

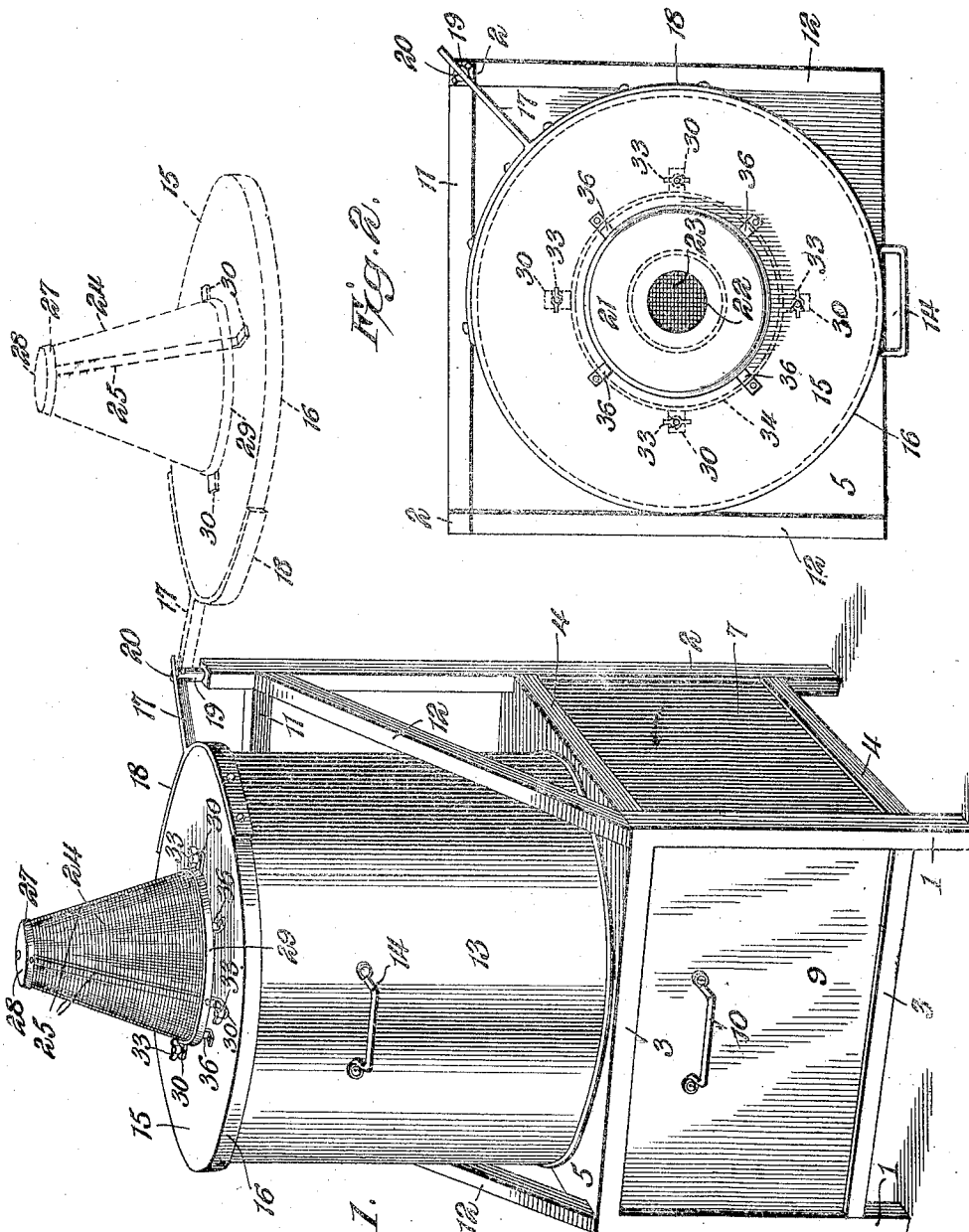
Aug. 12, 1924.

A. G. DUNCAN
COMBINATION GARBAGE CAN

1,505,014

Filed June 17, 1921

2 Sheets-Sheet 1



WITNESSES

Clyde L. Patchiff
Howard D. Orr

Fig. 1.

Harold W. Duncan, Admr. of the
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INVENTOR.

