United States Patent

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[54] **RECEIVER FOR ASHES, BUTTS AND REFUSE**
7 Claims, 4 Drawing Figs.

[52] **U.S. Cl.** **131/242,** 220/1
[51] **Int. Cl.** **A24f 19/00**
[50] **Field of Search** 131/231, 240, 242, 257; 220/1H

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ABSTRACT: A flat-bottomed can provides a self-standing receiver. The top of the can has an upstanding screw-threaded neck for a screw cap having a lid portion that is centrally apertured and embodies a truncated conical adapter into which the depending discharge neck of an upstanding funnel is secured. A coiled spring atop the funnel provides cigarette seating and gripping members so that ashes, butts and refuse gravitate and accumulate in the receiver for emptying and disposition.

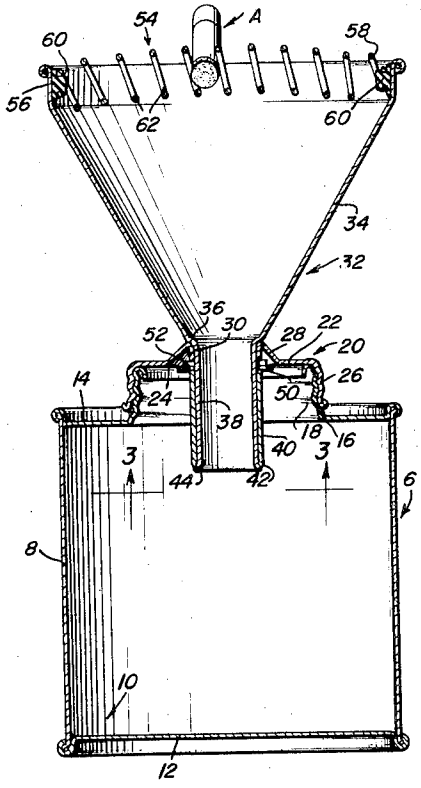


Fig. 1

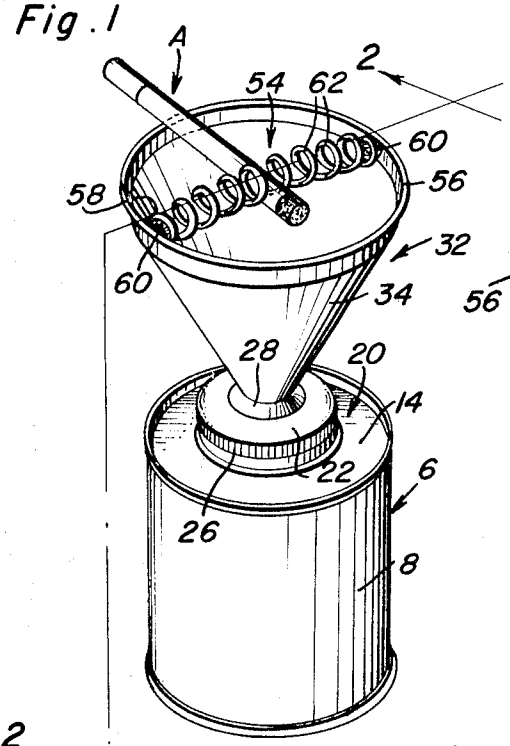


Fig. 2

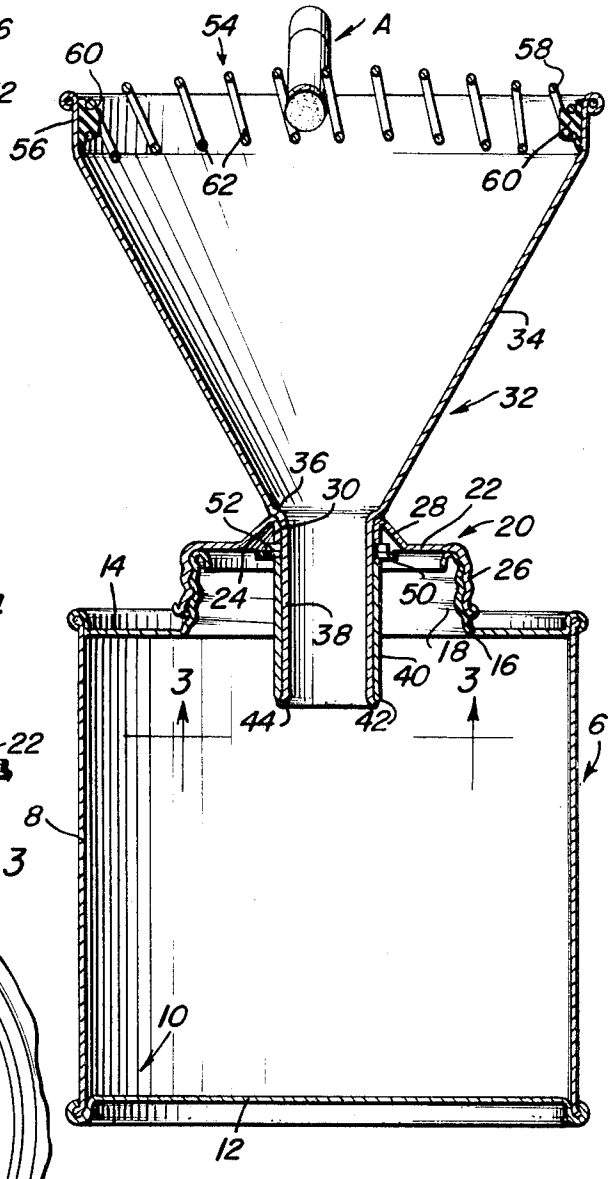


Fig. 4

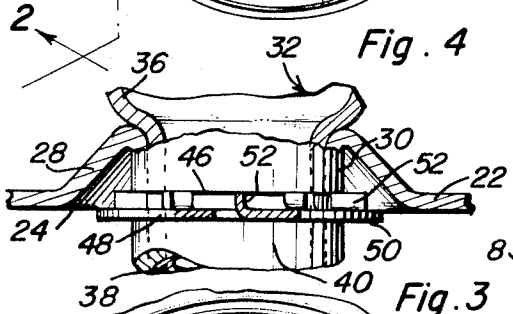
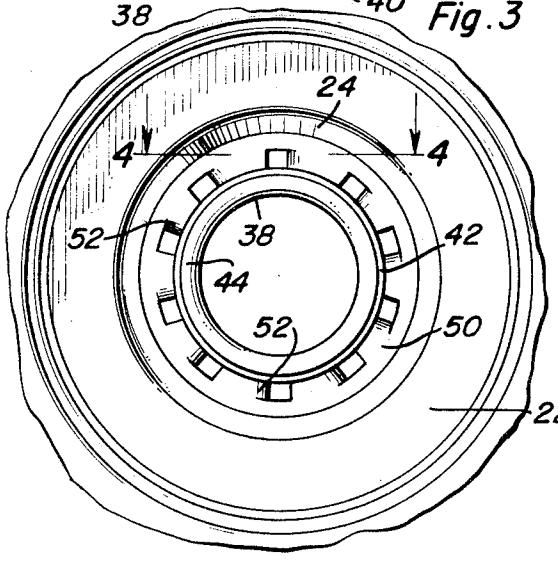


Fig. 3



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U.S. PATENT 3,522,812

RECEIVER FOR ASHES, BUTTS AND REFUSE

This is a continuation-in-part of application Serial No. 637,242, filed on May 9, 1967 and now abandoned.

This invention relates to a portable hollow base which constitutes a self-extinguishing receiver or tray for cigar and cigarette ashes, burning butts and smoker's refuse and pertains, more explicitly, to a portable but self-standing, can-type receiver having an upstanding screw-threaded neck to which a structurally novel screw cap is detachably connected and wherein said cap is equipped with an upstanding funnel, said funnel having an axial composite discharge neck which is fixedly anchored on a centrally apertured portion of the cap.

