May 14, 1963 R. T. RENSHAW 3,089,633

TRASH TRAY

Filed April 10, 1961 2 Sheets-Sheet 1

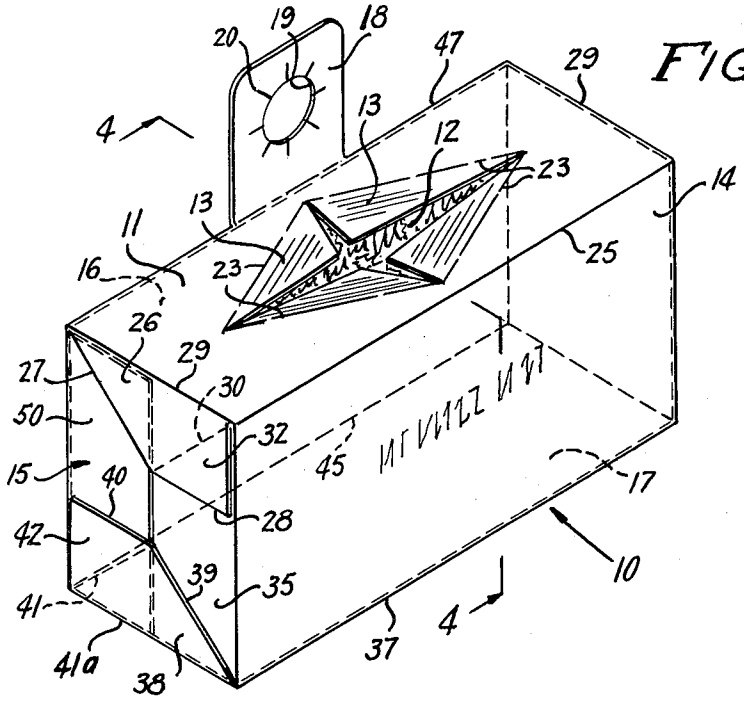


FIG. 1

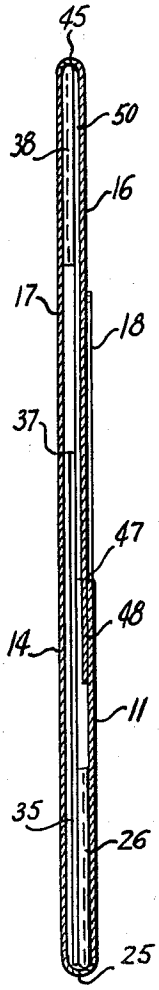
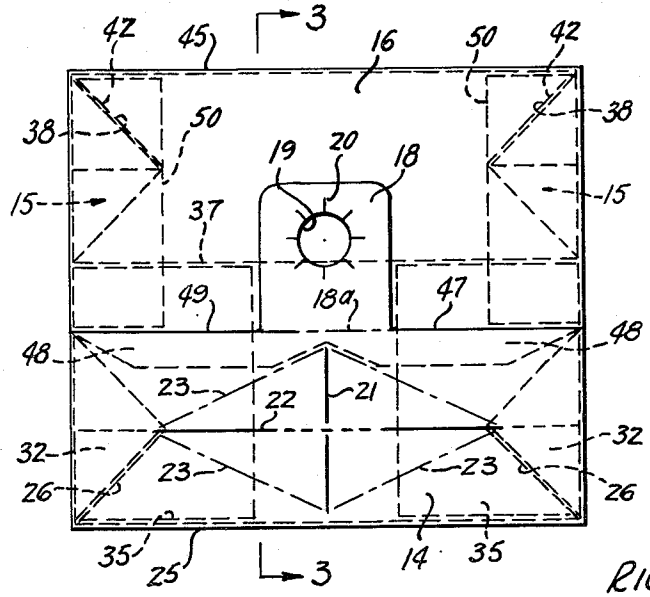


