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Attorneys for Plaintiff Four Paws Products Ltd.

U.S.	FIL.	S OFFICE COURT E.D	9H
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**BROOKLYN OFFICE** 

UNITED S'	TATES I	DISTRI	CT C	DURT
<b>EASTERN</b>	<b>DISTRI</b>	CT OF	NEW	<b>YORK</b>

FOUR PAWS PRODUCTS LTD., a New York Corporation,

v.

Plaintiff,

ROYAL PET INCORPORATED,

Defendant.

Civil Action No.:

**COMPLAINT** 

JURY TRIAL DEMANDED PLATT, J.

WALL M.J.

# **COMPLAINT**

Plaintiff Four Paws Products Ltd. ("Four Paws") complains against Defendant Royal Pet Incorporated ("Royal Pet") as follows:

# **NATURE OF THIS ACTION**

1. Plaintiff Four Paws brings this action for patent infringement under the Patent Laws of the United States, 35 U.S.C. § 101 et seq.

# **JURISDICTION AND VENUE**

- 2. This is an action for patent infringement arising under the patent laws of the United States (Title 35 of the United States Code). This Court has subject matter jurisdiction of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 3. This Court has personal jurisdiction over Defendant Royal Pet pursuant to CPLR § 302(a) of the New York State Long-Arm Statute and the U.S. Constitution because Defendant is contracting to supply goods in the State of New York and within this judicial district, and otherwise purposefully avails itself of the benefits of this judicial district.
  - 4. Venue is proper in this district pursuant to 28 U.S.C. §§ 1391(b-c) and 1400(b).

# THE PARTIES

- 5. Plaintiff Four Paws is a corporation duly organized and existing under the laws of the State of New York with its principal place of business at 50 Wireless Boulevard, Hauppauge, New York 11788.
- 6. Upon information and belief, Defendant Royal Pet is a corporation having a place of business at 6250 Claude Way East, Inver Grove Heights, MN 55076.

# FACTS COMMON TO ALL COUNTS

# Plaintiff Four Paws' Patent

- 7. On March 19, 1996, United States Patent No. Des. 368,003 (the "'003 Design Patent") issued to Allen Simon for an invention entitled "Litter Retriever." A copy of the '003 Design Patent is attached hereto as Exhibit A.
- 8. On February 11, 1997, United States Patent No. 5,601,321 (the "'321 Patent") issued to Allen Simon for an invention entitled "Litter and Refuse Retrieval Device." A copy of the '321 Patent is attached hereto as Exhibit B.

- 9. On February 20, 2007, United States Patent No. 7,178,843 (the "'843 Patent") was duly and legally issued to several named inventors for an invention entitled "LITTER AND REFUSE RETRIEVAL DEVICE." A copy of the '843 Patent is attached hereto as Exhibit C.
- 10. Four Paws has been assigned the entire right, title, and interest in the '003 Design Patent, the '321 Patent and the '843 Patent (collectively, the "Four Paws Patents"), and is therefore the sole owner of the Four Paws Patents.

# Defendant Royal Pet Incorporated and Its Infringing Activities

- 11. Defendant Royal Pet has been manufacturing, distributing, offering for sale, licensing, leasing, and/or selling litter and refuse retrieval devices in this District and throughout the United States.
- 12. Upon information and belief, Defendant Royal Pet had actual knowledge of the '843 patent, and knowingly and recklessly disregarded Four Paws' patent rights in manufacturing, distributing, offering for sale, licensing, leasing, and/or selling litter and refuse retrieval devices.

# **COUNT I - INFRINGEMENT OF THE '003 DESIGN PATENT**

- 13. Four Paws repeats and realleges each of the allegations in paragraphs 1 through 12 as if fully set forth herein.
- 14. Defendant Royal Pet has been and is now directly infringing one or more claims of the '003 Design Patent by manufacturing, using, selling, licensing, leasing, and/or offering for sale a litter and refuse retrieval device without the authority of Four Paws.
- 15. The litter and refuse retrieval device is sold as the "Spring Action Scooper," under the trademark "Spotty."

- 16. Defendant Royal Pet has been and is now inducing others to infringe one or more of the claims of the '003 Design Patent through its sales and/or offering for sale of its "Spring Action Scooper," without the authority of Four Paws.
  - 17. Four Paws has, and will be damaged and harmed, by Royal Pet's infringement.
- 18. Four Paws will be irreparably harmed unless Royal Pet's infringing activities are enjoined.
  - 19. Four Paws has no adequate remedy at law.

