April 9, 1929. D. E. HUNTER 1,708,017

VERTICAL FILING DEVICE

Filed Jan. 11, 1928

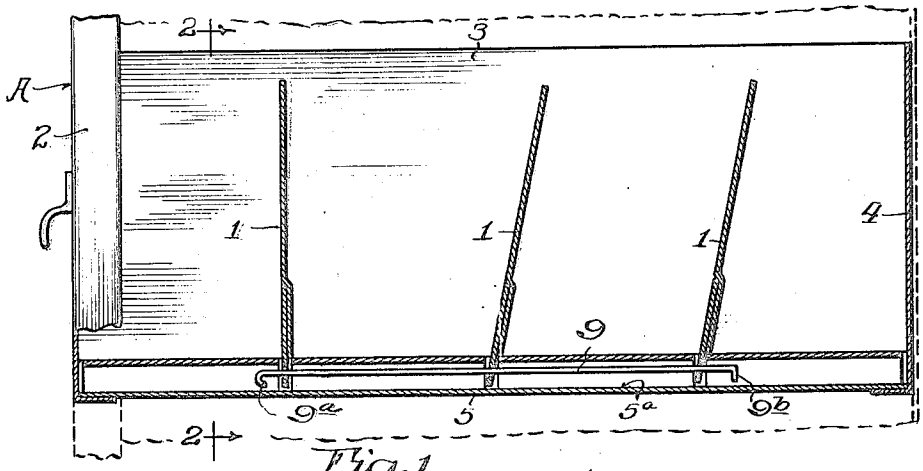


Fig. 1

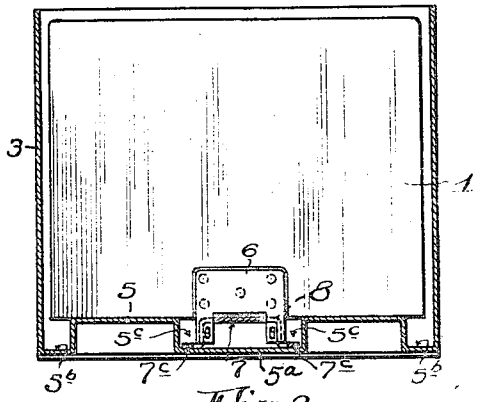


Fig. 2

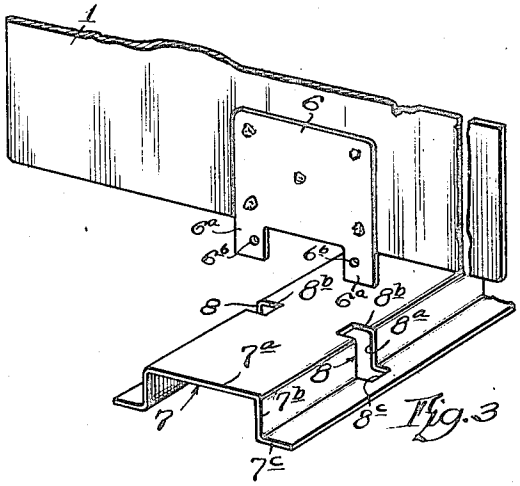


Fig. 3

Fig. 4

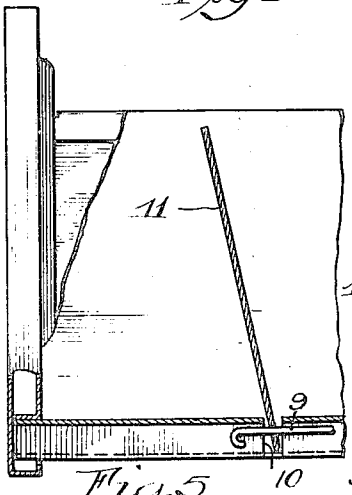
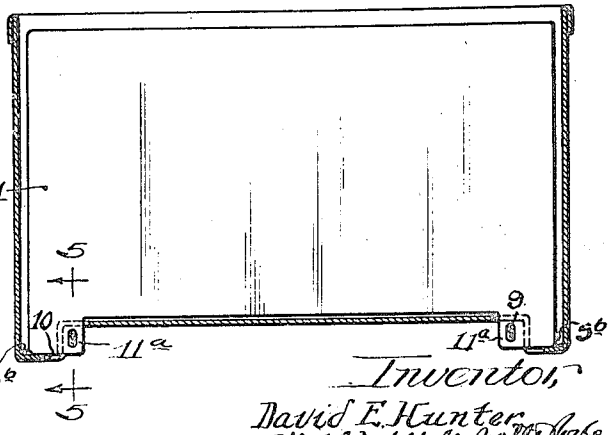


Fig. 5



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Patented Apr. 9, 1929. 1,708,017

UNITED STATES PATENT OFFICE.

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VERTICAL FILING DEVICE.

Application filed January 11, 1928. Serial No. 245,868.

This invention relates to improvements in drawer construction for vertical filing devices, and more particularly to a novel arrangement of partition plates within a drawer or like receptacle for vertical filing devices, and adapted to divide the space therein into a series of separate filing compartments.