FIG. 3

FIG. 2



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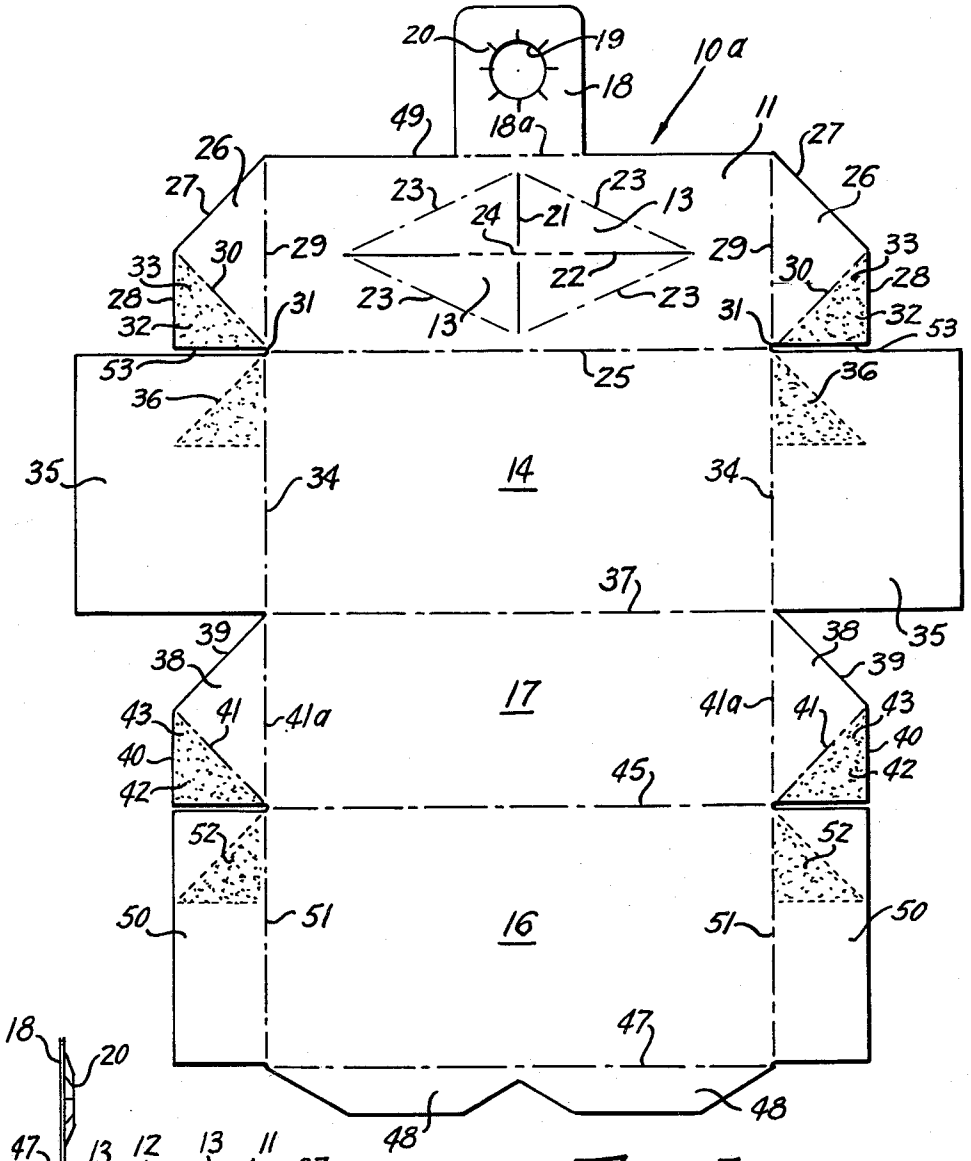


FIG. 5

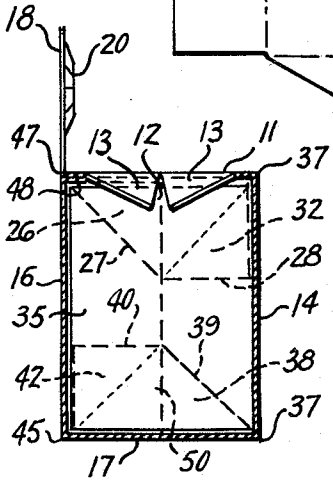


FIG. 4

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TRASH TRAY

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1 Claim. (Cl. 229—38)

This invention relates to a trash tray, or receptacle for holding trash, and has particular applicability to such trash tray for use in a motor vehicle.

