Aug. 4, 1953 F. A. VOLLENDER, JR 2,647,523

ASH TRAY ADAPTER

Filed March 16, 1950

Fig. 1

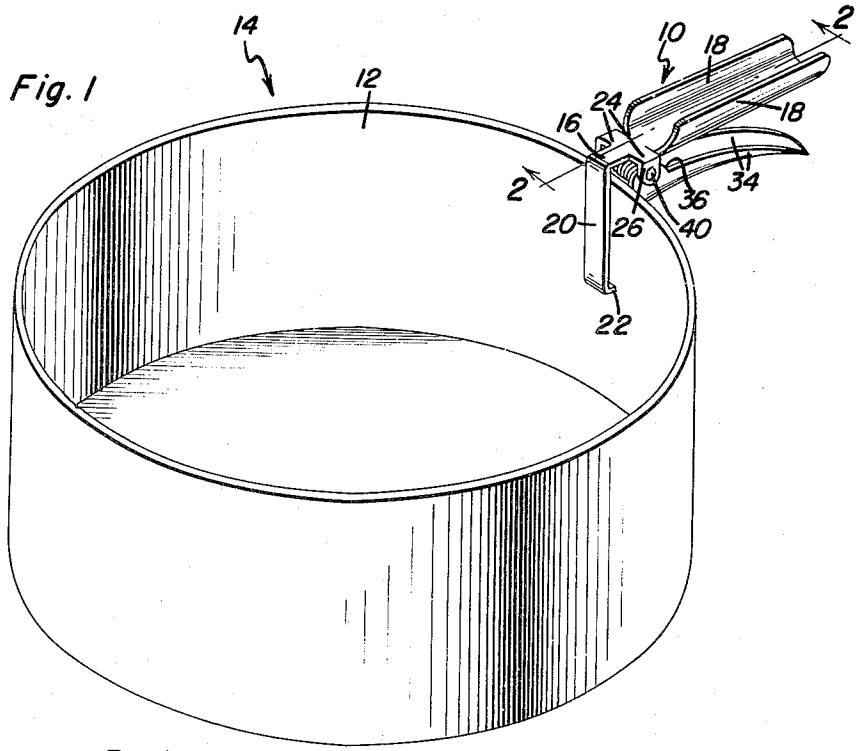


Fig. 2

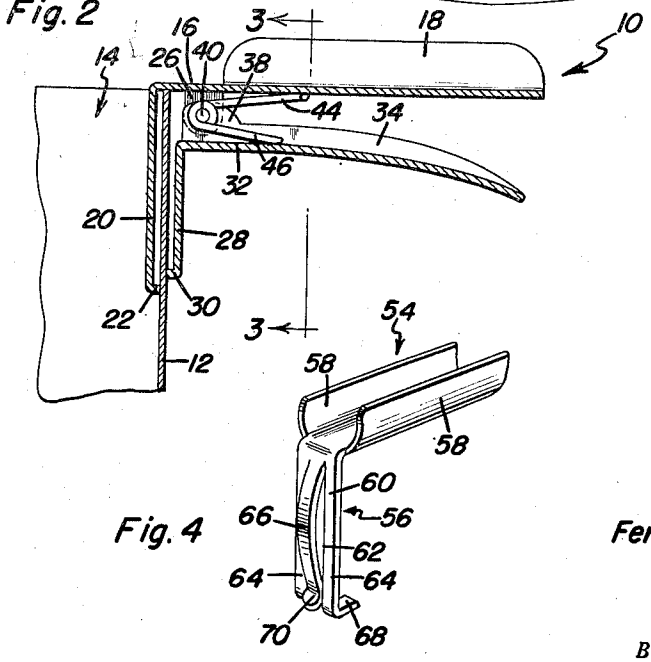


Fig. 3

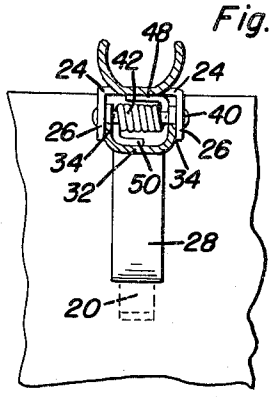


Fig. 4

Ferdinand A. Vollender, Jr.

INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

Patented Aug. 4, 1953

2,647,523

UNITED STATES PATENT OFFICE

2,647,523

ASH TRAY ADAPTER

Ferdinand A. Vollender, Jr., Guttenberg, N. J.

Application March 16, 1950, Serial No. 149,916

3 Claims. (Cl. 131—257)

1

This invention comprises novel and useful improvements in an ash tray adapter and more specifically pertains to an attachment which may be releasably secured upon the side walls of a container for adapting the same for use as an ash tray.

