

Dec. 28, 1965

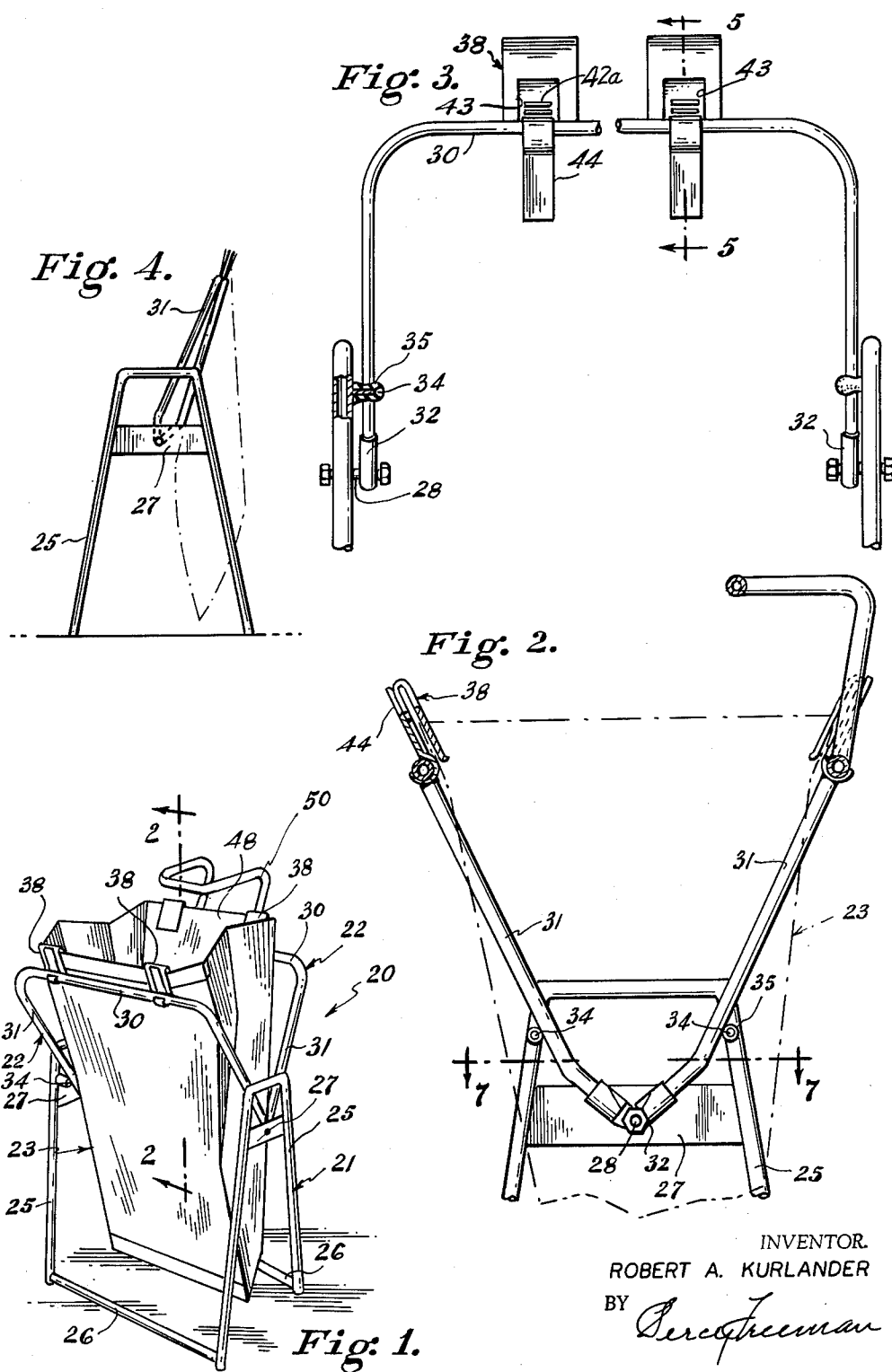
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3,226,070