A primary object of this invention is the provision of a receptacle or trash tray which may be conveniently suspended from either the lock of the glove compartment or any of the knobs, such as the lighter on the dashboard of a motor vehicle so as to be readily available for the deposit of trash, such as cigarette packages, used kleenex, or such other trash as may be accumulated during the course of a motor trip.

An additional object of the invention is the provision of a convenient receptacle which may be carried interiorly of a motor vehicle for the accommodation of trash, thus obviating any possibility of throwing the trash out on highways with the resultant unsightly litter, and possibility of legal penalty.

A further object of the invention is the provision of such a device which may be folded in flat position when not in use, and consequently transported with a minimum of effort and difficulty.

Still another object of the invention is the provision of such a device which is readily disposable, and which, when filled may be thrown away.

A further object of the invention is the provision of a device of this character having a substantially one-way opening in the lid thereof to retain any trash inserted therein from blowing out.

Still another object of the invention is the provision of a device of this character which is durable in construction, which may be folded flat and expanded to useful position with a minimum of effort and which may be manufactured with a minimum of cost so as to be provided as a free or throw away item.

Still other objects reside in the combinations of elements, arrangements of parts, and features of construction, all as will be more fully pointed out hereinafter and disclosed in the accompanying drawings wherein:

FIGURE 1 is a perspective view of one form of device embodying the elements of the instant invention shown in operative position.

FIGURE 2 is a plan view of the device shown in folded position.

FIGURE 3 is an enlarged sectional view taken substantially along the line 3—3 of FIG. 2 as viewed in the direction indicated by the arrows.

FIGURE 4 is a sectional view taken substantially along the line 4—4 of FIG. 1 as viewed in the direction indicated by the arrows; and

FIGURE 5 is a plan view of the blank from which the article is made.

Similar reference characters refer to similar parts throughout the several views of the drawing.

Having reference now to the drawing in detail, the box or trash tray of the instant invention is generally indicated at **10** as shown in fully open or operative position in FIG. 1 and in folded or storage position in FIG. 2. The box consists of a top wall **11** having a central opening **12** therein, the opening being surrounded by triangular inwardly extending tabs **13** which permit the easy depositing of rubbish in the receptacle but resist its withdrawal. The box also includes a front wall **14**, substantially identical but opposite end walls **15**, a rear wall **16** and a bottom **17** (see FIGS. 2 and 3). An integral supporting tab **18** is positioned at the extremity

of one side of a top wall, and has an opening **19** therein which is surrounded by a series of radial slits **20**, which permit the opening to be positioned over the lock interiorly of the glove compartment of a vehicle, or over the lighter, or any of the other dashboard protuberances, regardless of size, within the limits of the opening in its associated slots.

When in stored condition the box is flat, as best shown in FIG. 2, and the ends **15** are self opening when pressure is exerted along the corners of the device to expand the same to operative position. In order to achieve this result it is necessary to describe the construction of the box, and the blank from which it is made, which is best shown in FIG. 5, and which is indicated generally at **10***a*. The top wall **11** is provided with a pair of right angularly disposed perforated lines **21** and **22**, the adjacent extremities of which are connected by fold lines **23**, the arrangement being such that when pressure is exerted at the center or intersection of the perforated score lines **21** and **22**, they are severed along these tear lines and fold downwardly along the fold lines **23** to form the triangular tabs **13** shown in FIG. 1. Top wall **11** is integral with front wall **14**, there being a fold line **25** separaitng the two and the top wall **11** is provided with complementary end flaps **26**, which form a portion of the end structure. Each of the end flaps has an angularly disposed portion **27**, and a straight portion **28** which is parallel to fold lines **29** defining the end of the top wall. A diagonal fold line **30** extends from the intersection of the angle portions **27** and the straight portions **28** to the corner of the flap **31**, and forms a triangular tab portion **32** which is coated on its rear or reverse side with adhesive **33**. The ends of front wall **14** are provided with fold lines **34** which separate rectangular end tabs **35**, which form the major components of end walls **15**. The adhesively covered tabs **32** are in the assembly of the box pasted to the sections indicated in dotted lines at **36** of the side walls, and folded along the fold lines, toward the front, it being noted that the rear of the blank is disclosed in FIG. 5.

