18 may quickly and economically be assembled and retained in a fixed position on the drawer guide. To accomplish this result, drawer guide 12 is provided with an opening in its vertical wall 15, said opening including a relatively wide portion 19 and a relatively narrow portion 20. While the preferred type of opening consists of a T-slot as illustrated, this opening need not be limited to a T-slot per se but may consist of any opening having relatively wide and relatively narrow portions adapted to cooperate with a drawer skid as hereafter explained. Skid member 18 includes relatively wide portions 21 and 22 with a relatively narrow or reduced portion 23 formed intermediate portions 21 and 22. By this construction skid 18 may be simply mounted in place after the drawer guide members have been mounted in the cabinet. As shown in Fig. 3, this result is accomplished by merely inserting the relatively wide portion 22 of skid 18 into the relatively wide portion 19 to such depth that the narrow or reduced portion 23 coincides with portion 20 of the opening in wall 15. In the embodiment illustrated, skid 18 will drop down into contact with wall 14 and will thereupon be retained in a fixed position without the use of any separate fastening means such as screws, rivets

3

or springs. It will readily be understood, however, that the concept of this invention is not limited to an arrangement as shown but includes a construction in which the opening in the guide member is formed in the bottom wall 14 as well as side wall 15. Skid 18 would, of course, then be placed through the opening in the bottom wall to such depth that the narrow portions of the skid and the opening coincide and would then be moved horizontally until portion 22 would lie beneath the narrow portion of the opening. A suitable spring or other means could be used to retain the skid in such position.

Fig. 4 illustrates in detail a section of an assembled drawer within the drawer guide. As shown, a generally U-shaped drawer slide 24 includes a pair of flanges 25 and 26 which may be welded or otherwise secured to a side wall 27 of drawer 11. Before inserting drawer slide 24 into drawer guide 12, skid 18 is disposed within the guide as heretofore explained. The drawer slide may easily be inserted in the drawer guide by merely tilting the front of the drawer upwardly and placing the slide in the cut out portion of the guide. In completely assembled relation, the bottom wall 28 of drawer slide 24 is supported on the upper surface of skid 18, thereby positively preventing displacement of the skid from its fixed position on the guide. The bottom surface of skid 18 is preferably supported on bottom wall 14 of guide 15 but may be disposed in spaced relation to the bottom wall if desired. Drawer 11 is centered between the projecting ends of skids 18 which aid in opposing any side thrust that may be imposed on the drawer.

Figures 5, 6 and 7 illustrate the manner in which the rear skid is fixedly secured to the drawer slide rather than the drawer guide, and is carried by the drawer slide. There is provided a drawer slide 29 of a generally U-shaped configuration including a pair of flanges 30 and 31 which may be secured to a side wall 32 of drawer 11 by welding or other suitable means. The vertical side wall of drawer slide 29 preferably includes a bent in portion 33 at the base of the U. Openings 34 and 35 are provided in the side walls of the U; which in this instance form the top and bottom walls of the drawer slide. There is thus provided an opening in the slide member having relatively wide and relatively narrow portions 36 and 37 respectively. A skid 38 is herein provided which is generally U-shaped but includes a pair of inwardly facing flanges 39 and 40 as shown. The top and bottom portions 40a and 40b are each preferably curved to provide smooth contact and easy sliding of the skid member within the drawer guide. A pair of curved ribs 40c and 40d are provided on the outer portion of the vertical side wall of skid 38 to insure a smooth sliding fit between the vertical side wall of the skid and the inner vertical surface of drawer guide 43. In this manner, there is provided a skid having an opening including relatively wide and relatively narrow portions 41 and 42 respectively. More specifically that space included between flanges 39 and 40 constitutes a relatively narrow opening, while that portion adjacent the base of the skid 38 and beneath flanges 39 and 40 constitutes a relatively wide opening. As shown in Fig. 6, skid 38 may be easily and quickly attached to slide 29 by merely distending the skid and snapping the flanges 39 and 40 over portion 33 of the slide. In this manner, the need for screws or rivets or other fastening means is obviated.

4

As shown in Fig. 7, the drawer guide 43 is formed of generally U-shaped configuration and includes a horizontal bottom flange 44, a vertical base 45, a horizontal top flange 46, and a vertical flange 47. Base 45 is welded or otherwise secured to a vertical wall 48 of a cabinet panel. In assembled relation, skid 38 is carried by a drawer slide 49, and contacts flange 44, base 45 and flange 46 as the drawer is moved from a fully closed to a fully opened position. Drawer slide 49 includes a pair of offset flanges 50 and 51 which are secured to the side wall of the drawer.

