May 21, 1957 A. E. PETERSON 2,793,092

ASH TRAY SUPPORT FOR AUTOMOBILES

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Fig. 1

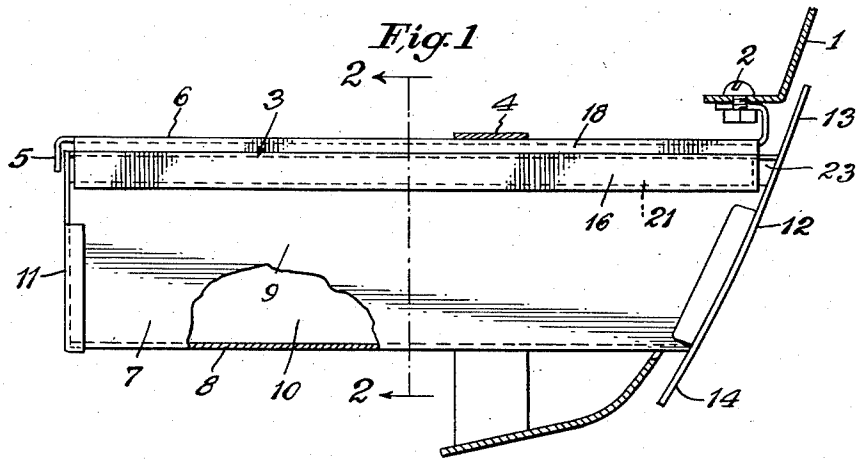


Fig. 2

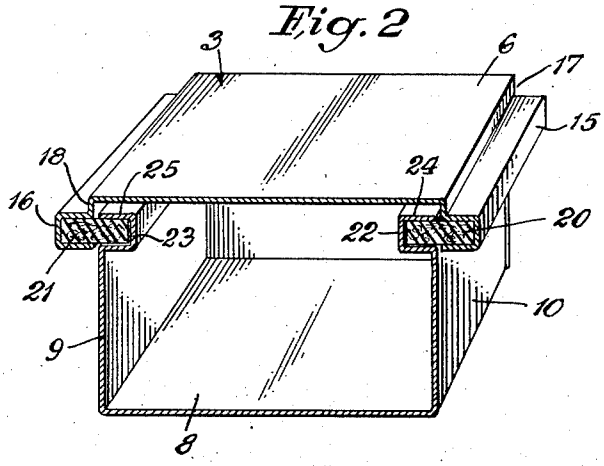
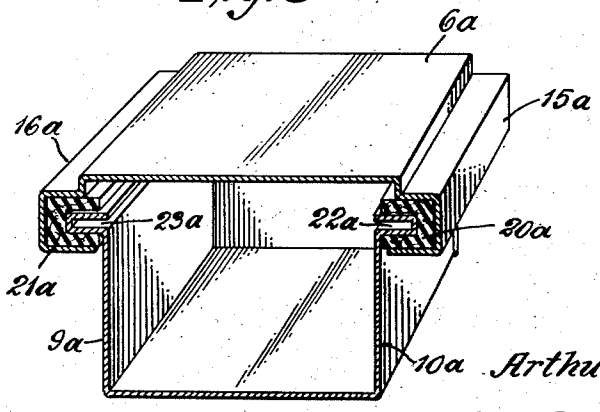


