Dec. 29, 1959 L. COHEN 2,919,096

SUPPORTS FOR ASH TRAYS, CUPS AND THE LIKE

Filed Nov. 20, 1957

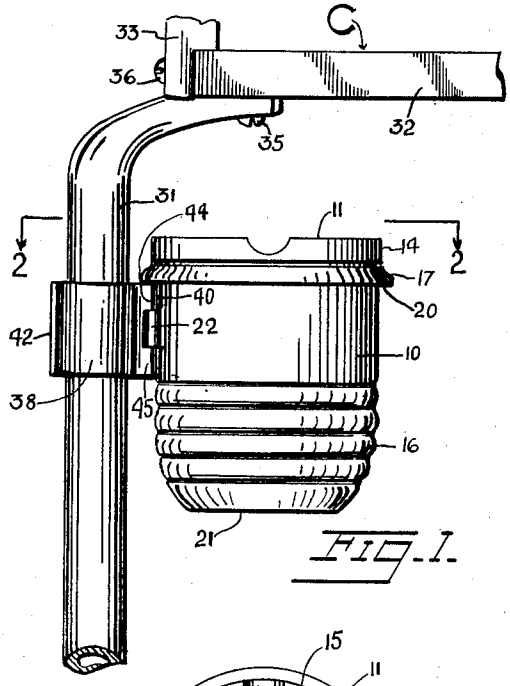


FIG. 1.

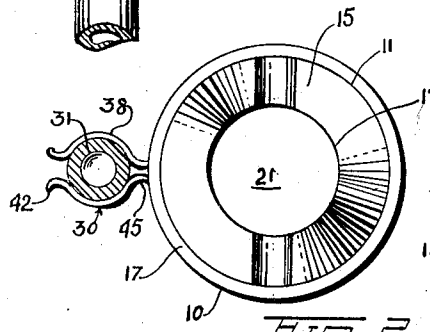


FIG. 2.

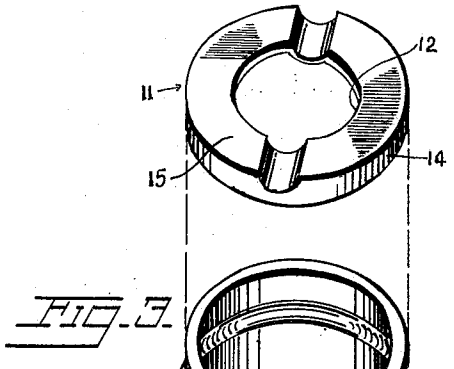
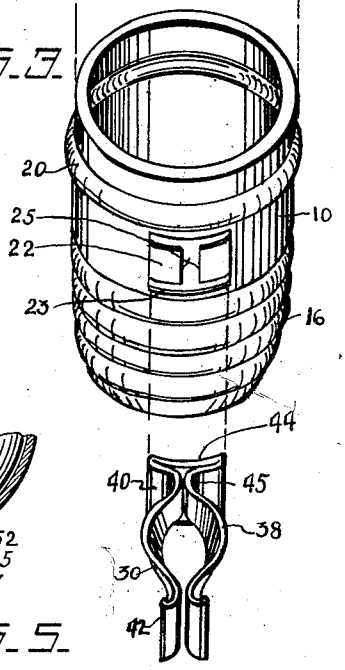


FIG. 3.



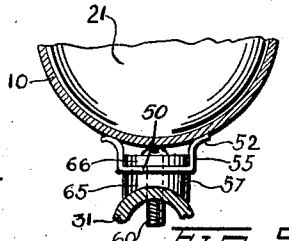


FIG. 5.

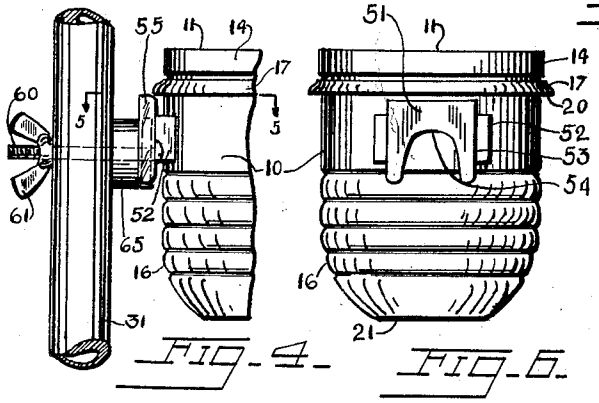


FIG. 4.