A fold line **37** separates the front wall **14** from the bottom wall **17**, the bottom wall **17** being provided with tabs **38** which are substantially identical to the tabs **26** having outwardly disposed angular portions **39** corresponding to the portions **27** and straight portions **40** corresponding to the portions **28**. Fold lines **41** are arranged in substantially identical relation to the fold lines **30** and the triangular tab portions **42** are covered with adhesive **43**.

Bottom wall **17** is also separated by a fold line **45** from rear wall **16**, which along its edge is provided with a fold line **47**, from which project a pair of tabs **48**, which are coated with adhesive, on the front side thereof, and which engage beneath the edges **49** of the top wall **11** and are secured thereto in the assembly of the box. End tabs **50** are separated from rear wall **16** by fold lines **51**, and are separate from the bottoms of tabs **38** as indicated at **52**, it being pointed out also that the tabs **26** are separated as at **53** from the end tabs **35** and the front wall **14**.

The adhesive **43** on triangular portions **42** is secured to the portions **52** of tabs **50**. It will thus be seen that in folded position with the fold lines **25** and **45** unfolded and with all of the end flaps **26**, **35**, **38**, and **50** folded inwardly, the box will assume the position as disclosed in FIGS. 2 and 3.

It will also be seen that after the blank has been assembled by pasting in the manner previously described with the various pasted tabs positioned in their appropriate locations, that the ends of tabs **35** and **50** are free, and fold inwardly between the combined top and rear walls forming an upper section of the device and the bot-

tom and front walls forming a lower section of the device so that in its assembled position the device forms a rectangle as shown in FIG. 2. Pressure exerted on the ends which form the fold lines 25 and 45 will cause folding along the lines 37 and 47 to cause the box to assume the shape shown in FIG. 1. Pressure exerted in the center 24 of the intersection of the lines 21 and 22 will separate the perforated tear lines and cause the tabs 13 to fold downwardly along the fold lines 23. Similarly, tab 18 may be bent upwardly along its fold line 18*a*, and a suitable protuberance on the dashboard or in the glove compartment inserted through the hole 19 so that the device will be suspended for ready use.

From the foregoing it will now be seen that there is herein provided an improved trash tray which accomplishes all the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made in this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative, and not in a limiting sense.

I claim:

A collapsible trash receptacle formed from a blank comprised of a rectangular top portion (11) having a central opening (24) defined by crossed perforated lines (21 and 22) forming triangular inwardly extending tabs (13), a supporting tab (18) extending from one side of the top wall portion and having a central circular opening (19) surrounded by radial slits (20) therein, a fold line (18*a*) secured between the top portion and the supporting tab, complementary end flaps (26) each including an angularly disposed portion (27) and a straight portion (28), the flaps being defined by fold lines (29) at the ends of the top wall or diagonal fold lines extending from the intersection of the angularly disposed portions and the straight portions to the corners (31) of each flap to form a triangular tab portion (32) coated on its rear side with adhesive (33), an integral front wall portion (14) separated from the top wall portion by a fold line (25), rectangular end tabs (35) at the ends of the front wall portion separated therefrom by fold lines (34), adhesively coated triangular portions (36) cooperating when the receptacle is folded with the adhesive coating (33) of the triangular tab portion (32), there being slots (53) between the end flaps (26) and the end tabs (35), an integral bottom wall portion (17) separated by a fold line (37) from the front wall portion, said bottom wall portion bearing additional end tabs (38) characterized by angular portions (39) and straight portions (40) directed by a diagonal fold line (41) with the inside of the triangular part (41) of the straight portion so formed being coated with adhesive (42), the additional end tabs being separated from the ends of the bottom wall portion by fold lines (41*a*), a rectangular rear wall portion (16) integral with the bottom wall portion and separated therefrom by a fold line (45), additional rectangular end flaps (50) separated from the rear wall by fold lines (51), triangular adhesive coated sections (52) on said additional end flaps cooperating with the adhesive coated portions on said additional end flaps when the receptacle is folded, said additional end flaps being divided from said additional end tabs by slits aligned with the fold line between the bottom wall and the rear wall, the additional end flaps being of less width than the first-mentioned end flaps, and a pair of top tabs (48) projecting from the extending end of the rear wall and adhesive coated for securement beneath the top wall when the receptacle is folded.

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