Fig. 3



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Fig 4

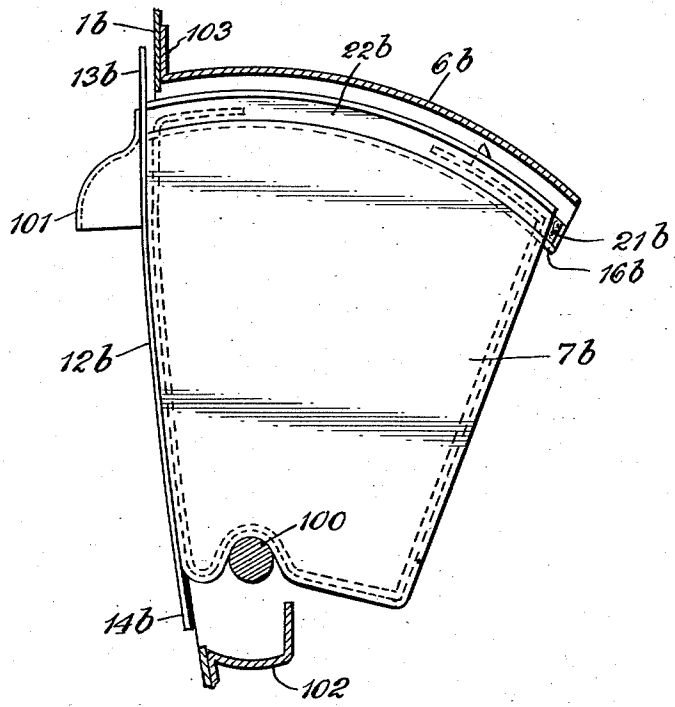
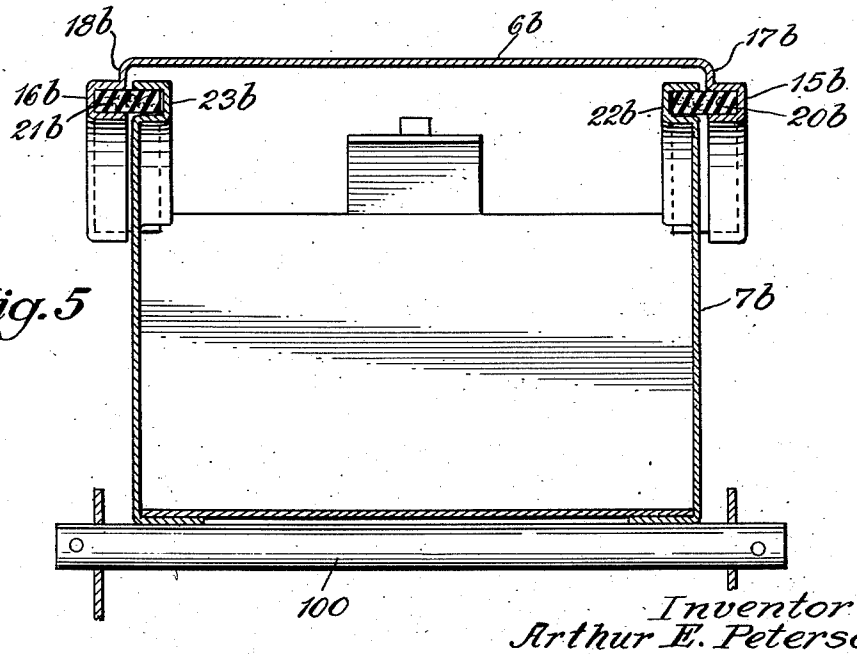


Fig. 5



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ASH TRAY SUPPORT FOR AUTOMOBILES

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Application October 22, 1954, Serial No. 463,992

4 Claims. (Cl. 312—246)

This invention relates to drawer-type containers and the like and has for one purpose the provision of a novel support for such containers.

Drawer-like containers slidably mounted in portions of an automobile are subjected to the repeated vibrations to which the automobile is subjected. If such drawer-like containers are mounted as the known containers have been mounted in the past in such manner as to incorporate a metal-to-metal contact between the support to which the metal container is mounted, the mounting must be such as to provide for relatively easy movement of the container along the support. If the container is mounted sufficiently loosely upon such a metal support, then the structure is subject to a rattling, and an undesirable noise is created in the automobile. In the past, efforts have been made to provide a mounting which would be sufficiently tight to prevent such rattling, but all of such known efforts have resulted in making the mounting and container relationship so tight that the drawer-like container could be moved along the support only with great effort. It is accordingly one purpose of this invention to provide a support which shall be sufficiently snug to prevent rattling noise and which shall, at the same time, be sufficiently loose to provide easy inward and outward movement of the drawer-like container. Similarly, it is one purpose of the invention to provide a support formed of the material which shall be effective to deaden the sound of such rattling which might occur from the drawer-like container and mounting therefor upon which it is slidably mounted.

Another purpose is to provide a support for a drawer-like container which shall be sufficiently flexible to absorb the tendency of the container to move in response to vibration and which shall, at the same time, be sufficiently stiff so as to provide a proper support without bending.

Another purpose is the provision of a support for slidably mounted, drawer-type containers.

Another purpose is the provision of a support for a movably mounted container which shall permit relatively free sliding movement of the container while, at the same time, insuring against rattling of the container.

Another purpose is the provision of a support formed of a friction material upon which a container may be slidably mounted for relatively free movement therealong.