BY

C. G. Siggers

ATTORNEY

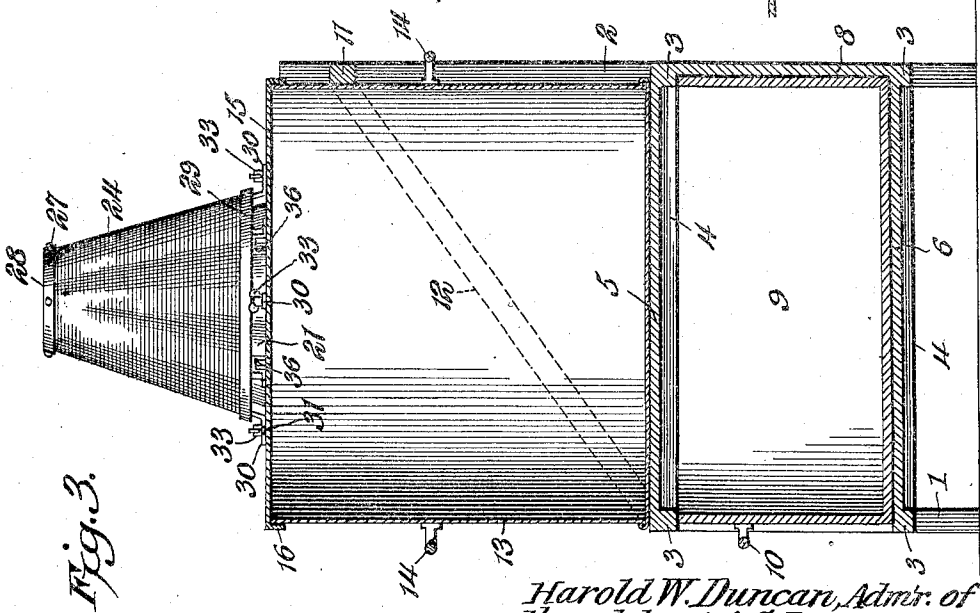
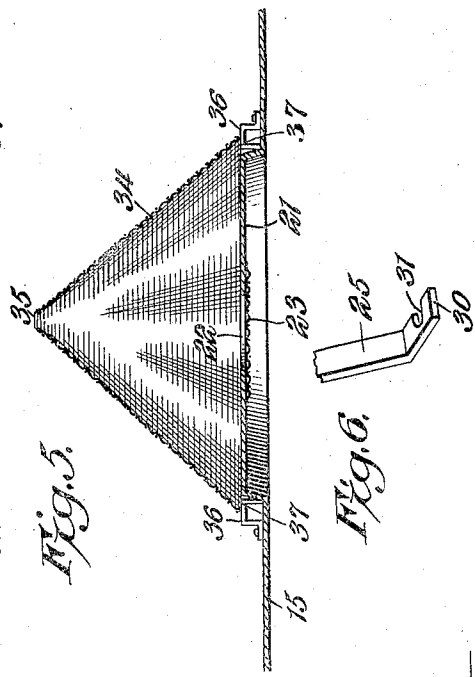
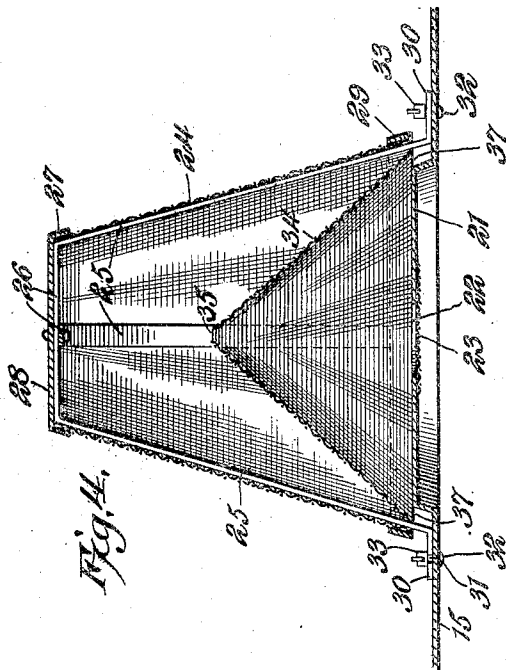
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UNITED STATES PATENT OFFICE.

ALEXANDER G. DUNCAN, DECEASED, LATE OF CEDAR RAPIDS, IOWA; BY HAROLD W. DUNCAN, ADMINISTRATOR, OF CEDAR RAPIDS, IOWA, ASSIGNOR TO HAROLD W. DUNCAN, OF CEDAR RAPIDS, IOWA.

COMBINATION GARBAGE CAN.

Application filed June 17, 1921. Serial No. 478,313.

To all whom it may concern:

Be it known that I, HAROLD W. DUNCAN, a citizen of the United States, residing at Cedar Rapids, county of Linn, State of Iowa, administrator of the estate of ALEXANDER G. DUNCAN, late a citizen of the United States, and a resident of Cedar Rapids, in the county of Linn, and State of Iowa, deceased (as by reference to the duly certified copy of letters of administration hereto annexed will more fully appear), do hereby declare that the said ALEXANDER G. DUNCAN invented a new and useful Improvement in Combination Garbage Cans, of which the following is a specification.

