

Oct. 15, 1957

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ASH TRAY - VEHICLE

2,809,877

Filed Nov. 18, 1953

2 Sheets-Sheet 1

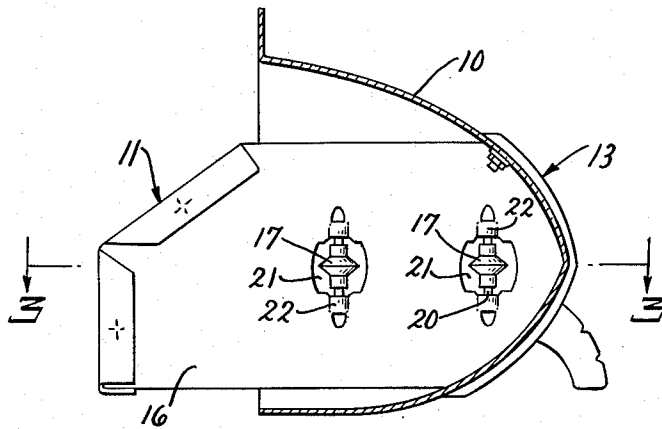


Fig. 1

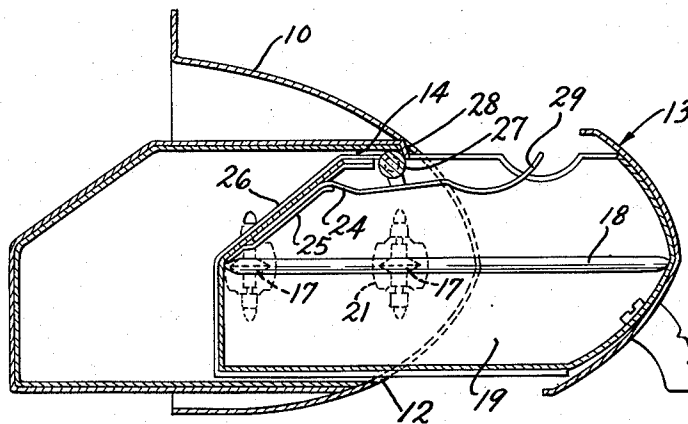


Fig. 2

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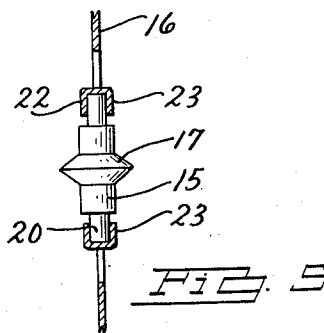
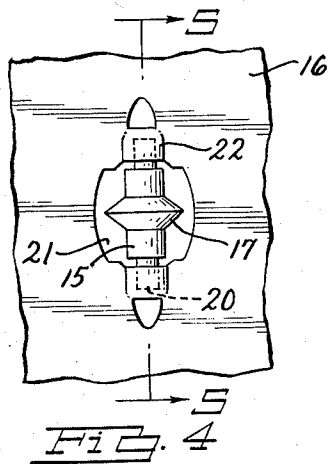
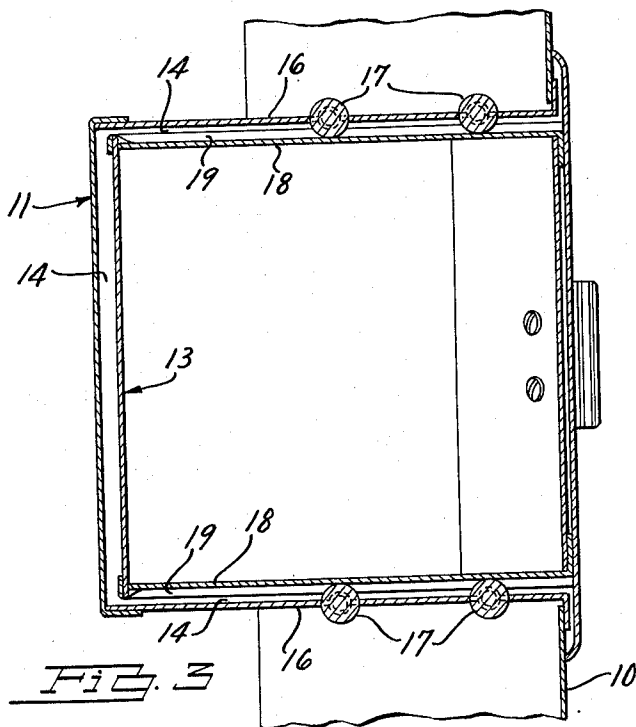
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ASH TRAY—VEHICLE

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Application November 18, 1953, Serial No. 392,922

Claims priority, application Germany November 26, 1952

3 Claims. (Cl. 312—246)

This invention relates to an ash tray and more particularly to a drawer type ash tray adapted to be installed in the instrument panel of an automobile or other vehicle.

The conventional drawer type ash tray used in vehicles comprises an ash receiving drawer slidable within a guide receptacle. A snug fit of drawer and receptacle is necessary to prevent rattling sounds when the vehicle is proceeding on the road. This snug fit results in an increased friction between the fitting surfaces, thus rendering it more difficult to move the drawer outwardly and inwardly and creating an unwelcome grating noise on such movement.

It is an object of the present invention to provide an ash tray of the drawer type which is easily slidable relative to the guide receptacle although closely guided therein, the close guide preventing rattling and grating noises. The invention provides for the mounting of the drawer on rollers, the rollers preferably being arranged on the side walls of the guide receptacle and thus maintaining the drawer interspaced from the guide walls of the receptacle.

