G. E. CARLSON.

DRAWER MOUNTING.

APPLICATION FILED MAY 5, 1919

1,311,042.

Patented July 22, 1919.

Fig. 1.

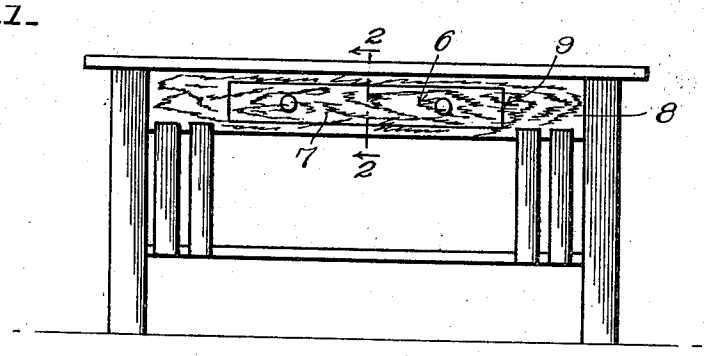


Fig. 2.

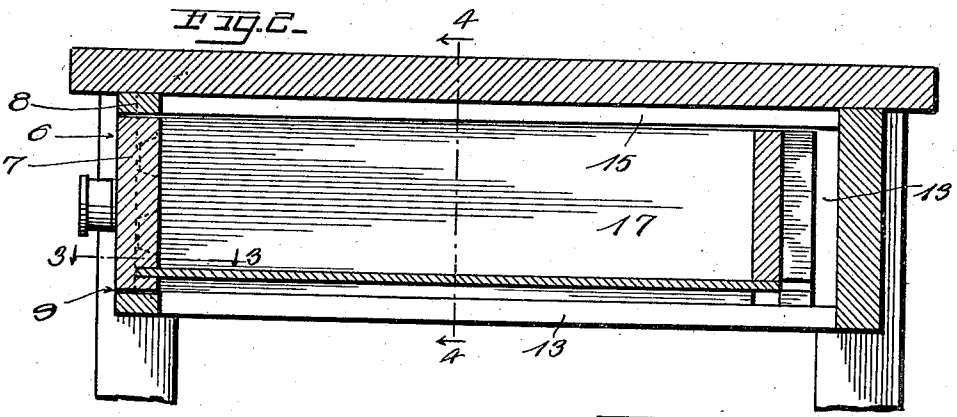


Fig. 3.

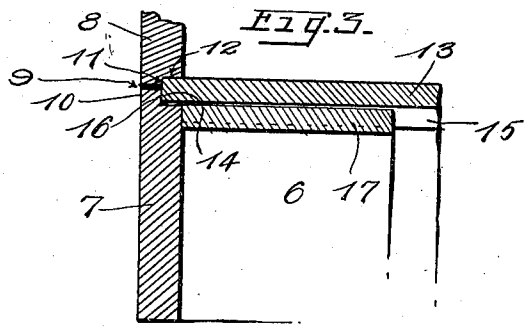


Fig. 4.

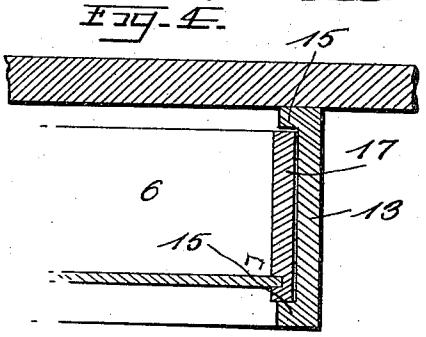
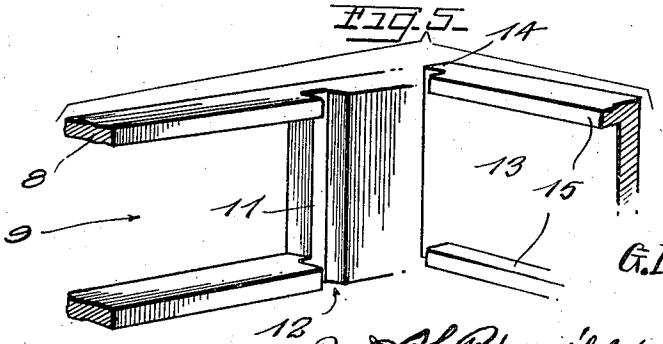


Fig. 5.



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DRAWER-MOUNTING.

1,311,042. Specification of Letters Patent. Patented July 22, 1919.

Application filed May 5, 1919. Serial No. 294,693.

To all whom it may concern:

Be it known that I, GUSTAVE E. CARLSON, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Drawer-Mountings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to drawer mountings, and it relates more specifically to a wooden structure which is especially useful in tables, table-desks and the like.

One object of this invention is to generally improve upon, simplify and cheapen structures of this kind by avoiding the necessity of using either separable guide strips, screw fastenings or glue, and at the same time insuring excessive accuracy in the fitting of the drawer, also enhancing the appearance of the article containing the drawer.

Other objects and advantages may become apparent to persons who read the following details of description in connection with the accompanying drawings, in which:—

Figure 1 is a front elevation of a table or table-desk comprising my improved drawer mounting.