# **COUNT II - INFRINGEMENT OF THE '321 PATENT**

- 20. Four Paws repeats and realleges each of the allegations in paragraphs 1 through 12 as if fully set forth herein.
- 21. Defendant Royal Pet has been and is now directly infringing one or more claims of the '321 Patent by manufacturing, using, selling, licensing, leasing, and/or offering for sale a litter and refuse retrieval device without the authority of Four Paws.
- 22. The litter and refuse retrieval device is sold as the "Spring Action Scooper," under the trademark "Spotty."
- 23. Defendant Royal Pet has been and is now inducing others to infringe one or more of the claims of the '321 Patent through its sales and/or offering for sale of its "Spring Action Scooper," without the authority of Four Paws.
  - 24. Four Paws has, and will be damaged and harmed, by Royal Pet's infringement.
- 25. Four Paws will be irreparably harmed unless Royal Pet's infringing activities are enjoined.
  - 26. Four Paws has no adequate remedy at law.

# **COUNT III - INFRINGEMENT OF THE '843 PATENT**

- 27. Four Paws repeats and realleges each of the allegations in paragraphs 1 through12 as if fully set forth herein.
- 28. Defendant Royal Pet has been and is now directly infringing one or more claims of the '843 Patent by manufacturing, using, selling, licensing, leasing, and/or offering for sale a litter and refuse retrieval device without the authority of Four Paws.
- 29. The litter and refuse retrieval device is sold as the "Spring Action Scooper," under the trademark "Spotty."
- 30. Defendant Royal Pet has been and is now inducing others to infringe one or more of the claims of the '843 Patent through its sales and/or offering for sale of its "Spring Action Scooper," without the authority of Four Paws.
  - 31. Four Paws has, and will be damaged and harmed, by Royal Pet's infringement.
- 32. Four Paws will be irreparably harmed unless Royal Pet's infringing activities are enjoined.
  - 33. Four Paws has no adequate remedy at law.

# PRAYER FOR RELIEF

Four Paws respectfully prays that:

- A. Judgment be entered for Four Paws.
- B. This Court declare that Defendant Royal Pet has infringed the Four Paws Patents.
- C. This Court preliminary and permanently enjoin Defendant Royal Pet, its officers, agents, servants, employees, attorneys, and those persons acting for, with, by, under, in privity with, in active concert with, and in participation with any one of them, from manufacturing, using, selling, licensing, importing, exporting and/or offering for sale the litter and refuse

retrieval device or any product which infringes the Four Paws Patents, and from inducing or contributing to the infringement of the Four Paws Patents.

- D. Defendant Royal Pet be ordered to send written notification to its dealers, distributors, and customers for the accused product(s) of its infringing activities, advising of the entry of the injunction and order set forth above, and requiring that the infringing devices still in inventory be returned to Defendant Royal Pet, and that all infringing activities cease.
- E. This Court require Defendant Royal Pet to account for and pay over to Four Paws all damages sustained by Four Paws including, but not limited to, a reasonable royalty and/or lost profits due by reason of its infringement, such reasonable royalty and/or lost profits to be based on lost sales.
- F. Defendant Royal Pet be required to pay to Four Paws all of its costs and disbursements in this action.
- G. The Court award Four Paws treble damages and attorney's fees for willful infringement.
- H. This Court declare that Four Paws is entitled to such other and further relief as the Court may deem just, proper, and appropriate.

Pursuant to Fed. R. Civ. P. 38(b), Plaintiff demands a trial by jury on all issues triable of right, or operation of law, by jury.

Dated: March 9, 2009

Respectfully Submitted, DARBY & DARBY, P.C.

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New York, NY 10007-0042

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Attorneys for Plaintiff: Four Paws Products Ltd.

Exhibit A

# United States Patent [19]

# Simon

[11] Patent Number: Des. 368,003 [45] Date of Patent: \*\*Mar. 19, 1996

[54]	LITTER	LITTER RETRIEVER					
[75]	Inventor:	Allen Simon, East Northport, N.Y.					
[73]	Assignee:	Four Paws Products, Ltd., Hauppauge, N.Y.					
[**]	Term:	14 Years					
[21]	Appl. No.:	: 31,375					
[22]	Filed:	Nov. 23, 1994					
[52]	U.S. Cl	U.S. Cl D8/4; D30/162					
		earch D8/4; D30/162; 294/1.4, 1.3					
[56]		References Cited					
	U.	S. PATENT DOCUMENTS					
r	0. 351,265 10	0/1994 Pierce D30/162					
	4,247,139 1	/1981 Grieb 294/1.4					

Primary Examiner—A. Hugo word Assistant Examiner—Holly Baynham Attorney, Agent, or Firm—Darby & Darby

1571

**CLAIM** 

The ornamental design for a litter retriever, as shown and described.

