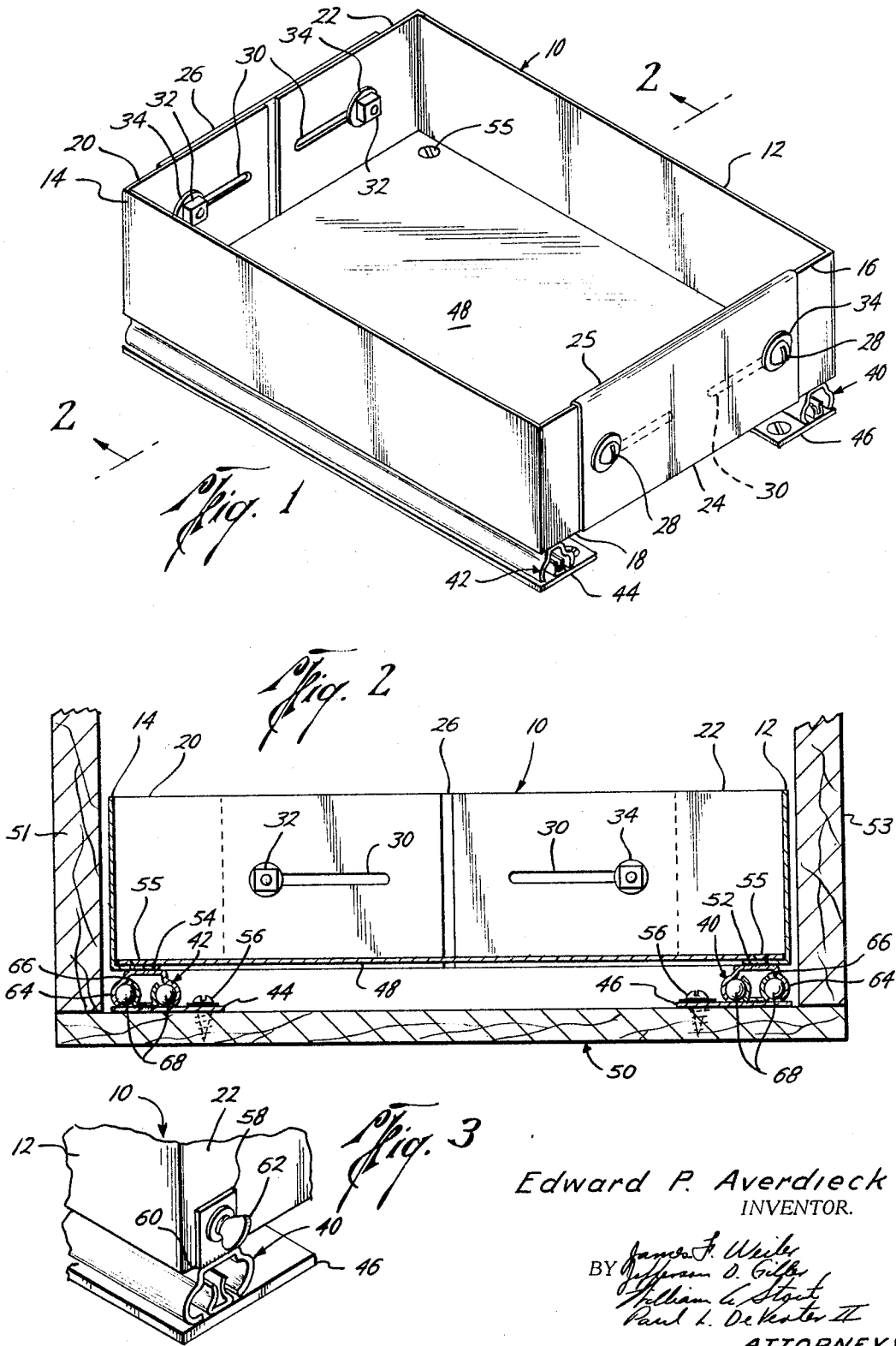


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E. P. AVERDIECK  
SLIDING ADJUSTABLE DRAWER

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3,272,583

## SLIDING ADJUSTABLE DRAWER

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This invention relates to a sliding drawer which is adjustable in size for mounting on a cabinet shelf.

The useful depth of a cabinet shelf is limited by accessibility to items stored at the rear of such shelf. Thus a deep cabinet is of little utility when located at an inaccessible place or when it is of a height requiring removal of items stored at the front of the shelf in order to reach items stored at the rear. In this connection, the present invention is conveniently and effectively directed to provide a drawer which is adjustable in size so as to fully utilize the space within a cabinet and to provide easy access to the items positioned in the drawer at the rear of the cabinet.

It is, therefore, an object of the present invention to provide a drawer which is readily adjustable and adaptable for mounting on a shelf within a cabinet having side walls.

A further object of this invention is to provide an adjustable drawer that permits easy access to all items stored within the cabinet.

Another object of this invention is to provide a drawer which is readily adjustable and adaptable for mounting on a shelf.