The ash receiver herein disclosed lends itself to use in the user's home, at his office or place of work, in his automobile or in similar areas. The special construction and coordination of the component parts provides an adaptation which is self-extinguishing, reduces stale and obnoxious odors to a practical minimum, virtually eliminates spilling and attending fire hazards, hides ugly ashtray mess, is easy to empty and keep clean, and is attractive in appearance.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a view in perspective of a receiver for ashes, butts and refuse constructed in accordance with the invention.

FIG. 2 is an enlarged view taken approximately on the plane of the central vertical section line **2-2** of **FIG.** 1.

FIG. 3 is an enlarged fragmentary detail view taken on the horizontal line **3-3** of **FIG.** 2.

FIG. 4 is an enlarged fragmentary detail view in section and elevation taken approximately on the plane of the section line **4-4** of **FIG.** 3.

With reference in particular to **FIGS.** 1 and 2 the portable self-standing container is denoted by the numeral **6** and in practice is made of sheet metal and is lightweight and comprises a substantially cylindrical can **8** a hollow portion of which provides the aforementioned receiver or receptacle portion **10**. The bottom wall of the can or container is denoted at **12** and the top wall at **14**. The central portion **16** of the top wall (**FIG.** 2) is provided with an upstanding screw-threaded attaching neck **18** for the readily attachable and detachable sheet material screw cap **20**. This screw cap embodies a generally flat lid or diaphragm portion **22** that is centrally apertured as at **24**. The outer portion of the lid portion is provided with a marginal rim **26** which is screw-threaded and is detachably joined to the openable and closable discharge neck **18**. The lid portion around the aperture is provided with a truncated conical collar-like riser **28** which is axially aligned with and joined with said centrally apertured portion and protrudes upwardly and provides a significant part of an adapter. The remaining part of the adapter comprises a relatively short depending annular or endless flange **30**.