## DESCRIPTION

FIG. 1 is a perspective view of a preferred embodiment of the litter retriever;

FIG. 2 is a front elevational view thereof;

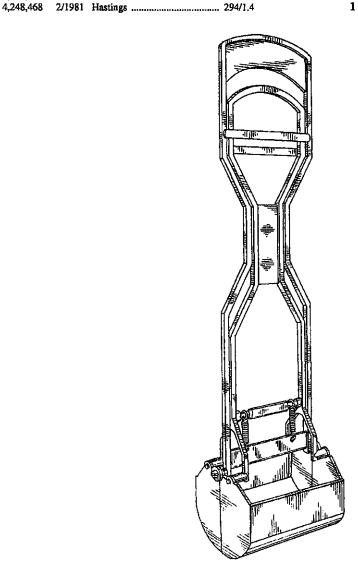
FIG. 3 is a right side elevational view thereof, the left side elevational view being a mirror image of the right side view;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view thereof; and,

FIG. 6 is a rear elevational view thereof.

1 Claim, 4 Drawing Sheets

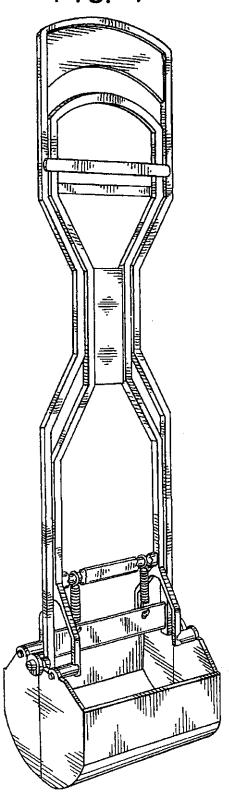


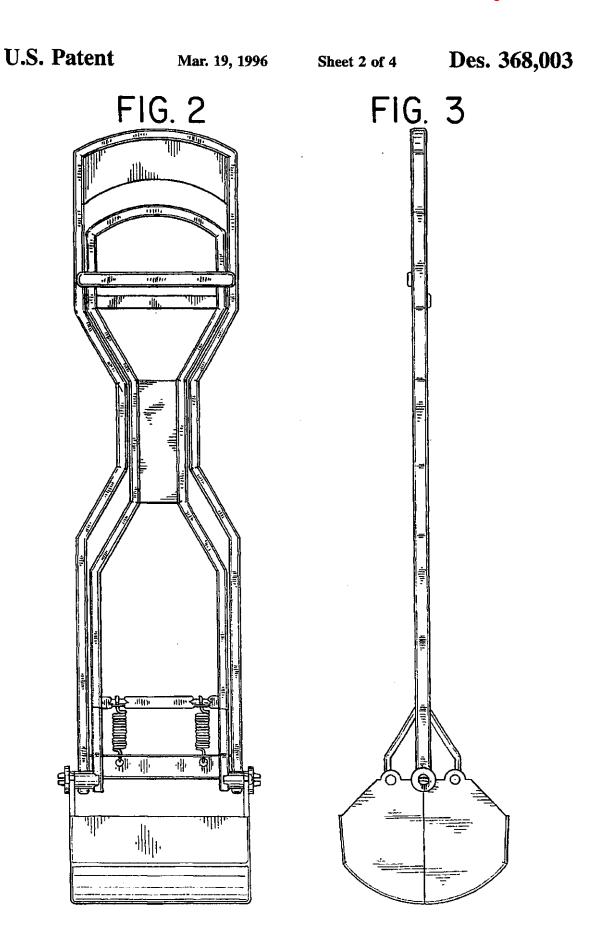
Mar. 19, 1996

Sheet 1 of 4

Des. 368,003

FIG. 1





Mar. 19, 1996 Sheet 3 of 4

Des. 368,003

FIG. 4

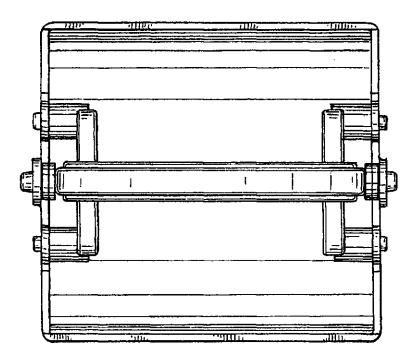
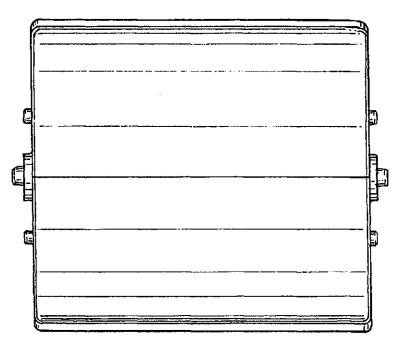