Other purposes will appear from time to time in the course of the specification and claims.

One example of the type of container to which my invention is applicable is, as shown in the drawings, an ash receiver or ash tray installed in an automotive vehicle.

This invention is illustrated more or less diagrammatically in the drawings, wherein:

Figure 1 is a side view in partial cross section;

Figure 2 is a view taken on the line 2—2 of Figure 1;

Figure 3 is a view similar to that of Figure 2 and illustrating a variant form of the invention;

Figure 4 is a side view in partial cross section of a variant form of the invention; and

Figure 5 is a front view in partial cross section of the structure illustrated in Figure 4.

Like parts are indicated by like symbols throughout the specification and drawings.

Referring now to the drawings, and particularly to Figure 1, numeral 1 generally indicates a portion of an automobile which may, for example, be a dashboard. Secured to the dashboard 1, as by the securing means shown generally at 2, is a container support, the general structure of which is indicated by the numeral 3. 4 is a cross member which may be attached to a portion of the automobile behind the dashboard 1, which may be secured to the top surface of the support in any suitable manner, for example by welding. It will be understood that, while the support 3 is shown as mounted upon the automobile dashboard 1 and extending inwardly from or behind the dashboard 1, the support 3 may be similarly mounted upon other structures without departing from the nature and scope of the invention.

The rear edge 5 of the top wall or body 6 of the support 3 may be downwardly or angularly bent, as shown in the left-hand portion of Figure 1, to provide a limiting or stop means for an ash receiver or container, shown generally at 7, and slidably mounted upon the support 3.

The container 7 may comprise a bottom wall 8 and a pair of side walls 9, 10, the container thus being upwardly open. While an ash tray or ash receiver is illustrated, it will be realized that the container 7 could be utilized to receive or contain a plurality of various items without departing from the nature and scope of the invention. The container 7 may have a rear wall 11 extending between and closing the space between the side walls 9, 10. A front wall 12 may close the space between the opposite edges of the side walls 9, 10 and may have an upper extension 13 and a lower extension 14 serving to mask the opening in the dashboard 1 through which the container 7 is free to move along the support 3.

The main body portion 6 of the support 3 may extend across the top of the box-like container 7 and may have along each of its longitudinal side edges one of the channel members 15, 16. As indicated in Figure 2, the support 3 may be formed of a single piece of sheet metal, the longitudinal edges of which may be bent to form the inwardly open channels 15, 16 which are spaced downwardly from the support section 6 by the downwardly bent or offset portions 17, 18, respectively. Normally fixedly secured within the channels 15, 16, respectively, are the runner supports 20, 21. The runner supports 20, 21 and the channels 15, 16 in which they are seated lie in a plane parallel to the body 6 of the support 3 and the bottom wall 8 of the container 7 and are of sufficient lateral extension to extend inwardly beneath the support section 6 and within the area defined by the side walls 9, 10 of the container 7. The top edges of the side walls 9, 10 of the container 7 may be bent upon themselves to form inwardly directed, outwardly open channel sections or runners 22, 23 of sufficient size to surround the inwardly extending portions of the runner supports 20, 21. The top walls 24, 25 of the container channels 22, 23 thus rest upon the upper surfaces of the inner portions of members 20, 21. It will be realized that the channels 22, 23 may be of sufficient width to relatively loosely surround the inwardly extending portions of the members 20, 21 to permit sliding movement of the containers therealong, yet they are sufficiently close to the upper, lower, and side surfaces of these inner portions to prevent rattling of the container.

The runner supports 20, 21 are formed of a material

such as to create only a desirable limited amount of friction between the metallic container channel-like runners **24**, **25** and the upper surfaces of the members **20**, **21** along which the portions **24**, **25** are to be moved. The members **20**, **21** could, for example, be formed of a composition of fabric and metal and may be in the form of a relatively thick webbing.