REFUSE-BAG SUPPORT

Filed Aug. 13, 1963

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

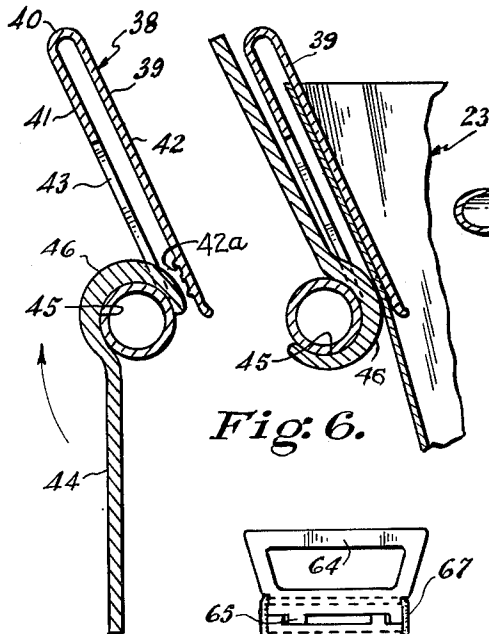


Fig: 6.

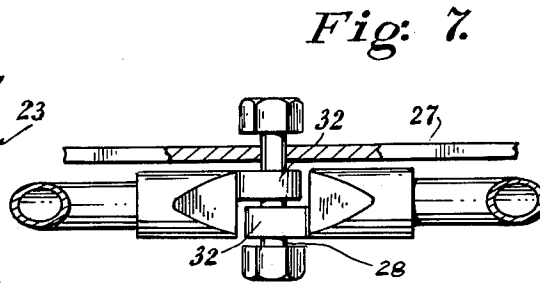


Fig: 7.

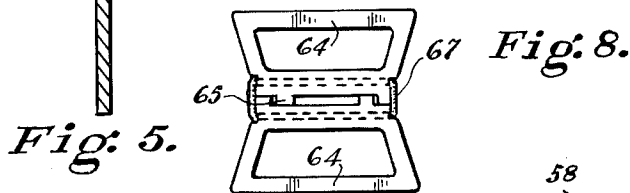


Fig: 5.

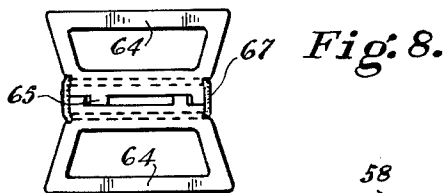


Fig: 8.

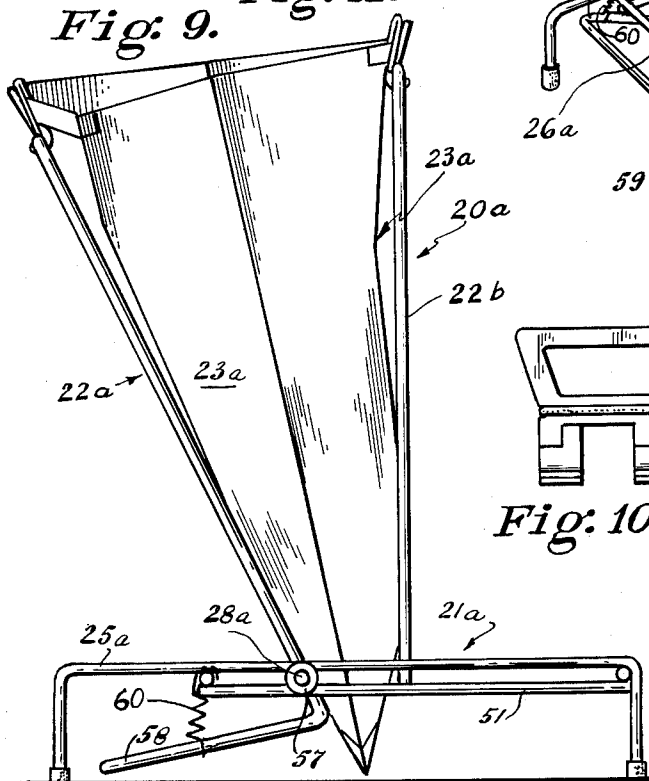


Fig: 9.