FIG. 5



Mar. 19, 1996

Sheet 4 of 4

Des. 368,003

FIG. 6

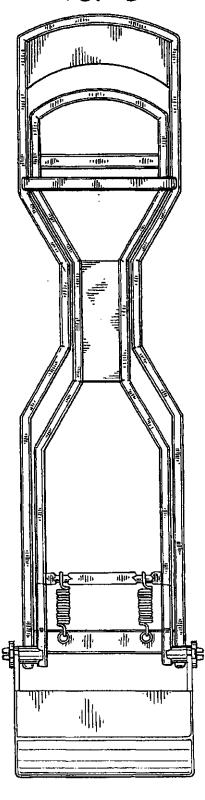


Exhibit B

# United States Patent [19]

Simon

4,005,897

4,247,139 4,248,468

4,477,111

[11] Patent Number:

5,601,321

[45] Date of Patent:

Feb. 11, 1997

2111	ion		
[54]	LITTER	AND 1	REFUSE RETRIEVAL DEVICE
[75]	Inventor:	Aller	Simon, East Northport, N.Y.
[73]	Assignee:	Four N.Y.	Paws Products, Ltd., Hauppauge,
[21]	Appl. No.	: 358,4	187
[22]	Filed:	Nov.	28, 1994
	Re	lated 1	U.S. Application Data
[63]	Continuation No. Des. 3		ut of Ser. No. 31,375, Nov. 23, 1994, Pat.
[51]	Int. Cl.6		A01K 29/00; E01H 1/12
[52]	U.S. Cl		<b>294/1.4</b> ; 294/115
[58]	Field of S	earch	294/1.3-1.5, 19.1,
		294/	50.8, 55, 115, 100; 15/257.1, 257.6, 104.8
[56]		Re	eferences Cited
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	652,077	6/1900	Burson 294/50.8

2/1977 Smith ...... 294/115

2/1981 Hastings ...... 294/115

		Lebeau Lindenberg et al.		
FO	REIGN	PATENT DOCU	MENTS	

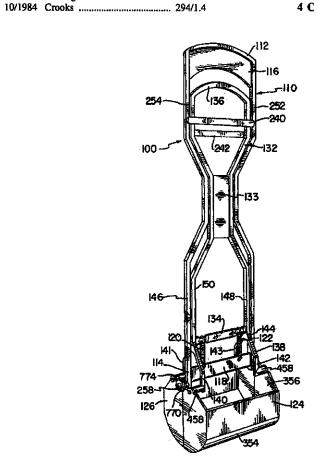
2095156 9/1982 United Kingdom ...... 294/1.4

Primary Examiner—Dean Kramer Attorney, Agent, or Firm—Darby & Darby

#### [57] ABSTRACT

A litter and refuse retrieval device for sanitarily and singlehandedly cleaning up after a pet. The device includes an outer frame having a handle at one end and outer nipples at the other end for pivotally mounting two scoops. Each scoop includes extended disk portions with holes therethrough that overlap with the disk portions of the other scoop placing the holes in alignment for insertion of the outer nipples of the outer frame. An inner control frame is carried by the outer frame and includes linkage arms having outwardly extending cylindrical portions having nipples extending therefrom for pivotally mounting the two scoops adjacent to the outer nipples. In operation, the inner control frame is squeezed by the user toward a stop potion of the outer frame, causing the scoops to pivot in opposite directions. Also provided is a spring biasing mechanism for closing the scoops after the user has released the inner control frame.