Still another object of this invention is to provide an adjustable drawer with slide means capable of being fastened to a cabinet shelf in a manner wherein the drawer utilizes a maximum amount of available shelf space.

Yet a still further object of the present invention is the provision of a drawer for installation in a cabinet having side walls wherein the drawer is adjustable in width for utilizing a maximum of available shelf space between the side walls and which is mounted on slides which are fastened to the cabinet shelf from the inside of the drawer thereby allowing the drawer to be installed after it has been fully expanded against the cabinet side walls.

Other and further objects, features and advantages will be apparent from the following description of a presently preferred embodiment of the invention, given for the purpose of disclosure, and taken in conjunction with the accompanying drawing, where like character references designate like parts throughout the several views, and where:

FIGURE 1 is a perspective view of the present invention,

FIGURE 2 is a detailed cross-sectional end view of the present invention in position installed on a shelf, and

FIGURE 3 is a partial perspective end view showing attachment of the drawer slide means to the drawer frame.

Generally, the present invention comprises an adjustable drawer frame wherein the two sides of the drawer are adjustably connected at both ends thereby permitting lateral expansion or contraction of the sides to fit within side walls of a cabinet shelf, and fully utilize the cabinet space rails permitting the drawer to slide within the cabinet shelf, means for attaching the rails to a shelf, and a bottom member adapted to be attached to the sides upon securing the rails to a shelf thereby forming a complete drawer.

Referring now to the drawings, and particularly to FIGURE 1, the reference numeral 10 generally designates the adjustable drawer of the present invention which includes sides 12 and 14 which have right angle projections 16 and 22, and 18 and 20, respectively. An ad-

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justable means is provided such as plate 24 which telescopically engages right angle projections 16 and 18 together to form a drawer front and a plate 26 which telescopically engages projections 20 and 22 together to form a drawer back. The bolts 28 project through holes in the plates 24 and 26 and are slidable within elongate slots 30 which are formed in the front projections 16 and 18, and the back projections 20 and 22 to permit lateral adjustment of the side members 12 and 14.

The drawer 10 is attached to slide means such as rails designated generally by the reference numerals 40 and 42. Such rails may be attached to the lower edges of the sides 12 and 14 respectively, or may be attached to flanges as will be hereafter described. The rails in turn are attached to plates 44 and 46 which are mountable on a cabinet shelf 50. The drawer bottom 48 is attached to the sides 12 and 14 after the plates 44 and 46 are mounted on as shelf 50 as will be fully explained herein-after.

Referring now to FIGURE 2, which illustrates the drawer 10 of the present invention mounted within a cabinet designated generally by reference numeral 50 having side walls 51 and 53. The great utility of the present invention becomes apparent upon examination of FIGURE 2 wherein the sides 12 and 14 of the drawer 10 are shown in close proximity to the sides 51 and 53 of the shelf 50 thus fully utilizing the shelf space. Then drawer side members 12 and 14 may include lower inwardly extending or horizontal flanges 52 and 54, respectively, serving as support means upon which are mounted the sliding means or rails 40 and 42. The flanges may be omitted and the rails may simply be attached to the lower edges of the drawer sides 12 and 14. The drawer bottom 48 is secured by conventional means such as screws 55, to the flanges 52 and 54. However, prior to mounting the bottom 48 on the flanges 52 and 54, the fastening plates 44 and 46 are secured to the cabinet shelf 50 by means such as wood screws 56. The wood screws 56 are secured by access through the aperture or hollow formed between the flanges 52 and 54 before mounting the bottom 48. Such access is advantageous in that the rails 40 and 42 can be mounted to the drawer sides 12 and 14 respectively and aligned for proper sliding before the drawer 10 is mounted to the shelf 50. As a result, the drawer is mounted in a way preventing binding when sliding the drawer 10 on the rails 40 and 42. Of equal importance is the fact that the drawer is thus mounted so as to make maximum effective use of available space within the shelf by virtue of the inwardly positioned fastening means or plates 44 and 46 which permit the drawer side members 12 and 14 to be moved close to the shelf sides 51 and 53.

With reference now to FIGURE 3, a partial perspective rear view of the drawer 10 is shown. One method of connecting the rails to the drawer is illustrated. Thus, rail 40 may be attached to the side projection 22 of the side 12 by means of a bracket 58. The bracket 58 is connected to the rail 40 such as by weld metal 60. A thumb screw 62 is then employed to fasten the bracket 58 to the drawer end 22. It is to be recognized that the embodiment shown in FIGURE 3 is merely illustrative of means that can be used to attach the drawer 10 to the rail 40. Similarly, the other rail 42 can be connected to the drawer side 14 on projection 20.