This invention relates to garbage can fly-traps.

The object is to provide a trap to be used in connection with a garbage can for catching flies attracted thereto, the said trap being mounted on the movable lid of the can in such manner as to readily permit of the removal of the lid for the purpose of introducing garbage therein, or emptying the same.

Another object is to provide a supporting frame for the can having the trap mounted thereon and also a separate drawer for tin cans or the like, which latter is also capable of being separately removed from the said frame in order to empty the same.

A further object is to provide a fly trap capable of holding a great number of flies and of readily trapping the same while hovering in the vicinity of the can, attracted thereto by the odors issuing from a screened opening provided therein for the purpose, the said trap being removable from the lid of the can when desired, as in cold weather when there are no flies, and readily replaced upon the lid when necessary.

A full and complete understanding of the invention may be obtained from a consideration of the following detailed description, taken in connection with the accompanying drawing forming a part of this specification; it being understood that while the drawing shows a practical form of the invention, the latter is not to be confined to strict conformity therewith, but may be changed or modified, so long as such changes or modifications mark no material departure from the salient features of the invention,

as specifically pointed out in the appended claims.

In the drawing, in which similar reference characters designate corresponding parts throughout the several figures:—

Figure 1 is a perspective view of a garbage can mounted on a stand equipped with a removable drawer in the base thereof, said can having its lid provided with the improved fly trap;

Figure 2 is a top plan view of the garbage can, the flytrap being removed therefrom;

Figure 3 is a vertical section through the garbage can and its supporting stand having the drawer, the flytrap being shown in side elevation;

Figure 4 is an enlarged vertical sectional view of the flytrap;

Figure 5 is a detail sectional view of the inner cone member of the trap;

Figure 6 is a detail view of the foot portion of one of the supporting members for the flytrap.

In the drawing there is illustrated a supporting frame work for the garbage can comprising front and rear leg members 1 and 2 respectively, which are joined together in any approved manner by upper and lower longitudinal and transverse strips 3 and 4 which, in turn, support upper and lower floors 5 and 6. The leg members 1 and 2 are further joined by side walls 7 and a rear wall 8, thus providing an open-ended receptacle or housing for an ordinary drawer 9, which is built in the usual manner and which is adapted to freely slide into and out of the said housing, the same being provided on its front wall with any suitable form of handle 10 to facilitate such action.

The bottom floor 6 is preferably spaced a short distance above the lower ends of the several legs, in order to elevate the drawer from the ground or other support, and the rear legs 2—2 are continued above the upper floor 5 a distance substantially equal to the height of the drawer housing, where they are joined together by a longitudinally disposed strip 11 extending across the back of the frame and located slightly below the upper ends of the rear legs, which are further braced by forwardly and downwardly extending inclined strips 12, suitably secured at their lower ends to the forward corners

of the top floor 5, as clearly shown in Figure 1.

The upper floor 5 is adapted to support a garbage can 13 of ordinary construction having the usual diametrically opposite handles 14—14 secured thereto, and said can is preferably of a diameter to freely slide onto the floor 5 and between the inclined braces 12, the rear cross bar or strip 11 acting as an abutment for the can to prevent it being forced too far to the rear.

The lid 15 of the can is preferably formed of sheet metal having a marginal depending flange 16 adapted to fit snugly around the upper open end of the can 13, and said lid is provided with an outstanding, radially-disposed supporting arm 17 having an arcuate portion 18 which is adapted to fit and to be riveted or otherwise secured to the flange 16.

One of the rear legs 2 is provided with a swivel post 19, bifurcated as at 20, for the reception of the outer end of the supporting arm 17 which is pivoted therein, the said pivot being substantially on a level with the top of the can, so that the lid 15 may rest flat upon the top of the can 13, as will be clearly understood. By this arrangement, the lid may be slightly elevated from the body of the can, the pivot and the bifurcated end of the post 19 readily permitting of such movement, and then swung in a horizontal path about the swivel post 19, as an axis, to assume a position out of the way of the can, when it is desired to remove the same for the purpose of dumping, as indicated in dotted lines in Figure 1. When in this position the arm 17 will support the lid 15 and its superimposed flytrap by reason of the said arm striking against the bottom of the bifurcated end of the post 19.

The lid 15 is provided, at its center with an elevated boss or support 21, circular in plan, formed by pressing up the metal of the lid, (see Figs. 4 and 5) and provided with a circular opening 22 of considerably less diameter than the boss or support, the said opening being screened by wire gauze 23 extending across the same and secured in any desired manner to the under face of the lid. The opening 22 permits odors generated by the garbage within the can to escape therefrom, while the gauze 23 prevents entrance of flies.