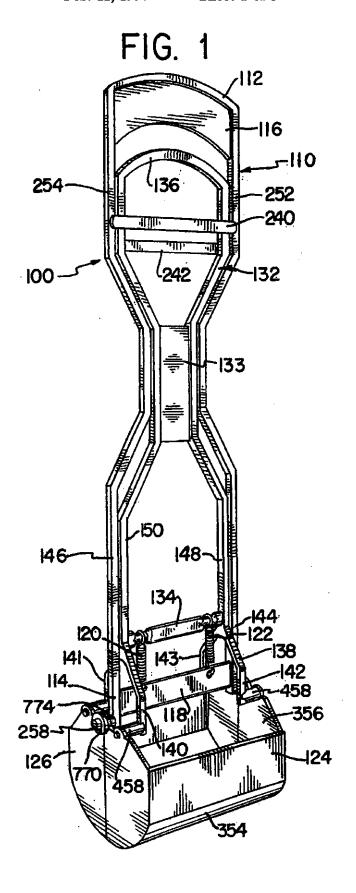
# 4 Claims, 5 Drawing Sheets

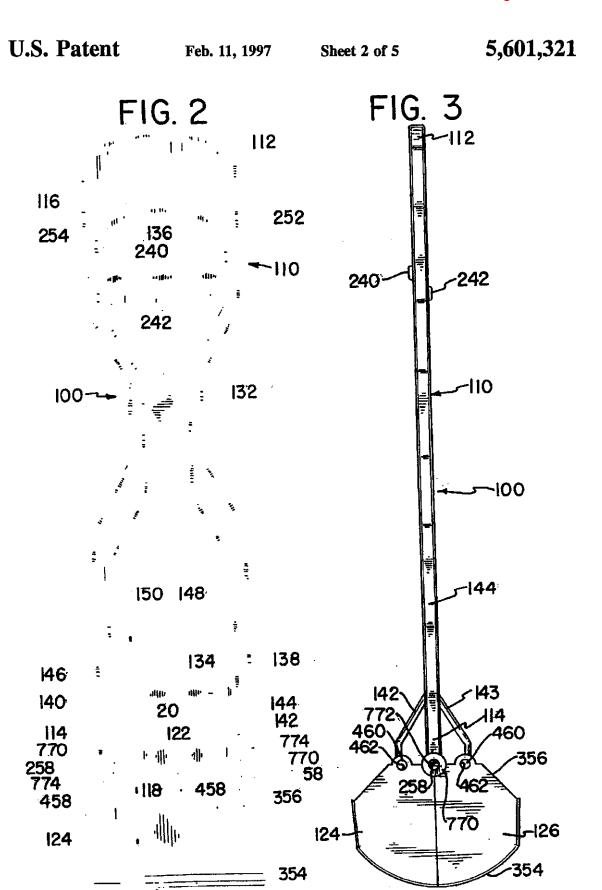


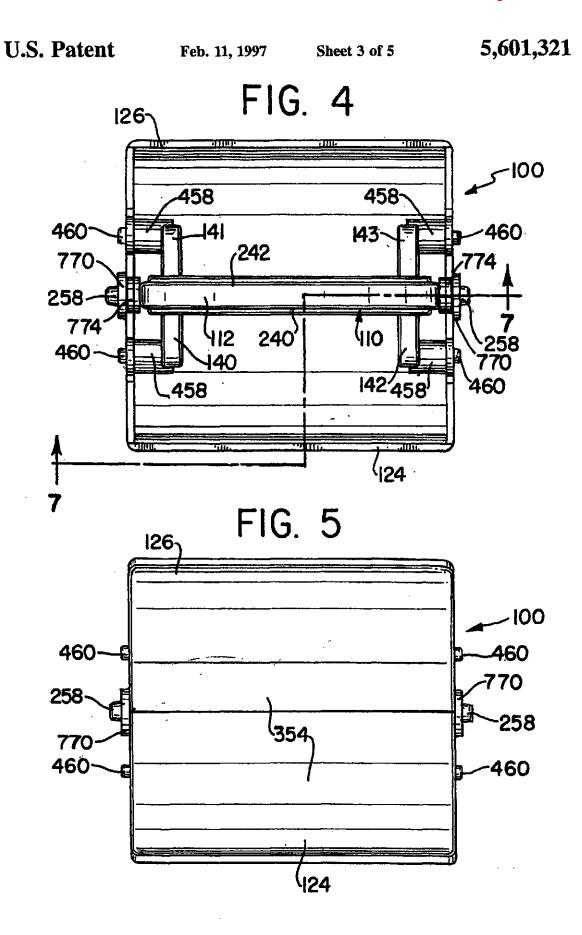
**U.S. Patent** Feb. 11, 1997

Sheet 1 of 5

5,601,321



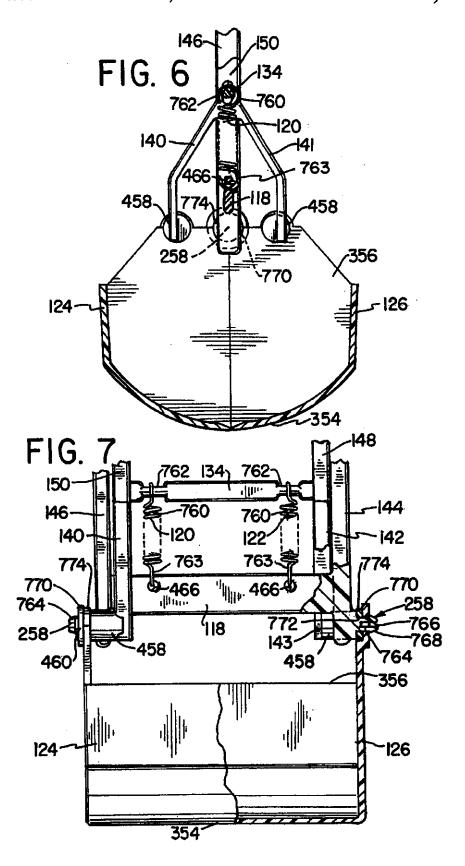




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Sheet 4 of 5

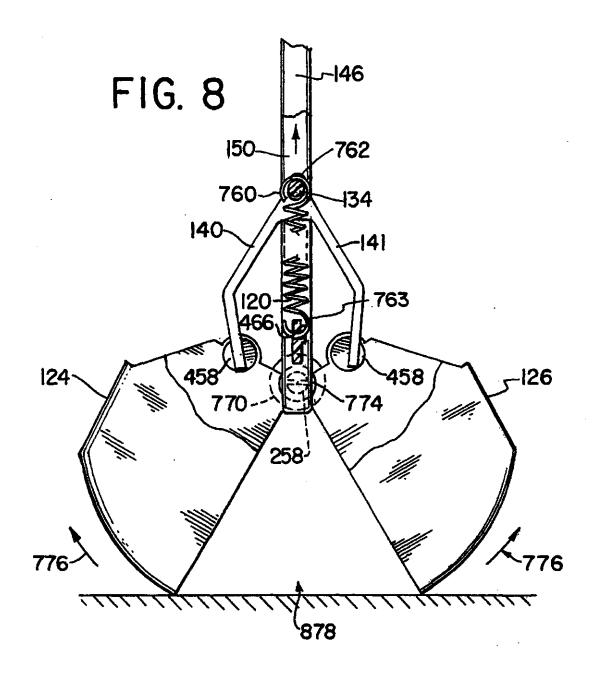
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Feb. 11, 1997

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# 5,601,321

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# 1 LITTER AND REFUSE RETRIEVAL DEVICE

#### CROSS-REFERENCES TO RELATED APPLICATIONS

This is a continuation-in-part of U.S. design patent application Ser. No. 29/031,375 entitled "Litter Retrieval Device" filed Nov. 23, 1994 by inventor Allen Simon now Design U.S. Pat. No. D368,003.

#### FIELD OF THE INVENTION

The present invention relates to a litter and refuse retrieval device. In particular, the present invention relates to a hand activated spring biased "pooper scooper."

#### BACKGROUND OF THE INVENTION

Pet refuse left on a sidewalk or on a street causes sanitary problems, particularly in large urban areas. Many cities have enacted local ordinances requiring that the pet owner clean 20 up after their pets. Such a task is not only unpleasant to perform but may be difficult to perform at the same time as holding a dog by a leash. Therefore, there is a need to provide a device, requiring only single-handed operation, for cleaning up after a pet in a sanitary fashion. Further, since it 25 would be extremely inconvenient to have a device failure in mid-clean up, the device must be strongly constructed, yet must be inexpensive to manufacture.