FIG. 6.

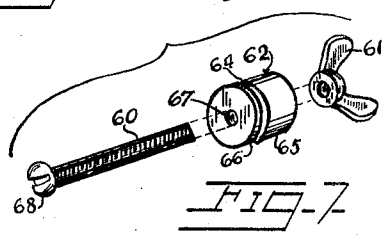


FIG. 7.

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SUPPORTS FOR ASH TRAYS, CUPS AND THE LIKE

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1 Claim. (Cl. 248—224)

This invention relates to the art of supports for ash trays, cups and the like.

The invention is directed in one embodiment thereof to an ash tray for outdoor and indoor aluminum chairs, for wheel chairs, baby carriages, hospital beds and other supports where the disposal of cigarette butts and small waste items must be disposed of in the immediate area of the support. The invention includes a cup-shaped container and a spring steel quick attaching clip secured to the container and attachable to a tubular frame of a support by spring tension. The spring clip is self adjusting to conform it to the tubular frame. The container and clip are separable for emptying the container at will.

In another embodiment of the invention, a bolt or screw is inserted through a diametral hole in a supporting frame of a chair, bed, table, etc. The screw carries a rubber grommet and a wing nut. The cup or container is formed with a bracket or track which engages a groove in the grommet. The cup or container is removably supported by the grommet. The container can be readily attached to and secured to the support.

The container may have various forms such as to serve as a container for fluids, a playing card holder, cigarette pack holder, small handy tray, catch-all device, and the like.

It is, therefore, a principal object to provide a cup-shaped container provided with a quick attachment and detachment device whereby the container is removably supported on a tubular frame.

A further object is to provide a cup-shaped container with a spring clip for securing the container to a tubular frame, the container being adapted to be removably secured on the clip.

A still further object is to provide a quickly attachable and detachable support for a waste container, said support including a bolt, wing nut, and rubber grommet.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is an elevational view of a device embodying the invention.

Fig. 2 is a plan view taken on lines 2—2 of Fig. 1.

Fig. 3 is a perspective exploded view of members of the device.

Fig. 4 is a fragmentary elevational view of another form of device embodying the invention.

Fig. 5 is a sectional view taken on lines 5—5 of Fig. 4.

Fig. 6 is an elevational view of the container of Figs. 4 and 5.

Fig. 7 is an exploded perspective view of portions of fastening members employed in the device of Figs. 4–6.

In Fig. 1 is shown in elevational view a hollow cylindrical cup-shaped body **10** formed of metal, plastic, or

the like. The body **10** has an open top. Mounted on the open top and readily removable therefrom is an annular ring **11** having a circular opening **12** and a depending flange or skirt **14**. The upper annular surface **15** of the ring inclines downwardly so that any waste placed upon the surface **15** will tend to slide into the hollow interior of the container **10**. The cylindrical portion of body **10** is formed with a plurality of corrugations defining rings **16**. These corrugations facilitate handling and carrying of the container when it is detached from its support. A circular shoulder **17** is integrally formed with the container near the open top thereof. This shoulder has a flat annular bottom surface **20**. The container has a flat bottom **21**, whose diameter is less than the diameter of the cylindrical body **10**. The flat bottom of the container permits it to stand upright on a flat support.

Struck outwardly from the body **10** are a pair of fingers **22** as best shown in Figs. 1 and 3. These fingers have their free ends **25** separated a short distance apart. The ends of the fingers are bent so as to extend coplanar with each other and spaced from the curved plane of the body **10**.

A bracket or support clip **30**, as best shown in Fig. 3, is employed to removably support the container on a tubular support such as frame member **31** of a chair, table or the like. In Fig. 1 member **31** is a leg of a chair C having a seat **32** and a back **33**. The legs and back are secured to the seat by screws **35** and **36**. Clip **30** has a pair of curved arms **38** which extend outwardly from the bent flange sections **40** at one end of the clip. The free ends **42** of the arms extend outwardly in generally opposite directions. The clip is formed from a single strip of flat spring metal. The flanges **40** are joined by a flexible rear bridge section **44**. Neck sections **45** join the arms **38** to the flanges **40**. Flanges **40** are flattened against the bridge section **44**. The bridge section and flange sections fit under and upwardly into engagement with fingers **22** of the container. When the clip **30** is fully engaged with the container, the flat undersurface of shoulder **20** rests on the top edges of the bridge section and flanges. This is the position of the container as shown in Figs. 1 and 2.

