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B. M. BAKER

2,519,623

DRAWER GUIDE

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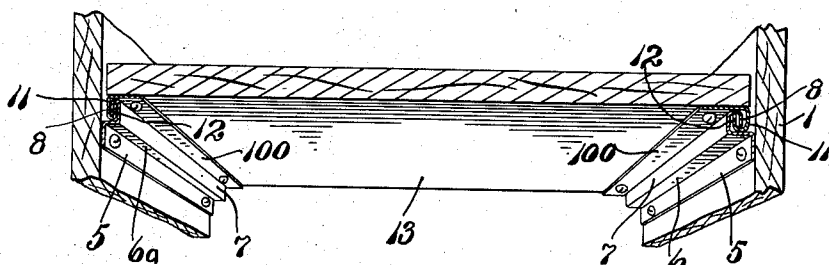


FIG. 1.

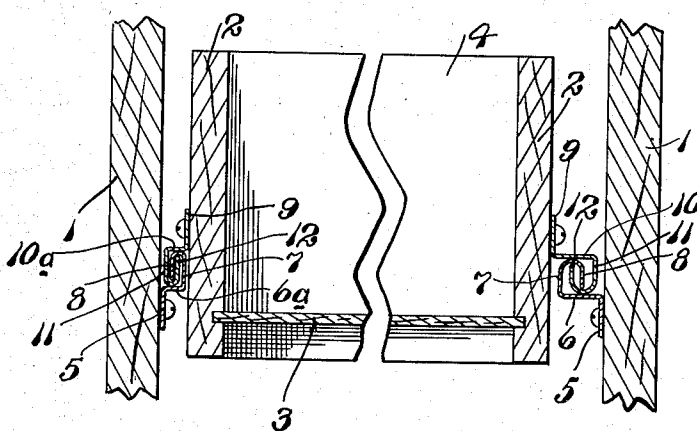


FIG. 2.

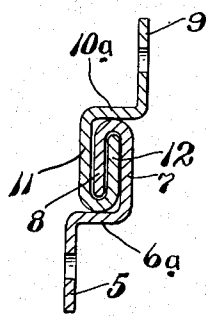


FIG. 3.

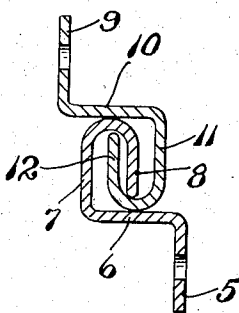


FIG. 4.

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DRAWER GUIDE

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3 Claims. (Cl. 45-77)

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This invention relates to a guiding means for drawers and slides, which may be mounted in desk pedestals or the like, being drawn out when access to the drawer contents is wanted, or the slide is to be used as a support, or other uses to which it is normally put.

With my invention, it is an object and purpose to provide slidable carrying means for a drawer or slide, differing in construction at opposite sides thereof so that one of the guides used maintains the adjacent side of the drawer or edge of the slide substantially in a constant plane of movement, and the other, in addition to its guiding functions, takes care of any troubles due to variations in the draw width from shrinking or swelling; and furthermore permits a greater tolerance in the initial width of the drawers, which do not have to be as closely and accurately produced in quantities in width dimension, or fitted to a pedestal or case, as previously required. Any binding or sticking of the drawer is practically taken care of in a simple and yet very effective manner.

An understanding of the invention may be had from the following description, taken in connection with the accompanying drawing, in which:

Fig. 1 is a fragmentary perspective and vertical sectional view showing my invention in connection with a horizontal slide,

Fig. 2 is a fragmentary vertical section showing a drawer mounted between space supporting sides of a pedestal or the like and utilizing my invention, and

Figs. 3 and 4 are enlarged transverse vertical sections through the guide structures which are used at the opposite sides of a drawer or opposite edges of a slide.

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

A drawer is generally mounted for horizontal movement between two spaced apart vertical sides 1 of a desk pedestal or similar casing structure, for example a filing cabinet, bureau or the like. The drawer has spaced vertical sides 2, a bottom 3 and ends 4 of conventional type.

For slidably mounting and guiding the drawer, at the inner side 1 of the pedestal, a lower guide member of thin sheet metal is located and secured. It is formed with a vertical flange 5 to lie against the inner side of the associated pedestal side 1, being secured thereto, preferably by screws. From the upper edge of the flange 5 a relatively wide horizontal ledge 6 extends inwardly, from the inner edge of which an inner vertical leg 7 extends upwardly and is curved outwardly into substantially U-form, terminating in a downwardly

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extending leg 8, the lower edge of which is a short distance above the ledge 6. The bend between the legs 7 and 8 is of a relatively large radius of curvature so that the two legs 7 and 8 are spaced a substantial distance from each other, greater than the thickness of the metal used, and are located in substantially parallel vertical planes.