U.S. Pat. No. 4,248,468 to Hastings discloses one such device. The Hastings patent discloses a litter retrieval appa- 30 ratus formed of an elongated unitary plastic frame having a handle section at one end, scoop-supporting arms at the other end, and an elongated central section having a passageway for receiving a control rod. The control rod extends through the passageway from the handle to the scoops. 35 Linkages connect the lower end of the control rod to the scoops and spring biasing means are provided for biasing the scoops in a closed position. While most of the device can be cheaply made of molded plastic, the patent discloses that the control rod is made of metal, therefore increasing the cost of 40 such a device. Since the control rod is narrow and extends down the length of the handle, it appears that it must be made of metal or another very strong material.

It is an object of the invention to provide an apparatus for retrieving litter that requires only one-handed operation.

It is another object of the invention to provide an inexpensive apparatus for litter retrieval.

Yet another object of the invention is to provide a strong, reliable device.

A litter and refuse retrieval device is provided for sanitarily and single-handedly cleaning up after a pet. The device includes an outer frame having a handle at one end and outer nipples at the other end for pivotally mounting two scoops. Each scoop includes extended disk portions with 55 holes therethrough that overlap with the disk portions of the other scoop placing the holes in alignment for insertion of the outer nipples of the outer frame. An inner control frame is carried by the outer frame and includes linkage arms having outwardly extending cylindrical portions having 60 nipples extending therefrom for pivotally mounting the two scoops adjacent to the outer nipples. In operation, the inner control frame is squeezed by the user toward a stop potion of the outer frame, causing the scoops to pivot in opposite directions. Also provided is a spring biasing mechanism for 65 closing the scoops after the user has released the inner control frame.