The object of the invention is to provide a simple and practical mounting for the partition plates, whereby the same may be readily assembled within the drawer.

A further object of the invention is to provide a mounting for the partition plates adapted for installation in drawers or filing receptacles already in use, and previously equipped with the sliding follower plate.

A preferred embodiment of my invention is disclosed in the accompanying drawings, in which

Figure 1 is a view in longitudinal section through a drawer or container embodying the features of the invention.

Figure 2 is a view in vertical transverse section taken on line 2—2 of Figure 1.

Figure 3 is a perspective view of a section of the channel track and the lower portion of the plate in position for assembly.

Figure 4 is a view in transverse vertical section through a container showing a modified plate installation, and

Figure 5 is a view in longitudinal section taken on line 5—5 of Figure 4.

In general, the invention embodies a series of stiff plates 1, spaced apart at predetermined intervals throughout the length of a drawer A or other filing receptacles, these plates assuming a general vertical position transversely or crosswise of the drawer, and so mounted that they are capable of swinging forwardly and rearwardly through a limited arc, but held against bodily displacement in both directions.

The features of the present invention, however, are directed to specific means for mounting the partition plate within a drawer or container.

The drawer A, which may also represent any receptacle or container used for the vertical filing of records, cards, correspondence and the like, is preferably of a sheet-metal construction consisting of a front wall or head 2 of a double-wall construction, side walls 3, 3, a rear wall 4 and a bottom wall 5, all except the front wall being of a single thickness of sheet-metal. The details of construction of the drawer are not important, except that the bottom of the drawer is preferably provided with a central longitudinal channel 5^a of say 3 or 4 inches in width and 1/2 to 3/4 of an inch in depth. Along the sides of the bottom wall are also narrow channels 5^b, 5^b of the same depth.

The partition plates 1 consist of rectangular pieces of sheet-metal of sufficient thickness to be stiff and non-yielding, their shape and size conforming generally to the cross-sectional contour of the drawer, that is, their height is such that their top edges are slightly below the top edges of the side walls 3, 3 or just below the top edges of the filed material, and their width is slightly less than the inside width of the drawer, so there is sufficient clearness between the vertical edges of the plates and the side walls 3, 3 to allow the plates to swing freely.

At the lower edge of each plate 1 and midway between its side edges is spot welded a supporting or carriage plate 6, of about the same thickness as the partition plate itself. In mounting the carriage plate to the partition plate the latter is preferably upset to provide a recess for the carriage plate, as shown in Figure 2, so that the exposed surface is flush with the corresponding face of the partition plate. The lower portion of the carriage plate 6 projects below the lower edge of the partition plate in the form of two depending tongues or lugs 6^a, 6^a of about 1/2 inch in length at each end of the plate, these tongues being adapted to project into the central channel 5^a in the bottom wall of the drawer adjacent the side walls thereof, and to engage a plate-supporting member now to be described.

Extending longitudinally of the channel 5^a and secured therein is a plate-supporting track member 7 consisting of a strip of metal bent to form an inverted U-shaped body portion 7^a including vertical flanges 7^b, 7^b terminating in laterally extending marginal flanges 7^c, 7^c, which bear upon the bottom of the channel 5^a with their edges in substantially abutting contact with the side walls of said channel. The width of body portion 7^a of the track 7, measured over the flanges 7^b, 7^b, is substantially less than the width of the channel 5^a so that on fitting the track into the channel 5^a, there are formed two relatively narrow parallel channels 5^c,

5c along the edges of the main or central channel 5a. In other words, the track 7 converts the single wide channel into the two narrow channels 5c, 5c, with the top surface of the track body 7a substantially flush with the sections of the bottom wall on either side of the channel 5a, as shown in Figure 2.

At predetermined and preferably equal distances apart along the track 7 are pairs of slots 8, 8, the slots of each pair occupying corresponding positions directly opposite each other at the edges of the track. More specifically, each slot consists of three connected portions extending generally in a transverse and vertical direction, and consisting of a central vertical portion 8a formed in the side wall of the track body 7a and two end portions 8b and 8c, one extending inwardly into the top wall of said track body 7a from the upper end of the vertical portion 8a, and the other extending outwardly into the flange 7b from the lower end of the vertical portion 8a.

As shown in Figures 2 and 3, each of the plates straddles the track with the projecting tongues 6a, 6a of the carriage plate 6 extending downwardly into the slots 8, the inner edge portions of the tongues engaging the upper portions 8b of the slots, and their lower edges clearing the bottom of the channel 5a. By this arrangement the plates are free to fulcrum on their lower edges on the top surface of the track body 7a, and the tongues 6a depending freely into the slots 8 with their several portions disposed as above set forth. By reason of this arrangement a substantial portion of each tongue along its inner edge projects laterally through the slots 8 and lies exterior to the channel 5c, there being small holes 6b punched in these projecting portions of the tongues through which are inserted key wires 9, the holes on opposite sides of the track being in alignment with each other so that the key wires can be made of sufficient length to pass through all of the plates and thus lock them to the track. The key wires are merely lengths of wire with a crook or bend 9a at one end, and after inserting the wires through the holes the other end is bent over as at 9b, thus preventing the wires from being withdrawn. These key wires are positioned within the space included by the body portion of the track, and thus are concealed from view and otherwise isolated so as not to interfere with the contents of the drawer or container. If desired, separate key wires or even cotter pins can be inserted through the holes in each tongue instead of the long key wires shown.