In accordance with the invention, a simple construction easily manufactured may be accomplished by providing openings in the side walls of the receptacle, one for each desired roller. The rollers are held in their respective openings by the provision of bearing means formed by depressing a portion of the metal adjacent the openings and by lancing out retaining tongues above the depressions. For reasons of simplification and economical use of materials, the invention preferably provides two rollers in each side wall of the receptacle, said rollers running in corresponding grooves of the drawer.

Further objects and features of the particular embodiments of the invention herein illustrated will appear in the following description, reference being had to the accompanying drawings forming a part of the specification wherein like reference numerals designate corresponding parts in the several views.

Fig. 1 is a side elevation of the ash tray embodying the present invention, the drawer being shown in closed position.

Fig. 2 is a cross-section view of the ash tray with the drawer being shown in open position.

Fig. 3 is a section taken substantially along line 3—3 of Fig. 1 looking in the direction of the arrows.

Fig. 4 is a side elevation of one of the drawer supporting elements.

Fig. 5 is a section taken substantially along line 5—5 of Fig. 4 looking in the direction of the arrows.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology

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or terminology employed herein is for the purpose of description and not of limitation.

In the drawings there is illustrated by way of example, a particular embodiment of the present invention as applied to a vehicle instrument panel or dashboard. The instrument panel or dashboard 10 is provided with a receptacle, generally designated 11. Preferably, said receptacle comprises a sheet metal box open only at the front side 12 for insertion of the tray or drawer, generally designated 13.

The tray or drawer 13 is arranged inside the receptacle 11 so that an interspace or clearance 14 is provided between any opposed sides of receptacle 11 and drawer 13, respectively. The drawer 13 is held in position within the receptacle 11 by means of rollers 15 arranged in opposed pairs and mounted preferably in the side walls 16 of the receptacle. The flanges 17 of the rollers 15 engage grooves 18 in the side walls 19 of the drawer 13. This manner of engagement secures a straight guidance both in the horizontal and vertical plane of movement.

Preferably the shafts 20 of the rollers 15 are journaled in the side walls of the receptacle 11. As best shown in Figs. 4 and 5, the side walls of the receptacle 11 are punched out to form openings 21. The metal at the upper and lower edges of the opening 21 is depressed to form semi-cylindrical shaft receiving recesses 22 to serve as bearing surfaces. The shaft 20 ends are retained in the recesses 22 by folded over tongues 23 which are punched or lanced out of the material of the receptacle side walls 16.

A releasable retaining device is provided for preventing complete withdrawal of the tray or drawer 13 except when necessary to permit emptying thereof. As shown in Fig. 2, a spring member 24 is secured by a retaining strip 25 to the back wall 26 of the drawer. The spring extends in a substantially horizontal direction and has secured to its upper surface an abutment 27 adapted to engage an overhanging lip 28 of the front opening 12 of the receptacle 11. By depressing the free end 29 of the spring 24, the abutment will be permitted to pass under the overhanging lip 28. It will be noted that the grooves 18 extend substantially to the rear edge of the drawer side walls 19 permitting the roller flanges 17 to roll out of contact with the grooves 18.

The foregoing construction has the advantage that it is not necessary in the process of manufacture to pay special attention to the accurate surfacing and dimensioning of the guiding and guided side walls of the receptacle and the drawer. The interspace or clearance between the receptacle and drawer side walls permit them to be fabricated in any convenient manner such as soldering the seams thereof.

It will be readily understood that the receptacle 11 would not have to be a closed receptacle but could be an open framework having the side panels 16 or the portion thereof supporting the rollers 15.

I claim:

1. An ash tray device adapted to be mounted in a vehicle panel comprising a receptacle fastened within said panel, a drawer removably received in said receptacle, roller means comprising flanged rollers having shaft portions, and bearing means carried by the side members of said receptacle journaled said shaft portions for turning movement about vertical axes, said roller flanges cooperating with guide grooves in the drawer side walls to support the drawer for inward and outward movement relative to the receptacle, said drawer being supported solely by said rollers within said receptacle with an interspace on all sides thereof.

2. An ash tray device adapted to be mounted in a vehicle panel comprising a receptacle fastened within

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said panel, a drawer removably received in said receptacle, roller means comprising flanged rollers having shaft portions, and bearing means carried by the side members of said receptacle journalling said shaft portions, said receptacle side members having openings providing for the mounting of said rollers with the roller shaft axes in the plane of said side members, said roller flanges cooperating with guide grooves in the drawer side walls to support the drawer for inward and outward movement relative to the receptacle, said drawer being supported solely by said rollers within said receptacle with an interspace on all sides thereof.

3. An ash tray device adapted to be mounted in a vehicle panel comprising a receptacle fastened within said panel, a drawer removably received in said receptacle, roller means comprising flanged rollers having shaft portions, and bearing means carried by the side members of said receptacle journalling said shaft portions, said receptacle side members having openings providing for

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the mounting of said rollers with the roller shaft axes in the plane of said side members, said roller flanges cooperating with guide grooves in the drawer side walls to support the drawer for inward and outward movement relative to the receptacle, said rollers and guides being located substantially centrally of the top and bottom of the receptacle and drawer, said drawer being supported solely by said rollers within the receptacle with an interspace on all sides thereof.

References Cited in the file of this patent

UNITED STATES PATENTS

816,295	Brooks	Mar. 27, 1906
1,052,101	Stiggleman	Feb. 4, 1913
2,015,389	Whitted	Sept. 24, 1935
2,043,886	De Boer	June 9, 1936
2,050,960	Olivetti	Aug. 11, 1936
2,288,637	Mauro	July 7, 1942
2,300,026	Visser	Oct. 27, 1942