In assembly of the device, the clip will be snapped on to a tubular support such as frame member **31** with arms **38** conforming to the width or diameter of the support. The body **10** may then be placed upon the clip with fingers **22** and sections **40**, **44** in engagement and with the top edges of the sections abutting the flat undersurface **20** of shoulder **17**. Ring **11** is removably seated on the container. The inwardly extending surface **15** prevents waste deposited in the container from inadvertently falling out.

It is to be understood that the clip may be attached to the front or rear leg or arm of any chair.

When it is desired to clean the container, it can easily be removed from the clip without disturbing the position of the clip on the frame member **31**. If necessary, the ring **11** can be removed to permit access to full width of the interior of the container. It is, of course, possible to use the device with ring **11** permanently removed.

Instead of forming fingers **22** as struck out portions of the container, they can be separate members welded or otherwise attached to the container body, so that aperture **23** need not be formed in the body **10**.

In Figs. 4–7 is shown another form of the invention. The container **10** is here provided with a rectangularly U-shaped bracket member **50**. Member **50** has a bight in the form of a flat plate **51** with arms **55**. The arms have wings **52** secured to the container by welding **53**. The plate has a slot **54** formed therein, the flat face of the plate thus stands outwardly from the surface of the

container a distance determined by the width of the arms **55**. An aperture is formed transversely through tubular member **31** and a screw or bolt **60** extends through this aperture. A wing nut **61** is threaded on the free end of the bolt. The bolt carries a cylindrical flexible rubber grommet **62** which has a circular groove **64** therein. The groove divides the grommet into sections **65** and **66**. Bolt **60** extends through aperture **67** in the grommet and the head **68** of the bolt abuts section **66** of the grommet. Section **66** fits within the space between the plate **51** and the outer surface of the container **10** as clearly shown in Fig. 5 and the section **65** is pressed between plate **51** and the tubular member **31** when the wing nut **61** is tightened. The flexible body of the grommet conforms to the curvature of the member **31** to insure a non-rotatable mounting of the container on member **31**.

The sides of slot **64** are engaged at the sides of groove **54**. To remove the container from the member **31**, it is only necessary to loosen the wing nut **61** and lift the container **10** upwardly to disengage the grommet **62** and bracket plate **51**.

Container **10** has the same cylindrical form in Figs. 4–6 as it has in Figs. 1–3 and the corrugations or rings **16** serve the same function in both forms of the invention.

In use, the container is rigidly supported and safely holds all cigarette butts and other waste placed into it. The quick attachable feature of the invention makes it possible to use the device at any desired location where a person sits, while smoking, eating, reading, etc.

The container **10** is preferably formed of metal such as aluminum, brass, copper, steel, and the like. It may be given any desired color by anodizing, plating, lacquering, etc. If the container is made of a plastic material it may be cast, vacuum formed or otherwise formed economically by high speed mass production methods. All parts of the device have simple geometric forms so that they can be fabricated economically by standard manufacturing methods.

If desired, manufacturers of furniture such as chairs, tables and the like, can provide suitable apertures in the various legs, arms, or other structural members of furniture they manufacture so that the user need not drill holes therethrough to attach the container by means of bolt **60**.

While I have illustrated and described the preferred

embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A device of the kind described comprising, a container, a bracket and a transversely perforated tubular support, said container having a cylindrical body with an open top and closed bottom, said bracket having a U-shaped body with end arms connected by a bight portion, said bight portion having a curved slot therein intersecting one edge thereof, said arms fixed to the cylindrical body of the container, an elongated threaded bolt extending through and outwardly of the perforation in said tubular support, a flexible grommet sleeved around one of the protruding ends of the bolt, and a wing nut on the other protruding end of the bolt for securing the bracket to the perforated tubular support, said grommet having an annular groove adjacent one end thereof, the edge walls of said groove interlocked with the edge walls of the curved slot in the bight portion of the bracket, said grommet serving to support the container and to space the bracket from the tubular support, said grommet adapted to conform to the shape of the tubular support.

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