An outer frusto-conical, wire gauze trap member 24, having its lower larger end of somewhat greater diameter than the diameter of the boss, is adapted to be supported in spaced relation to the upper surface of the lid 15 and concentric with the boss.

The frusto-conical member 24 is attached to and supported by crossed leg members 25, formed of strips of metal bent intermediate their ends to provide upper flat portions 26 which fit within the marginal, downturned flange 27 of a cap plate 28, the latter

being securely riveted to the crossed portions of the strips and housing within the flange the upper edge of the wire gauze 24. The lower edge of the wire gauze is located substantially on a level with the boss 21 and is held to the leg members by a metallic ring 29 suitably riveted thereto.

The lower ends of the legs 25 are provided with feet 30 having entrance slots 31 (Fig. 6) extending from one edge thereof, said slots being arranged on corresponding sides of the feet and adapted to receive studs 32 rigidly secured to the top side of the can lid, in spaced relation to the plateau. Thumb nuts 33 threaded onto the said studs are adapted to bind the feet 30 rigidly in position, and when it is desired to remove the outer trap member 24 from the lid of the can, it is only necessary to loosen the thumb nuts and turn the legs together with the outer gauze member 24 in a direction to free all of the feet 30 from the studs, when such release may be effected.

A conical wire gauze member 34 is located within the outer member 24 and has its apex provided with an opening 35, and its lower wider edge is of a diameter to snugly fit within the lower portion of said outer member and to rest upon and be supported by short metallic strips bent to form rests 36 riveted to the lid 15 and of a height substantially equal to the height of the boss 21. When the inner conical member is resting upon the supports 36 and within the outer gauze member, an annular trap entrance 37 is provided.

With the flytrap mounted upon the lid in the manner described, the odors arising from the garbage within the can will attract the flies which find the only entrance through the passageway 37, when they will crawl upwardly along the inner sides of the inner cone and pass through the restricted opening 35, into the interior of the outer gauze member 24, when they become securely trapped.

When it is desired to assemble the trap upon the lid of the garbage can, as at the advent of the fly season, it is only necessary to place the inner trap member 34 on the rests 36 and set the outer trap member 24 over the same, engaging slots 31 with studs 32 and screwing down the nuts 33.

From the foregoing it will be seen that a simple, cheaply manufactured and easily operated flytrap has been provided for use in connection with garbage cans and that the same may be readily applied to the can when desired or removed therefrom when the fly pest is no longer present.

What is claimed is:

1. The combination with a garbage can having a lid provided with an elevated, substantially circular boss having a screened opening therein, a series of rests secured to

the lid in spaced relation to the periphery of said boss, an inner wire cone supported by said rests and having an opening at the top and bottom, the opening at the bottom being of greater diameter than said boss, whereby an entrance to said cone is provided between it and the boss, and an outer wire trap body closed at the top and provided with supporting framework detachably secured to the lid above and around the inner cone.

2. The combination of a garbage can having a lid, an inner wire cone removably supported upon the lid so as to provide an entrance into the inner cone at the lower outer edge of the same, said inner cone being provided with an opening at the top, an outer wire trap body, and means for supporting the outer trap body upon the lid outside of and independently of the support for the inner cone, said means providing for the ready detachment of the outer body from the lid.

3. The combination of a garbage can having a lid provided with an elevated circular boss having an opening communicating with the interior of the can, an inner wire cone mounted above said boss, means for supporting said inner cone so that the bottom of said inner cone projects above the periphery of said boss and provides an entrance for flies into said cone, the latter being provided with a fly entrance at the top, an outer wire body mounted above the inner body and surrounding the same, and means for detachably supporting the outer body

in place, the lower edges of the inner cone and outer body being substantially on a line with the upper surface of said boss, and the supporting means permitting separate and independent attachment and detachment of the cone and body.

4. The combination of a garbage can having a lid provided with a gauze-covered opening surrounded by an elevated circular support, a series of rests secured to the lid in spaced relation to the margin of the support, an inner cone formed of wire mesh and having an opening at its apex, said cone being adapted to be placed upon the rests with its lower edge in spaced relation to the support, to provide a circumferential opening, an outer gauze cone closed at its top and having a supporting frame-work comprising legs terminating in feet having open-ended slots and adapted to be placed over and around the inner cone, with its wider edge lowermost and in hugging relation to the outer edge of the inner cone, the lower edges of the inner and outer cones being on a level with the surface of the support, and studs carried by the lid and adapted to enter the said slots of the feet and equipped with thumb nuts for holding the frame and cones in position.

In testimony, that I claim the foregoing as the invention of ALEXANDER G. DUNCAN, I have hereto affixed my signature.

HAROLD W. DUNCAN.

Administrator of the estate of Alexander G. Duncan, deceased.