Referring again to FIGURE 2, the sliding means 40 and 42 as shown may include a first inverted channel member 64 with sides formed in a C-shape. Within the first channel member 64 is a second channel member 66 with sides formed in a C-shape thereby providing cylindrical apertures in association with the first channel member 64. Mounted and slidable within these apertures

are ball bearings 68 which promote smooth sliding of one channel member upon the other. It is to be recognized that other suitable sliding means may be employed in place of rails 40 and 42 as circumstances may require.

In operation, the side members 12 and 14 are joined at their ends by plates 24 and 26. Since the rails 40 and 42 or other suitable sliding means are connected to the flanges 52 and 54 respectively, the rails are properly aligned in parallel to avoid binding when sliding the drawer. The drawer unit thus comprised is then fitted within the cabinet shelf 58 by lateral adjustment of the sides 12 and 14 to conform the sides to the available cabinet space between walls 51 and 53. Such adjustment is made by operating the nuts 32 and bolts 28 and sliding the side projections 16 and 18, and 20 and 22 within the plates 24 and 26. When the sides 12 and 14 are properly positioned within the cabinet walls 51 and 53 and are parallel to each other, the nuts 32 are tightened. Then the brackets 44 and 46 are secured to the cabinet shelf 50 as by wood screws 56. This mounting operation is conducted through a hollow recess or aperture which is formed between the sides 12 and 14 and the flanges 52 and 54. Because the fastening means such as the brackets 44 and 46 and the screws 56 may be positioned and secured to the shelf 50 interiorly of the drawer 10, the sides 12 and 14 may be fully extended to a position adjacent the shelf walls 53 and 51, respectively, and thus fully utilize the shelf space. Upon completion of the mounting operation, the drawer bottom member 48 is secured in place by fastening it to the flanges 52 and 54. The result is a sliding drawer fitting snugly and efficiently within the cabinet shelf permitting maximum effective use of said cabinet.

The present invention, therefore, is well adapted to carry out the objects and attain the ends and advantages mentioned as well as others inherent therein. While a presently preferred embodiment of the invention has been given for the purpose of disclosure, numerous changes in the details of construction, and the combination, shape, size, arrangement of parts, and uses may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.

What is claimed is:

1. In an adjustable drawer for mounting on a cabinet shelf having side walls, said drawer having first and second sides connected together by front and back members which are adjustable in length, the improvement comprising,

slide means connected to each side member for attaching said drawer on said shelf.

supporting means extending inwardly from each side member for supporting a bottom member,

a bottom member adapted to be positioned on said supporting means thereby providing a drawer bottom, and

fastening means connected to the slide means for securing the slide means to said shelf, said fastening means positioned inwardly from said supporting means whereby the drawer may be fully expanded between the cabinet side walls and the fastening means secured to said shelf prior to positioning said bottom.

2. In an adjustable drawer for mounting on a cabinet shelf and having first and second sides, each side member having perpendicular projections at either end thereof extensible toward the projection of the other side member, each member having a lower flange, a first and sec-

ond plate connecting the projections of the first and second side members and permitting adjustable connection of said side members thereby providing an adjustable drawer frame having a hollow bottom section, the combination with said drawer frame of

slide means connected to each of said side members, fastening means connected to each of said slide means and positioned in said hollow, and

a bottom member attachable to said side member flanges covering said hollow upon mounting the fastening slide means to the cabinet shelf.

3. The invention of claim 2 wherein the slide means connected to each of said side members each include, a first C-shaped rail attached to a side member flange, a second C-shaped rail slidably engaging the first rail and attached to the fastening means thereby providing a cylindrical aperture between said first and second rail, and

ball bearings slidable within said cylindrical aperture.

4. In an adjustable drawer for mounting on a cabinet shelf having side walls, said drawer having first and second sides connected together by front and back members which are adjustable in length for filling the space between the cabinet walls, the improvement comprising,

horizontal flange means connected to each side member and extending inwardly to provide a support for a bottom,

slide means connected to each flange means, fastening means connected to each slide means for securing the slide means to said shelf, said fastening means extending inwardly beyond the inward edge of said flange means whereby the drawer may be fully expanded between the cabinet side walls and the fastening means secured to the shelf from the interior of said drawer, and

a bottom member sized to fit the adjusted drawer and be supported on and secured to said flange means.

5. In an adjustable drawer for mounting on a cabinet shelf, said drawer having first and second sides connected together by front and back members which are adjustable in length, the improvement comprising,

horizontal flange means connected to each side member and extending inwardly to provide a support for a bottom,

slide means connected to each flange means, fastening means connected to each slide means for securing the slide means to said shelf, said fastening means extending inwardly beyond the inward edge of said flange means whereby the drawer may be expanded and the fastening means secured to the shelf from the interior of said drawer, and

a bottom member sized to fit the adjusted drawer and be supported on and secured to said flange means.

#### References Cited by the Examiner

##### UNITED STATES PATENTS

1,291,794 1/1919 Droste ----- 5-308

##### FOREIGN PATENTS

964,755 2/1950 France.  
1,308,735 10/1962 France.  
7,429 of 1888 Great Britain.  
173,383 1/1922 Great Britain.

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