The primary object of this invention is to provide an attachment or adapter which may be easily applied to the upper edge of the side wall of any suitable container and when so applied will function to support a burning cigar or cigarette in such a position as to enable the container to receive the ashes of the same.

A further object of this invention is to provide an attachment or adapter in conformity with the preceding object, which shall be of a very simple, inexpensive and light weight construction, and ideally adapted for ready fabrication by mass production methods from sheet metal or other similar materials for dispensing at a very economical cost.

A still further object of the invention is to provide an adapter or attachment which shall have a resilient clamping action upon the side walls of a container, and yet may be readily applied to or released therefrom.

Yet another important object of the invention is to provide an ash tray adapter and attachment as set forth in the foregoing objects which is especially adapted for fabrication as a unitary article from a single or integral sheet of material.

A still further important object of the invention is to provide an adapter in conformity with the above mentioned objects and which shall have a clamping means releasably engageable upon the side walls of a container for securely supporting the attachment therefrom, and which shall include a clamping leg which is integral with the tray portion of the adapter together with a pivoted leg which is resiliently pivoted to the attachment.

These, together with various ancillary features and objects of the invention, which will later become apparent as the following description proceeds, are attained by the present invention, preferred embodiments of which have been illustrated, by way of example only, in the accompanying drawings, wherein:

Figure 1 is a perspective view showing a first embodiment incorporating the principles of the invention therein;

Figure 2 is a vertical transverse sectional view taken substantially upon the plane indicated by the section line 2—2 of Figure 1, both Figures 1 and 2 showing the device applied to the rim of a can or the like;

2

Figure 3 is a vertical transverse sectional view taken substantially upon the plane indicated by the section line 3—3 of Figure 2; and

Figure 4 is a perspective view of a second embodiment of the invention.

Referring now more specifically to the accompanying drawings, wherein like numerals designate similar parts throughout the various views, attention is first made to the embodiment illustrated in Figures 1–3 of the drawings. In this form of the invention there is disclosed an attachment or adapter indicated generally by the numeral 10 and which is shown mounted upon the upper portion of the side wall 12 of a container 14 of any desired type. This container can be any discarded can or the like, which may be available, since the primary purpose of this invention is to provide a device readily attachable to such a can for converting the same into use as an ash tray.

In the form of the invention disclosed in Figures 1–3, the attachment or adapter 10 includes a horizontally disposed flat strip of material 16, which at what may be termed its outer portion is provided with upwardly curved side walls 18, defining a U-shaped trough therebetween as clearly shown in Figure 3. This trough is, of course, preferably open at both of its ends, in order that a cigarette, cigar or the like may be readily disposed therein, easily removed therefrom and securely supported against displacement when placed upon the device.

At its inner extremity, the flat portion 16 is provided with a perpendicular, depending leg 20, which preferably has an inturned flange 22 at its lower extremity. Obviously, this flange could be at any desired point along the length of the depending leg 20, and the flange serves as an abutment surface engaging the inner surface of the side wall 12 of the container 14, as readily disclosed in Figures 1 and 2.

Intermediate the depending leg 20 and the curved side walls 18 of the tray, the flat portion 16 is provided with laterally extending members 24, see particularly Figure 3, which at their outer ends are provided with depending ears 26 disposed in parallel relation with respect to each other.

In addition to the relatively fixed leg 20, the device disclosed in Figures 1–3 includes a movable leg, the same including a depending member 28, which at its lower extremity is provided with a forwardly turned flange 30, similar to the flange 22, and adapted to grip or engage the outside surface of the side wall 12 of the container 14.

Similarly, the leg 28 could be provided with this flange 30 at any point intermediate its ends.

At its upper extremity, the leg 28 is provided with a horizontally extending, integral member 32, which is U-shaped in cross-section as shown in Figure 3, being provided with upwardly extending side walls 34, which adjacent the depending portion 28 are provided with upwardly extending ears 36, received within the ears 26.

A pivot pin 40 extends through the nested ears 26 and 34, and pivotally connects the tray and fixed jaw to the movable jaw and to the handle extending therefrom, this handle consisting of the members 32 and 34. A resilient means is provided for resiliently urging the jaws or legs 28 and 20 towards each other for resiliently gripping and clamping the side wall 12 of the container 14 therebetween in order that the device may be resiliently yet releasably mounted and supported upon the upper portion of the side wall of the container. This resilient means preferably includes a wire spring consisting of a helical coil 42 which embraces the pivot pin 40 between the nested ears, this spring having arms 44 and 46 with transverse terminals 48 and 50, respectively engaging the under surface of the tray and the top surface of the horizontal member 32. This spring evenly urges the jaws or legs into their closed position as shown in Figure 2.