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#### BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and other features of the present invention will be more readily apparent from the following derailed description of preferred embodiments taken in conjunction with the attached drawings wherein:

FIG. 1 is a perspective view of the litter retrieval device of the present invention in a closed position;

FIG. 2 is a front elevational view thereof;

FIG. 3 is a right side elevational view thereof;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view thereof;

FIG. 6 is a partial sectional view of the scoop portion and 15 spring mechanism of the present invention, taken along lines 6—6 of FIG. 2;

FIG. 7 is a partial sectional view thereof, taken along lines 7-7 of FIG. 4, illustrating the connection between a scoop portion and frames of the present invention; and

FIG. 8 is a partial sectional view of the scoop portion and spring mechanism similar to FIG. 6 except the invention is shown in an open position.

#### DETAILED DESCRIPTION OF PREFERRED **EMBODIMENTS**

FIG. 1 is a perspective view of a preferred embodiment of the present invention. Referring to FIG. 1, an elongated outer frame 110 is provided having a handle end 112 and a scoop end 114. Two scoops 124 and 126 are pivotally connected to the scoop end 114 of the outer frame 110 by means of outer nipples 764. The outer frame 110 includes an outer brace 118 extending from a first vertical side 144 to a second vertical side 146 for strengthening its scoop end 114 and for securing the lower end of two biasing springs 120 and 122 thereto.

Carried by the outer frame 110 and aligned therewith is an elongated inner control frame 132 having a handle end 136 and a scoop end 138. The inner frame 132 includes an inner brace 134 extending from a first inner vertical side 148 to a second inner vertical side 150 for strengthening the scoop end 138 and for securing the upper end of the two biasing springs 120 and 122.

A rectangular portion 133 is also preferably provided between the first inner vertical side 148 and the second inner vertical side 150 at the central portion of the inner control frame 132 for providing additional strength to the inner control frame 132.

Included at the scoop end 138 of the inner control frame 132 is a pair of linkage arms 140 and 141 for flexibly and pivotally connecting one side of each scoop 124 and 126 to one side of the inner control frame 132. A second pair of linkage arms 142 and 143 is provided for flexibly and pivotally connecting the other side of each scoop 124 and 126 to the other side of the inner control frame.

The inner control frame 132 can be moved upwardly against the force of biasing springs 120 and 122, until the handle end 136 of the inner control frame 132 meets a stop portion 116 of outer frame 112.

The entire device 100, except for the biasing springs 120 and 122, is preferably made from a hard plastic material with the linkage arms 140, 141, 142, and 143 at least slightly flexible for reasons that will be described later. The device 100 is therefore inexpensive to manufacture, yet strong so that is it not easily broken. Further, the plastic material can be easily cleaned.

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FIG. 2 illustrates the front elevational view of the preferred embodiment of the present invention. The outer frame 110 is in the form of a flat hour-glass like shape with the inner control frame 132 being similarly shaped but sized to fit within the outer frame 110.

The inner control frame 132 maintains its alignment within the outer frame 110 by means of first and second alignment members 240 and 242 extending between both sides of the outer frame 110. As shown, the first alignment member 240 is attached to the front of two top vertical 10 members 252 and 254 of the outer frame 110, while the second alignment members are similarly attached to the rear.

FIG. 3 is a right side view of the preferred embodiment of the present invention further illustrating certain of the features of the invention. As described above, the linkage arms 15 142 and 143 provide connectivity between the inner control frame 132 and the scoops 124 and 126. The linkage arms 142 and 143 outwardly and downwardly extend in an acute angle for a distance from the inner control frame 132, in opposite directions and are preferably integral with the inner 20 control frame 132. The two linkage arms 142 and 143 then extend vertically for a short distance so that each linkage arm 142 and 143 can be pivotally connected to a scoop, linkage arm 142 being connected to the right end of scoop 126 and linkage arm 143 being connected to the right end of 25 the scoop 124. Linkage arms 140 and 141 (shown in FIG. 1) are similarly connected to the left end of scoops 124 and 126 respectively.

The scoops 124 and 126 are formed to mate with each other. As illustrated in FIG. 3 with device 100 in a closed position, the scoops 124 and 126 mate so that they form a container having a closed bottom 354 and an open top 356. The scoops 124 and 126 are connected at central pivot points 258 that also connect both scoops 124 and 126 to the outer frame 110. As will be described in further detail later in connection with FIG. 8, when a user pulls inner control frame 132 upwardly toward the stop portion 116, the linkage arms 142 and 143 cause the scoops 124 and 126 to pivot in opposite directions, opening the bottom portion 354.