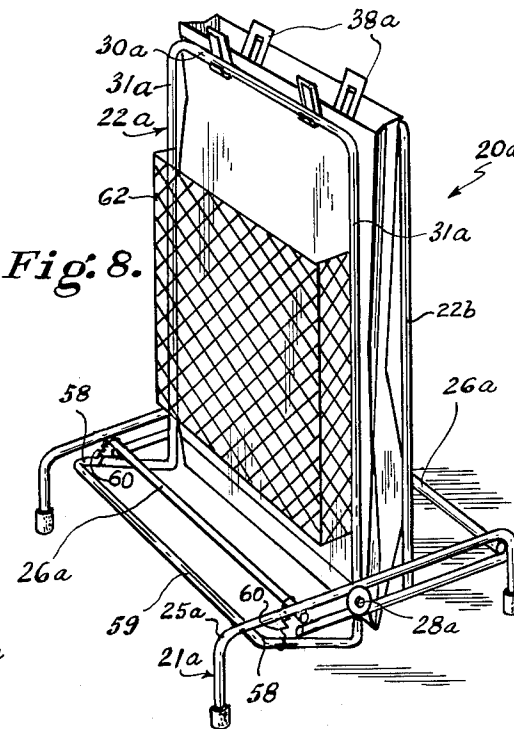


Fig: 10.

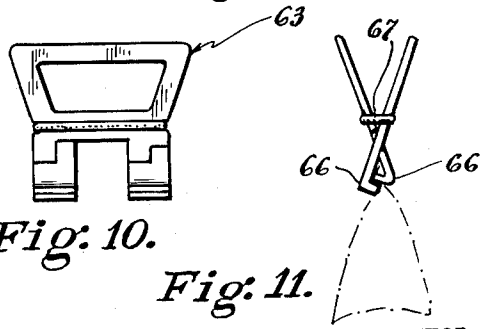


Fig. 11.

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3,226,070

REFUSE-BAG SUPPORT

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Filed Aug. 13, 1963, Ser. No. 301,797
3 Claims. (Cl. 248-97)

This invention relates generally to a receptacle for refuse, and is especially concerned with a holder for a refuse receptacle or bag.

As is well known, garbage and other waste is usually collected in a disposable receptacle, such as a bag, or the like and discarded in the receptacle. Heretofore, the collection of garbage and waste in bags has been relatively difficult, and transfer or removal of filled bags has been an onerous and often messy procedure. While certain proposals have been presented for using disposable bags as garbage and waste collection receptacles, these proposals have not found general acceptance as requiring relatively expensive apparatus and adding little to convenience and sanitation.

Accordingly, it is an important object of the present invention to provide a waste-bag holder which overcomes the above-mentioned difficulties, is extremely simple to use, insures closure of a bag except for receiving waste, and permits of quick and easy removal of a waste-filled bag.

It is another object of the present invention to provide a waste-bag holder having the advantageous characteristics mentioned in the preceding paragraph, which is extremely simple in construction, durable and reliable throughout a long useful life, and which can be economically manufactured for sale at a reasonable price.

Other objects of the present invention will become apparent upon reading the following specification and referring to the accompanying drawings, which form a material part of this disclosure.

The invention accordingly consists in the features of construction, combinations of elements, and arrangements of parts, which will be exemplified in the construction hereinafter described, and of which the scope will be indicated by the appended claims.

In the drawings:

FIGURE 1 is a perspective view showing a bag holder of the present invention, in association with a bag, and showing the bag held in open condition.