In the operation of this form of the invention, it will be seen that the tray and the handle portion 32 enable the spring to be compressed whereby the clamping jaws or legs may be open and the device may be installed or removed from the upper portion of the rim of a can or the like.

While the preceding embodiment may in many instances be considered to be more serviceable, more dependable in its clamping action and more satisfactory for application to different sizes and types of containers, a much simpler and less expensive construction is disclosed in Figure 4, the same consisting of a single integral sheet metal blank, comprising angularly disposed portions respectively forming a tray indicated generally at 54 and a clamp generally indicated at 56. As shown, the blank from which this embodiment is fabricated is bent at substantially its mid-portion at right angles so that the clamping portion 56 will depend from a horizontally disposed tray portion 54. The tray portion itself is provided with parallel, upwardly curving side walls 58 which are similar to the walls 18 of the previous embodiment, and which in cross section are substantially semi-circular to provide a cylindrical trough or tray of a proper size for retaining a cigarette or the like.

The clamping portion 56 is preferably formed by vertically sliding the depending flat, sheet metal member 60 by a pair of parallel slots 62 from the lower edge thereof, thus providing a pair of parallel outer legs 64, and an intermediate leg 66.

It is preferred to have the outer legs 64 substantially straight, and these legs at their lower ends, or any convenient portion intermediate their ends, are provided with inturned flanges 68 similar in utility to flanges 22 previously described.

However, the intermediate leg 66 is preferably bowed outwardly from the straight legs 64, and has its lower extremity or any other suitable portion thereof provided with an outturned flange 70.

As will be readily apparent, at least the depending member 60 of this embodiment is of a resilient nature, and the legs 64 and 66 are given a permanent bias or set with respect to each other so that the bowed or convex portion of the leg 66 may be pressed into alignment with the outer surface of the legs 64, thereby moving the flange 70 to the inner side of the legs 64 and in spaced relation to the flanges 68 so that the side wall of a container may be inserted between the legs by lowering the device thereon in a manner which will be readily understood. When released, the normal bias of the legs will cause the flange 72 to engage the outside surface and the flange 68 the inside surface of the side wall of a container to frictionally and resiliently but detachably hold the device in proper and firm position upon the upper portion of the rim or upper edge of the side wall.

It is a very prime advantage of this invention to provide a readily removable attachment which may be easily applied to or removed from any discarded container or the like for temporarily adapting the same to function as an ash tray.

From the foregoing, the construction and operation of the device together with its many advantages will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art after a consideration of the foregoing specification and accompanying drawings, it is not desired to limit the invention to the exact construction shown and described, but all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. An ash tray adapter comprising a substantially horizontal cigarette receiving tray, a depending clamping means at one end of said tray adapted to engage the upper portion of the opposite sides of the side wall of a container, said clamping means comprising an integral depending leg engageable with the inner surface of said container side wall and a depending leg pivoted on the tray and engageable with the outer surface of said container side wall, a handle integral with said pivoted leg, and a spring engaging said tray and handle biasing said legs toward each other, said integral leg having a flange inturned toward said tray adapted to engage said container side wall inner surface.

2. An ash tray adapter comprising a cigarette receiving trough having a leg depending integrally from one end thereof, ears depending from the sides of said trough adjacent said one end thereof, a lever disposed below and substantially parallel to said tray, ears rising from the sides of said lever adjacent one end thereof and being in juxtaposition with said trough ears, a pivot pin extending through said juxtaposed ears and securing said lever and said trough to one another, a leg integrally depending from said one end of said lever, and resilient means on said pivot pin adapted to engage the trough and lever to urge said lever leg toward said trough leg for clamping the adapter to an ash tray.

3. An ash tray adapter comprising an elongated cigarette receiving tray having a leg depending integrally from one end thereof, a lever disposed below and substantially parallel to said tray, a leg depending from one end of said lever in substantially parallel, adjacent relation to said tray leg, lugs in pairs on said tray and said lever at the ends from which their legs depend, the lugs of said lever nesting within the lugs of

the tray and being pivotally secured to the latter lug, and resilient means interposed between said tray and said lever adapted to urge the tray and lever away from one another thereby urging said legs toward one another.

FERDINAND A. VOLLENDER, JR.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
D. 56,963	Fields	Jan. 25, 1921
46,692	Morse et al.	Mar. 7, 1865
1,802,332	Burns	Apr. 28, 1931
2,047,786	Kuntz	July 14, 1936
2,272,084	Clapp	Feb. 3, 1942
2,400,488	Cochran	May 21, 1946

FOREIGN PATENTS

Number	Country	Date
2,614	Great Britain	1898
402,682	Great Britain	Dec. 7, 1933