Referring now to Figure 3, a variant form of the invention is illustrated. The support portion **6***a* corresponds generally to the support section **6** shown in Figure 2. Similarly, the support channels **15***a*, **16***a* correspond generally to the support channels **15**, **16** of Figure 2 except that they may be greater in lateral or vertical cross section as the parts are shown in the drawings. Encased within the channels **15***a* and **16***a* and extending inwardly a short distance therefrom are the generally U-shaped or channel-like runner supporting members **20***a*, **21***a*. The side walls **9***a*, **10***a* of the container may have their upper edges outwardly bent and inwardly bent upon themselves to form the outwardly extending longitudinal runners **22***a*, **23***a*. The runners **22***a*, **23***a* are channel-like in form and are generally of a cross-sectional area such as to fit snugly within the channel-like runner supporting members **20***a*, **21***a*. As indicated in Figure 3, the runner supports **20***a*, **21***a* may be formed of a material such as to permit free slidable movement of the runners **22***a*, **23***a* therein and may, for example, be formed of a composition of rubber and a fabric such as felt.

Referring now to Figures 4 and 5, I illustrate a variant form of my invention, wherein an ash tray or container body **7***b* may be rotatably or tiltably mounted upon a pin or spindle **100**. The container body **7***b* may have a front wall **12***b* having upper and lower edge portions **13***b*, **14***b*, respectively, which serve to mask the area of a structure, such as an automobile dashboard **1***b*, about an aperture therein through which the body or container **7***b* may be moved on its pivot **100**. **101** generally indicates a handle portion adjacent an upper area of the front facing **12***b*. The automobile dashboard **1***b* may be inwardly offset, as indicated generally at **102**, to create an area through which the lower facing portion **14***b* may move when the ash tray **7***b* is rotated about the axis **100**. A support **6***b* may be secured to and behind the dashboard **1***b*, as indicated generally at **103**. The support **6***b*, as best seen in Figure 5, corresponds generally to the supports **6** and **6***a*, illustrated in Figures 1–3, except that it is generally arcuate in lateral cross section. The support **6***b* has along its opposite arcuate side edges **17***b*, **18***b* a pair of U-shaped, inwardly open channels **15***b*, **16***b*. Positioned within the channels **15***b*, **16***b* and thus corresponding in arcuate position therewith are runner supporting members **20***b*, **21***b*, which correspond in substance with the runner supporting members illustrated in Figures 2 and 3. Similarly, the container body **7***b* may have along its upper opposite side edges the runners **22***b*, **23***b*, which are shaped to fit about and ride upon the inwardly extending portions of the members **20***b*, **21***b*.

It will be realized that, whereas I have described and illustrated a practical and operative device, nevertheless, many changes may be made in the size, shape, number and disposition of parts without departing from the spirit of my invention. I therefore wish my description and drawings to be taken as, in a broad sense, illustrative or diagrammatic, rather than as limiting me to my precise showing.

I claim:

1. In combination, a drawer-like, upwardly open container, a support for said container, said support comprising a central body portion, a pair of spaced parallel inwardly directed channel members, said channel members being secured along and beneath opposed longitudinal edges of said body portion, a pair of flexible runner-supporting members, each of said runner-supporting members completely filling one of said channel members and being held thereby, each of said runner-supporting members having a longitudinal portion extending inwardly beneath said body portion, said container having a pair of longitudinal runner elements along its opposite longitudinal upper edges, said runner elements comprising outwardly open channels receiving said inwardly extending runner-supporting longitudinal portions.

2. In combination, a drawer-like, upwardly open container, a support for said container, said support comprising a central body portion, a pair of spaced, parallel, inwardly directed channel members, each of said channel members being secured along and beneath an opposed longitudinal edge of said body portion, a pair of semi-rigid runner-supporting members, each of said runner-supporting members completely filling one of said channel members and being held thereby, each of said runner-supporting members having a longitudinal portion extending inwardly beneath said body portion, said container having a pair of longitudinal runner elements along its opposite longitudinal upper edges, said runner elements comprising outwardly open channels receiving said inwardly extending runner-supporting longitudinal portions, said first named channels, said runner-supporting members and said runner elements being of substantially equal length and lying generally in the same plane.

3. In combination, a support, a pair of opposed, spaced, inwardly-open channel members along opposite longitudinal edges of said support, semi-rigid runner-supporting channel members carried by and substantially filling said channel members, a container, a pair of runner members along the upper longitudinal edges of said container, said runner members being in container-supporting relationship with said runner-supporting members.

4. In combination, a support, a pair of longitudinally extending, inwardly-open, opposed channels on said support, each of said channels carrying and positioning a flexible runner-supporting member, a container, runners on said container, said runners being in container-supporting relationship with said runner-supporting elements, said runners comprising channels formed along the upper edges of opposed walls of said container, said runner supporting elements being in contact with opposite walls of said container channels.

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