FIGURE 2 is a partial sectional elevational view taken generally along the line 2—2 of FIGURE 1.

FIGURE 3 is a partial side elevational view of the bag holder of FIGURE 2, with the bag removed, and partly in section for clarity of understanding.

FIGURE 4 is an end elevational view of the bag holder of FIGURE 1, showing in phantom a bag in closed condition.

FIGURE 5 is a partial sectional view taken generally along the line 5—5 of FIGURE 3, somewhat enlarged, and illustrating a clip of the instant device in its open condition.

FIGURE 6 is a sectional view similar to FIGURE 5, but showing the clip in its closed condition, as clamping an end of a bag.

FIGURE 7 is a partial sectional, slightly exploded view, taken generally along the line 7—7 of FIGURE 2.

FIGURE 8 is a perspective view showing a slightly modified embodiment of waste-bag holder constructed in accordance with the teachings of the present invention, the holder being in its closed condition.

FIGURE 9 is an open end elevational view showing the holder of FIGURE 8 in open condition.

FIGURE 10 is an elevational view showing a carry-

ing device of the present invention for transporting a bag from the holder.

FIGURE 11 is an end elevational view of the holding device of FIGURE 10, but in closed bag-carrying condition.

FIGURE 12 is a top plan view of the holding device of FIGURE 10 in open condition.

Referring now more particularly to the drawings, and specifically to FIGURES 1-4 thereof, a waste-bag holder is there generally designated 20, and includes a lower part, base or support 21 adapted to rest on a suitable horizontal supporting surface, such as the floor. Upstanding from the support 21 are a pair of facing members or wings 22 mounted on the support for relative movement of their upper regions toward and away from each other. A waste bag 23 is shown in position within the support 20, having its upper region or mouth secured to the upper regions of the wings 22 and depending through the lower regions of the wings.

The support or base 21 may be of an open-framework construction including a pair of spaced facing endpieces 25, each of inverted generally U-shaped configuration, and rigidly connected together at the lower ends of the legs by side-pieces 26. Each endpiece 25 is provided with a strap or brace 27 extending generally horizontally between the legs of the endpiece adjacent to and spaced below the upper or bight region thereof.

The wings 22 may be substantially identical, each being of an inverted generally U-shaped configuration and integrally fabricated of tubing or rod stock. Thus, each of the wings 22 includes an upper or bight region 30 extending generally horizontally, and having at opposite ends a pair of legs 31 depending in parallelism toward respective straps or braces 27 of opposite support end pieces 25. The lower ends of the wing legs 31 are provided with aligned bushings or eyes 32, each adjacent pair of wing legs 31 being inward of and adjacent to a respective end strap or brace 27. Further, a bolt or pivot 28 extends horizontally through each brace 27, as best seen in FIGURE 7, and through the adjacent aligned eyes 32, with the pivots of opposite braces in longitudinal alignment to mount the wings 22 for angular movement relative to each other to swing the upper wing members 30 toward and away from each other.

As best seen in FIGURE 2, the support end frames 25 are each provided with a pair of inwardly extending pins or stops 34 located to limit relative swinging movement of the wings 22 away from each other. Thus, the pins or stops 34, may be each covered with suitable shock-absorbing material, such as a rubber sheath 35, and may each project inward from a respective leg of the associated end piece 25 at a location spaced above that of the aligned pivots 28. The wings 22 are, therefore, swingable between an open or spaced-apart position, as in FIGURES 1 and 2, and a closed condition having been moved together, as in FIGURE 4. In both the open position of FIGURES 1 and 2 and the closed position of FIGURE 4, the wings 22 are at rest. In the open position, the wings 22 are both inclined outward away from each other and resting against their respective adjacent stops 34, while in the closed position one of the wings has been swung from its open position, over or past dead center to rest against the other wing.