The skid members heretofore described may be of any suitable composition but are preferably formed of a material such as nylon impregnated synthetic plastic or formed purely of a synthetic resin, without a nylon base. Skids of either composition have been found to be satisfactory in practice since both function to provide a low coefficient of friction and have suitable wearing qualities. While this specification has described the invention in terms of a single slide and guide member, it will be understood that similar slide and guide members are provided on opposite sides of the drawer so that the drawer is supported on each side thereof by a skid member as disclosed and described.

It will be seen that the invention provides a novel arrangement for mounting a skid member to either the drawer guide or drawer slide or both in which the skid member is retained in a fixed position in its supporting member without the use of screws, rivets, or other fastening means. The skid may be easily and quickly placed in position and is readily adaptable to large scale manufacture on an economical basis with consequent savings in labor and material costs.

While our invention has been disclosed and described in a particular embodiment thereof, it is to be understood that various changes and modifications may be made as will readily be apparent to a person skilled in the art without departing from the spirit and scope thereof. Having described our invention, we claim:

1. In a cabinet having drawers slideably mounted therein, a drawer guide fixedly secured to the cabinet, a drawer slide fixedly secured to said drawer and having a portion thereof extending into the confines of said guide, an opening in said guide having relatively wide and narrow communicating portions, a skid adapted to be inserted into said opening having a portion extending between said guide and slide in supporting and sliding relationship with the under surface of said slide and the side wall of said drawer respectively, said skid having spaced parallel surfaces for engaging the opposite surfaces of said guide adjacent the narrow portion of the guide opening to retain said skid in assembled relationship with said guide, a pair of horizontally extending vertically spaced openings formed in one end of said drawer slide, and a unitary skid having inturned flanges for engagement with said horizontally extending openings to retain said skid on said slide, said unitary skid having upper, lower and lateral bearing surfaces slideably engaging the interior of said guide, said skids cooperating to slideably maintain said slide in spaced relationship with said guide.

2. In a cabinet having a drawer slideable mounted therein, a drawer guide fixedly secured to said cabinet, a drawer slide fixedly secured to the drawer, said guide surrounding said slide in spaced relationship therewith, said guide being

5

formed to define an opening, a skid engaged with the opening of said guide and extending between said guide and slide for slideably supporting the underside of said slide, said slide being formed to define a pair of horizontally extending vertically spaced openings, and a unitary skid having inturned flanges engaging the horizontally extending openings, said skid having curved top, bottom and side surfaces for slideably bearing on the interior of said guide, said first and second named skids cooperating to slideably position and support said slide within said guide.

3. In a cabinet having a drawer slideably mounted therein, a drawer guide comprising a channel bar of C-shaped cross section fixedly secured to the cabinet, a drawer slide comprising a channel bar of U-shaped cross section fixedly secured to the side wall of the drawer and projecting outwardly into the interior of said drawer guide, said drawer guide being formed to define an opening adjacent one end thereof, a skid secured within the guide opening and extending beneath the lower portion of said U-shaped drawer slide, and a unitary skid secured to one end of said drawer slide, said last named skid having curved upper, lower, and side faces for engaging said guide, said first and second named skids cooperating to maintain said channel bars in spaced parallel relationship irrespective of the position of said drawer within said cabinet.

4. In a cabinet having a drawer slideably mounted therein, a U-shaped slide secured to said drawer with the open side of said slide facing the drawer wall, a substantially C-shaped guide secured to said cabinet, said guide sur-

6

rounding said slide in spaced relationship therewith, said guide being formed to define a T slot adjacent one end thereof, a skid having an end portion for engagement with the T slot of said guide, said skid being assembled to said guide in position to slideably support the underside of said slide, said slide being formed to define a pair of vertically spaced openings in one end remote from said skid, a second skid having upper, lower, and side bearing faces, a pair of inturned flanges formed integrally with said second named skid, said flanges engaging the vertically spaced openings for securing said skid to said slide, said slide being recessed adjacent said second named skid to prevent movement parallel to said slide, the bearing faces of said second named skid engaging three interior surfaces of said guide, said first and second named skids cooperating to centralize said slide within said guide.

LOUIS GEORGE BUCHY.
HENRY MARION.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
680,127	Cornell	Aug. 6, 1901
1,376,494	Wickstrom	May 3, 1921
1,568,270	Cross	Jan. 5, 1926
1,569,158	Tobey	Jan. 12, 1926
1,832,203	Gussock	Nov. 17, 1931
1,929,762	Ulrich	Oct. 10, 1933
2,514,664	Miller et al.	July 11, 1950