The numeral **32** designates means for supporting cigars and cigarettes and also for directing ashes and butts into the receiver **10**. This means is characterized by a funnel **34** whose downwardly tapering lower end portion **36** is joined with and merges into a complemental discharge neck **38**. The upper portion of the neck depends through and is snugly surrounded by the assembling and retaining flange **30**. The funnel and neck are made of one kind of metal and the neck **38** is completely and effectually surrounded by a snug fitting sleeve **40** which is preferably made of aluminum. The sleeve is proportional to the length of the neck **38** and the lower end thereof is positioned and held in place as at **42** by a peened terminal edge **44**. As brought out in **FIG.** 4 the upper end of the sleeve is spaced downwardly from the lower lip or edge **46** of the aforementioned flange **30**. An aluminum washer is sandwiched between the upper edge **48** of the sleeve **40** and lower edge **46** of the neck **30** as shown in **FIG.** 4. The washer denoted by the numeral **50**, surrounds the neck **38** and

cooperates with the sleeve **40**. This washer is of a diameter greater than the sleeve **40** and of an outside diameter less than the diameter of the aperture **24**. It will be noted also that the inner marginal edge of the washer has struck out circumferentially spaced teeth or lugs **52** which can be slightly yieldable. Hence this washer is in effect like a spring washer and with the teeth **52** engaging the edge **46** and the washer engaging the edge **48**, the sleeve is pushed down tight against the peened edge **44**.

The readily applicable and removable clip means is denoted by the numeral **54** and comprises a coil spring of a length, when expanded, to bridge or span the central open mouth portion of the funnel. The mouth portion is annular and is denoted here for convenience by the numeral **56**. The endmost coils or convolutions **58** are such as to accommodatingly position and retain rubber button-like heads **60**. These heads are exposed so that the rubber surfaces thereof contact the interior surface of the annular mouth **56**. The intermediate coils **62** are such in diameter and are so spaced when in use as to provide holders and rests for the lighted cigarette A. This clip means **54** is readily applicable and removable.

With particular respect to the self-extinguishing aspect of this invention, when a burning cigarette is dropped into the receiver or receptacle portion the smoke stream ascends almost immediately. When the arising heated gases reach and encompass the aluminum sleeve and washer, these component parts serve as heat transfer agents whereby to then cool the mixture of gases, permitting the latter to settle at the bottom of the receptacle. Inasmuch as only a limited supply of oxygen is present in the receptacle it consumes the essential oxygen and the cigarette is snuffed out and extinguished.

This ashtray will not spill its contents and is safe to use in such areas as refineries, garages, gasoline stations, aboard ships, buses and other similar and otherwise hazardous areas. It is capacious and requires only emptying once a day under normal use.

In addition to the above, it is evident that by unscrewing the cap **20** and detaching the cap and funnel **34** the then uncovered can or container can be turned upside down and the accumulated refuse can be readily dumped out in a self-evident manner.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described and accordingly all suitable modifications and equivalents may be resorted to falling within the scope of the invention.

We claim:

1. For use by smokers of cigars and cigarettes, a refuse collector comprising: a portable container providing a self-standing receiver, said container having a top wall provided with a centralized upstanding screw-threaded neck, a screw-cap including a lid portion that is centrally apertured and a marginal rim encircling and detachably joined to said neck, a truncated conical collar-like riser axially aligned and joined with the centrally apertured portion of said lid portion and protruding upwardly and providing an adapter, and means for supporting cigars and cigarettes and directing ashes and butts into said receiver, said means including a funnel, said funnel embodying a wide-mouth hopper having a discharge neck and a downwardly tapering lower end merging thereinto said neck passing downwardly through said centrally apertured portion and depending into and terminating in an upper portion of said receiver and removable clip means mounted in and bridging the mouth portion of said funnel and embodying resilient components in which a cigarette can be temporarily clipped and stored in a safe readily accessible position directly above and in alignment with said discharge neck.

2. The refuse collector defined in and according to Claim **1**, and wherein the apertured portion embodies an endless marginal edge provided with an integral depending collar-like flange, said flange surrounding and being secured to and joining said flange and neck together.

3. The refuse collector defined in and according to Claim 2, and a sleeve snugly surrounding a major portion of said neck, said sleeve being made of heat transfer material.

4. The refuse collector defined in and according to Claim 2, and, in combination, an aluminum sleeve snugly surrounding and covering the major portion of said neck, the lower terminal end portion of said sleeve being flared outwardly and engaging said terminal end portion and serving to prevent displacement of the sleeve from the neck.

5. The refuse collector defined in and according to Claim 4, and a washer snugly surrounding said neck and sandwiched between the lower edge of said flange and upper edge of said sleeve, said washer having resilient struck out circumferentially spaced tooth-like detents having yieldable ends in

thrust engagement with the lower edge of said flange.

6. The refuse collector defined in and according to Claim 1, and wherein said clip means comprises a coil spring of predetermined length, cross-section and tension, the coils of said spring providing the aforementioned resilient components and being spaced apart sufficiently to provide individual selectively usable rests for cigarettes.

7. The refuse collector defined in and according to Claim 6, and wherein the respective endmost coils of said coil spring are provided with surface contacting spring positioning and retaining heads made of rubber and having anti-slipping contact with diametrically opposite surface portions of the mouth portion of said funnel.