Carried by each of the upper, horizontal wing members 30 are a pair of spaced securement members or clips 38, best seen in FIGURES 2, 3, 5 and 6. The securement members or clips 38 each include a resilient bent strip or U-shaped member 39 having an upper bight region or bend 40 and a pair of facing spaced legs 41 and 42 extending downward from the bend. The outer leg 41 has its lower region secured to the adjacent upper wing mem-

ber 30 by any suitable means, such as welding, or being curled thereabout, and is provided with a central cutout or opening 43. A lever or arm 44 has one end extending into the opening 43 and pivotally connected to the horizontal wing member 30, as by a curl or knuckle 45. Carried by the lever or arm 44, partially about the member 30 is an arcuate cam or friction member 46 movable with the lever upon rotation thereof about the member 30 into and out of frictional engagement with the other clip leg 42.

In use, a bag 23 is arranged within the support 21 having its mouth secured to the upper wing members 30 by the securement members or clips 38. That is, the upper edge portions or mouth region 48 of the bag 23 may be engaged upward between the legs 41 and 42 of the several clips 38 with the latter in their open condition of FIGURE 5, and the arms or levers 44 swung upward to the position of FIGURE 6 wherein the cams 46 effectively serve to frictionally clamp and hold the engaged bag mouth region 48 against the inner clip legs 42, which are knurled or serrated as at 42a to assist in securing the bag against slippage.

In the condition of FIGURES 1 and 2, the wings 22 have been swung away from each other, the wing members 30 being secured to opposite regions of the bag mouth 23 to open the latter. The wing members are at rest in this condition so that the bag remains open as required for receiving waste and the like.

In order to close the mouth of the bag 23, as for sanitation when the bag contains garbage and the like, it is only necessary to swing one of the wings 22 beyond dead center toward the other wing, the condition shown in FIGURE 4, and the wing members are then in a rest position retaining the bag mouth closed.

A bail member 50 may be fixedly secured to one wing member 30, and may be used as a handle to facilitate bringing the distal wing 30 toward the proximal wing. It has also been found convenient to use the bail member 50 as an abutment against which dishes or other containers may be tapped to dislodge refuse.

A slightly modified embodiment of waste-bag holder is shown in FIGURES 8 and 9, and there generally designated 20a, wherein a base or support 21a is adapted to rest on a suitable horizontal supporting surface, and a pair of facing wings 22a and 22b to upstand from the support 21a, and being mounted thereon for relative movement toward and away from each other.

More specifically, the support 21a may include a pair of spaced, inverted generally U-shaped members or end-pieces 25a, rigidly connected together by an elongate side member 26a extending between and secured to the upper regions of the end members 21a.

One wing 22b, the rightward one as seen in FIGURES 8 and 9, may be of inverted, generally U-shaped configuration and upstanding rigidly from the support 21a, being fixedly secured thereto as by having its legs welded or otherwise fastened to the horizontal portion of the end-piece 25a. Below and parallel to support members 25a there are positioned bars 51 extending between and welded to side members 26a.

The leftward wing 22a is of inverted, generally U-shaped configuration having a generally horizontal upper member 30a and depending legs 31a depending from opposite ends of the upper member. Adjacent to and spaced above the lower ends of the wing legs 31a, there are provided outstanding pivots or trunnions 28a respectively rotatably received within the journal-defining portions 57 to mount the leftward wing 22a for swinging movement to move its upper region toward and away from the upper region of the rightward wing 22b.

The legs 31a of the leftward, pivotally mounted wing 22a may depend beneath the journals 57, being there provided with leftward extensions or lever arms 58, which are connected together by a longitudinal actuator or pedal member 59. Suitable resilient means, such as tension springs 60, may be connected between the arms 58 and

side members 26a to urge the actuating member 59 upward and swing the leftward wing 22a toward its closed position adjacent to the fixed rightward wing 22b.

The upper ends of the wings 22a may be provided with suitable securement members or clips 38a, such as those employed in the first-described embodiment. A bag 23a may have a margin along its mouth held by the clips 38a and depend from the upper ends of the wings 22a into the open lower regions thereof.