Figures 4 and 5 show a modification of the construction hereinbefore described, wherein the central channel is eliminated in the bottom of the drawer although the side channels 5b are retained. Bearing in mind that the presence of the central channel is standard in drawers equipped with a follower plate, the modified type of drawer would be suitable for initial installations utilizing the partition plates, whereas the previously described construction would be particularly adaptable to drawers in which the follower-plate installation had been used or originally constructed for its installation.

Hence with the omission of the central channel, the track plate 7 is also omitted and the side channels 5b, 5b now serve the same function as the channels 5c, 5c in the above described construction, with slots 10 similar in all respects to the slots 8 in the track plate 7, being formed along the inner edges of the channels 5b, 5b. The design of the plates 11 is modified to correspond with the location of the slot 10, namely, by forming tongues 11a, 11a at the extreme ends of the lower edge of the plate. These tongues moreover may be integral with the plate, thus eliminating the carriage plate, if desired. The same arrangement of key wires and holes is used as before to lock the plates to the bottom of the drawer. The plates may fulcrum either on the bottom wall of the container with the lower edges of the tongues clearing the bottoms of the channels or vice versa, that is, with the tongues bearing on the bottoms of the channels and the intermediate lower edge of the plates clearing the bottom wall of the drawer as shown. Either arrangement is satisfactory since the plates are free to swing in both directions in either case, but are limited by the contact between the tongues and the edges of the slots which act as stops.

Having indicated a number of possible types of construction, all embodying the invention, I do not wish to be limited to any specific device except in so far as set forth in the appended claims.

I claim:

1. In a filing device, the combination of a container, a plate adapted to extend transversely of said container and supported in substantially upright position therein, said container having a longitudinal channel in its bottom wall and a transverse slot formed in one side wall of said channel, said plate having a tongue adapted to depend into said channel and engage said slot with a portion extending laterally through said wall outside of the channel and a fastening member passing through the extended portion of said tongue.

2. In a filing device, the combination of a container having a bottom wall provided with a pair of parallel channels extending lengthwise thereof, and a pair of slots extending transversely of said channels and intersecting one wall of each channel including portions of the horizontal wall portions adjacent thereto, a plate extending transversely of said container and provided at its lower edge with a pair of tongues adapted to extend into said channels with portions thereof included in said slots and extending

laterally outside of said channels, and fastening members inserted through holes in the laterally extended portions of said tongues.

3. In a filing device the combination of a container having a bottom wall provided with a central channel extending lengthwise thereof, a track member of inverted U-section secured in said channel, the vertical walls of said track member being spaced inwardly from the adjacent walls of said central channel to form a pair of relatively narrow parallel channels, said track member having a pair of transverse slots including each side wall and a portion of the top wall adjacent thereto, a plate extending transversely of said container and provided at its lower edge with projecting tongues adapted to extend into said last-mentioned channels, and through said slots, and fastening members passing through portions of said tongues exterior to said last-mentioned channels.

4. In a filing device, the combination of a sheet-metal container having a bottom wall provided with a pair of relatively narrow U-shaped parallel channels extending the length thereof, a series of plates adapted to extend transversely of said container in substantially upright position to divide the space in said container into a plurality of compartments, and to rest at their lower edges on said bottom wall, said plates having tongues extending beyond their lower edges and spaced apart to register with said channels, and with pairs of transverse slots substantially wider than the thickness of said tongues, and cut in said bottom wall to include one side of each channel and portions of the bottom wall adjacent thereto, said slots coacting with said tongues to permit a limited angular swinging movement of said plates.

5. In a filing device, the combination of a sheet-metal container having a bottom wall provided with a pair of relatively narrow U-shaped parallel channels extending the length thereof, a series of plates adapted to extend transversely of said container in substantially upright position to divide the space in said container into a plurality of compartments, and to rest at their lower edges on said bottom wall, said plates having tongues extending beyond their lower edges and adapted to extend into said channels and between the edges of pairs of transverse slots formed in said bottom wall to include a side of each channel, said slots acting to permit said plates to swing through an arc of predetermined extent and allow portions of said tongues to extend laterally from said channels, and key wires adapted to be inserted through aligned holes formed in the laterally extending portions of said tongues.

6. In a filing device, the combination of a container having an upwardly facing longitudinal channel at its bottom provided with a slot in one side wall thereof, a plate supported at its lower edge in substantially upright position on the bottom of said container, a tongue projecting from the lower edge of said plate and adapted to extend into said channel with a portion, thereof extending laterally through said slot and beyond said channel, and a fastening member passing through said laterally extended portion of said tongue.

Signed at Muskegon, Mich., this 5th day of January 1928.

DAVID E. HUNTER.