Attached at the inner side of the other side 1 is a lower member also made of sheet metal, differing from the member first described, by narrowing the ledge 6a, as shown comparatively in Figs. 3 and 4, and bringing the legs 7 and 8 closer together with the bend between them on a shorter radius.

The cooperating upper guide member used with the drawer is also of thin sheet metal, having an upper flange 9 adapted to be screw attached to a side of the drawer, a horizontal ledge 10 extending outwardly from the flange 9 and of a width comparative to the ledge 6, and a U-shaped structure consisting of an outer downwardly extending vertical leg 11 and an inner leg 12 integrally connected with the first leg by a U-bend, the distance between the legs 11 and 12 being the same as between the legs 7 and 8. Said upper and lower members of the guide, as shown in Fig. 4 are slidably interlocked with the terminal leg 8 between the legs 11 and 12, and the leg 12 between the legs 7 and 8. The two members, one upper and one lower of the guide, are identical in structure and are reversed in position.

Similarly the upper guide member, at the upper side of the drawer has its ledge 10a narrower in width than the ledge 10. The slidable interlock connection is the same. The spacing of legs 11 and 12 and 7 and 8 is such that said legs 8 and 12 are close together, and also in close relation to the outer legs 7 and 11, while the structure of the other guide with the wider spacings of legs 7 and 8 and 11 and 12 permits a lateral movement of the upper and lower guide members which is not permitted at the other side of the drawer.

With the structure and assembly as described the more closely connected guide at one side of the drawer, that at the left in Fig. 2, holds the drawer from sidewise movement and maintains the drawer movement in a substantially straight line. At the same time there is a wider tolerance relative to the width of the drawer, because the more loosely connected members, those at the right in Fig. 2 permit a lateral change of position of the legs 12 and 8 with respect to each other. The closer tolerance which would be required if both guides were of the type in Fig. 3 is not needed. Also any change in dimension due

to shrinking or swelling is taken care of without danger of binding and resistance to the movement.

Substantially the same guides are used with a horizontally mounted slide, such as 13 in Fig. 1. The lower guide members are identical with those in mounting a drawer as in Fig. 2. The upper cooperating members are changed only by not bending up the flange 9 but extending it in the same plane with the horizontal ledges 10 and 10a, as indicated at 100 in Fig. 1, so that said flanges located against the under side of slide 13 at opposite edge portions may be screw connected to the slide. The action and results obtained are the same as with a drawer.

The invention has proven very practical and useful. The elimination of custom fitting of slides and drawers to the pedestals in which they are mounted thus eliminates high priced labor and reduces costs, with a certainty that binding, sticking, and other common undesirable occurrences in drawer and slide movement will not happen.

The invention 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 a structure as described, two spaced parallel vertical supports, a member located between said supports for slidable connection therewith to move in a substantially horizontal plane, a two-part guide having one part connected with the inner side of one of said vertical supports and the other part to said member, said two parts of the guides being identical and having inter-engaging U-shaped connections relatively movable longitudinally one with respect to the other, and relatively closely connected to prevent lateral play therein, a second two-part guide having one part thereof connected at the inner side of the other of the vertical supports and the other part connected to said member, having engaging inter-connecting U-shaped portions loosely connected laterally and associated to permit lateral play therein.

2. In a structure as described, two spaced apart vertical supports, a drawer located between said supports, a horizontal guide member fixed at the inner side of each support and extending inwardly therefrom and terminating in vertical inverted U-shaped portion, a second guide member fixed to the outer side of each side of the drawer extending outwardly therefrom and terminating in a vertically positioned U-shaped portion, the free legs of said U-shaped portions inter-connecting with each other, said guide members at one side of the drawer having inter-connecting U-shaped portions in relatively close engagement to prevent lateral movement or play therebetween, and at the other side the legs of said U-shaped portions being spaced to allow lateral movement.

3. In a structure as described, two spaced apart vertical supports, a member located between them and mounted for sliding movement and a two-part guide between each vertical side of said sliding member and its adjacent support, one part of each guide being attached to said sliding member and the other part thereof attached to a support, the two parts of said guides each having interlocking U-shaped portions and other portions extending past the curved part of the U-shaped portion of the other part and closely adjacent to it, the interlocking portions of one guide being closely spaced to prevent relative lateral movement and the interlocking portions of the other guide being widely spaced to permit relative lateral movement.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
803,102	Harris	Oct. 31, 1905
962,122	Brown	June 21, 1910
1,321,859	Streich	Nov. 18, 1919