An attractive receptacle or container 62 may be secured to one of the wings 22a, say the leftward wing, and may be employed to house a tote handle and bag stapler.

In operation, the waste-bag holder 20a is normally closed, as by the action of springs 60 effecting relative closing movement of the wing members. When it is desired to deposit waste or refuse in the bag 23a, the actuating pedal member 59 may be depressed by an operator's foot, see FIGURE 9, to effect relative opening movement of the wings 22a to open the held bag. Release by the operator's foot permits automatic closing of the bag.

When it is desired to remove a bag from the holder of the instant invention, and transport the bag for disposal, the mouth of the bag is first stapled or otherwise sealed, and a carrying device or tote handle 63 may be employed, as shown in FIGURES 10-12. The tote handle may include a pair of open, generally polygonal, handle members 64 extending in crossed relation and pivotally connected together by interconnecting lugs 65 or other suitable means. Extending from the handle members 64 may be gripping hooks 66 movable toward and away from each other upon relative swinging movement of the handle members. The hooks are arranged in facing relation and engageable with the margin around the mouth of a bag to hold the mouth closed and support the bag when the handles are swung toward each other. This affords convenient portability of the bag while retaining the latter safely closed. A resilient band 67 may extend around the handles 64 to yieldingly hold them together.

Although the present invention has been described in some detail by way of illustration and example for purposes of clarity of understanding, it is understood that certain changes and modifications may be made within the spirit of the invention and scope of the appended claims.

What is claimed is:

1. A refuse-bag holder comprising a support, a pair of facing wings upstanding from said support, mounting means mounting said wings for swinging movement of the upper wing regions toward and away from each other, said wings having their lower regions open, and securing means carried by the upper wing regions, whereby a bag is adapted to be secured at its mouth by said securing means for suspension through the lower wing regions and having its mouth closed and opened by swinging movement of said wings, said mounting means comprising pivot means located for swinging movement of an upper wing region over dead center upon movement between closed and open positions for self-retention in said positions.

2. A refuse-bag holder comprising a support, a pair of facing inverted generally U-shaped wing members upstanding from said support, mounting means pivotally mounting at least one wing member for swinging movement of its bight region toward and away from the bight region of the other wing member, and detachable securement means carried by the bight regions of said wing members for releasably holding the mouth of a bag, whereby a bag is adapted to be secured at its mouth by said securement means for suspension through said wing members and having its mouth open and closed by swinging movement of said wing members, said securement means comprising a plurality of friction-cam clips releasably engageable with the mouth of a bag, said clips each comprising a generally U-shaped resilient part having one leg connected to the bight region of a respective wing member, and a cam rotatably carried by the bight region of the respective wing member and configured for

movement upon rotation into and out of frictional engagement with the other leg of said resilient part.

3. A refuse-bag holder comprising a support, a pair of facing inverted generally U-shaped wing members up-
standing from said support, mounting means pivotally
mounting at least one wing member for swinging move-
ment of its bight region toward and away from the bight
region of the other wing member, and detachable secure-
ment means carried by the bight regions of said wing
members for releasably holding the mouth of a bag, 10
whereby a bag is adapted to be secured at its mouth by
said securement means for suspension through said wing
members and having its mouth open and closed by swing-
ing movement of said wing members, said mounting means
being located for swinging movement of a bight wing-
member region over dead center upon movement between 15

closed and open positions for self-retention in said positions.

References Cited by the Examiner

UNITED STATES PATENTS

969,695	9/1910	Holsey	294—118
1,199,001	9/1916	Fellows	248—101
2,269,257	1/1942	Edwards	248—147
2,437,233	3/1948	Smith	248—101
2,459,970	1/1949	Smith	248—101
2,470,271	5/1949	Steinbacher	248—97

FOREIGN PATENTS

70,597	12/1958	France.
16,118	7/1912	Great Britain.

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