Fig. 2 is an enlarged transverse vertical sectional view, the section being taken along the line 2—2 of Fig. 1.

Fig. 3 is a horizontal sectional detail, the section being taken along the line 3—3 of Fig. 2.

Fig. 4 is a vertical sectional detail, the section being taken along the line 4—4 of Fig. 2.

Fig. 5 is a perspective view illustrating the formation of the front rail or plate which has the drawer-receiving opening therethrough, this figure also illustrating the front end portion of one of the guide bars out of engagement with the groove of the front plate in which it is normally fitted and secured.

Referring to these drawings in detail in which similar reference characters correspond with similar parts throughout the several views, and in which the table in Fig. 1 merely illustrates one of the various applications of my invention.

The invention comprises the structure illustrated in detail in Figs. 2 to 5 inclusive, especially the mounting in which the drawer 6 is slidable. In constructing this device, the front plate 7 of the drawer 6 is preferably cut out of the front plate 8 by means of a thin circular saw, or other appropriate means, so as to provide a drawer-receiving opening 9, and this not only insures a correct fit of the drawer front in the plate 8, but also insures that the wood-grain of the plate 8 matches that of the drawer front 7, and it also insures a comparatively even shrinkage, so that the crack between the plate 8 and drawer front remains sufficiently wide to permit the drawer front to work easily in the opening 9, while the crack never becomes wide enough to become unsightly. The drawer front is formed with laterally extending flanges 10, one of which is illustrated in Fig. 3, and these flanges are respectively contiguous to vertical surfaces 11 at the ends of the drawer-opening. Each plate 8 has its inner surface formed with a groove or dodo 12 which communicates with the opening 9 in such relation that the vertical center or intermediate portion of each groove is in the same plane with the adjacent vertical surface 11. The object of this construction will be understood after considering its relation to other elements of the invention.

The drawer mounting also comprises a pair of channel bearings or guiding bars 13, each formed with its intermediate and end portions of a thickness to correspond with the horizontal distance across the grooves 12, and the front end portion 14 of each bar 13 is snugly fitted and secured in a corresponding one of the grooves or dodos 12, and nails may be employed for securing the front ends 14 in the dodos, so that no other securing means are necessary. Moreover, because the flanges 15 are preferably integral with the bars 13, there is no need of fastening means for these flanges, as in ordinary constructions of this kind where the upper and lower drawer guides are put on with nails or glue, and there is no danger of these flanges or drawer guides coming loose.

When the bars 13 have their front ends 14 fitted in the dodos 12, their extreme front surfaces abut against the bottom surfaces of the dodos, and a portion of each of said extreme front surfaces extends inward past the

contiguous surface 11 so as to provide a drawer-stop as indicated at 16 in Fig. 3. The distance from the extreme front surface or drawer-stop 16 to the front surface of the plate 8 is equal to the thickness of the contiguous flange 10, so that the drawer front 7 has its front surface flush with the front surface of the plate 8. The drawer-sides 17 are slidable between the flanges 15 of the guide-bars 13, the space between the bars 13 being in communication with the drawer-receiving opening 9. It will be seen, therefore, that the drawer may be pulled almost entirely from the drawer-mounting, and the flanges 15 will still hold it substantially in horizontal position.

It is not intended to limit this invention to the exact details of construction as described herein, but changes may be made within the scope of the inventive idea as described and claimed herein.

What I claim as my invention is:

1. The combination with a drawer having laterally extending flanges at its front end, of a front plate having a drawer-receiving opening therethrough, said opening having vertical surfaces normally contiguous to the said flanges of the drawer, said front plate being formed with vertical grooves each having its intermediate portion in the plane of the corresponding one of said vertical surfaces, and guiding bars each having its front end fitted and secured in said grooves, the front extremities of said bars being spaced from the front surface of said plate a distance equal to the thickness of said flanges, whereby said extremities coact with said flanges to stop the drawer where its front surface is flush with that of said front plate.

2. A drawer mounting comprising a plate having a drawer-receiving opening therethrough, said opening having vertical surfaces, said plate having also two vertical grooves which communicate with said drawer-receiving opening, and a pair of channel bars having their front ends secured respectively in said grooves, the top and bottom flanges of each channel bar being spaced from one another a distance approximately equal to the height of said drawer-receiving opening, the space between these flanges constituting an extension of said drawer-receiving opening.

3. The combination with a drawer having laterally extending flanges at its front end, of a front plate having a drawer-receiving opening therethrough, said opening having vertical surfaces normally contiguous to the said flanges of the drawer, said front plate being formed with vertical grooves each having its intermediate portion in the plane of the corresponding one of said vertical surfaces, and guiding bars each having its front end fitted and secured in grooves, the front extremities of said bars being spaced from the front surfaces of said plate a distance equal to the thickness of said flanges, said guiding bars having flanges spaced from one another a distance approximately equal to the height of the drawer's sides and receiving the sides therebetween and constituting guides therefor.

In testimony whereof I have hereunto set my hand.

GUSTAVE ELVIN CARLSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."