FIG. 4 shows the top view of the present invention in a closed position. As illustrated, the top portion 356 of the container formed by the mating of the two scoops 124 and 126 is open.

Also clearly illustrated is the connection between the 45 linkage arms 140–143 to the scoops 124 and 126. Each of the linkage arms 140–143 include a cylindrical portion 458 having a nipple 460 extending therefrom with the cylindrical portion 458 and nipple 460 extending towards the side of a scoop 124 or 126. Each of the scoops 124 and 126 include a right and left receiving hole 462 and 464, positioned adjacent to the central pivot point 258, dimensioned to receive a nipple 460. The nipples 460 inserted in their respective receiving holes 462 (See FIG. 3) provide the pivotability of the scoops 124 and 124 on the linkage arms 55 140–143.

Referring now to FIG. 5, the bottom view of the preferred embodiment in a closed position is shown. The two scoops 124 and 126 mate so as to form a container. The scoops 124 and 126 are tightly mated in the closed position as a result 60 of the biasing springs 120 and 122 as more clearly illustrated in FIG. 6. Referring to FIG. 6, the biasing springs 120 and 122 bias the inner control frame 132 in a down or closed position by pulling the inner brace 134 toward the outer brace 118. In this position, the linkage arms 140-143 push 65 down on the cylindrical portions 458 thus keeping them in alignment with pivot points 258 and tightly mating the

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scoops 124 and 126. As is evident, the container formed by scoops 124 and 126 in the closed position has a rounded bottom portion 354.

Referring now to FIG. 7, biasing springs 120 and 122 are secured at the top by looping their respective top loop portions 760 around notched portions 762 of the inner brace 134. Further, the biasing springs 120 and 122 are secured at the bottom by looping their respective bottom loop portions 763 through holes 466 positioned in the outer brace 118. Each hole 466 is positioned adjacent to one of the vertical sides 148 and 150 of the inner control frame 132 and directly below a notched portion 762 so that biasing springs 120 and 122 are substantially parallel to each other and in spaced relationship.

Each of the scoops 126 and 124 include complementary extending disk portions 770 and 774 respectively, each having holes 772 therethrough (more clearly shown in FIG. 1). These disk portions 770 and 774 overlap, and their corresponding holes 772 align when the scoops 124 and 126 are mated. The outer frame 110 is connected to each of the scoops 124 and 126 by means of two outwardly extending outer nipples 764 that are preferably integral with the outer frame 110. The outer nipples 764 have a split portion 766 and shoulder portions 768. Each of the outer nipples 764 are passed through the holes 772 and are secured in place, the shoulder portions 768 extending beyond the holes 772 thus locking the outer nipples 764 in place. The split portion 766 provides flexibility to the outer nipples 764 so that the outer nipples 764 and corresponding shoulder portions 768 are easily passed through the holes 772. Once secured, the scoops 124 and 126 may be pivoted in opposite directions on the outer nipples 764.

FIG. 8 illustrates the preferred embodiment of the present invention in an open position. Referring now to both FIG. 8 and FIG. 1, to place the device in this position, a user squeezes the inner control frame 132 with one hand toward the stop portion 116 of the outer frame 110. In doing so, outer frame 110 forces the outer nipples 764 in a downward direction while the inner control frame 132 pulls up on the linkage arms 140–143, causing the scoops 124 and 126 to pivot on the nipples 764 in opposite directions as indicated by the arrows 776. Note that the linkage arms 140–143 flex inwardly as the device is being opened.

When the user releases the inner control frame 132, the biasing springs 120 and 122 pull the outer frame 110 and the inner control frame 132 back to their original positions by means of the inner brace 134 and the outer brace 118.

In operation, the user squeezes the inner control frame 132 in the manner described above. The user then places the now open portion 878 over the refuse to be picked up. The user then releases the inner control frame 132, allowing the scoops 124 and 126 to close, scooping up the refuse in the process.

While the present invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention.

What is claimed is:

- 1. A refuse retrieval device comprising:
- an elongated outer frame member having a handle at one end and mounting means at another end;
- an elongated inner frame member carried by the outer frame member having a handle at one end and two pair of linkage arms at another end, said linkage arms integrally formed with said inner frame member;

5,601,321

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- a pair of scoop means having a first end and a second end, the first end and the second end being pivotally mounted on the mounting means, each end of the scoop means also pivotally connected to one pair of the linkage arms; and
- a spring biasing mechanism connected to the inner frame member and the outer frame member for biasing the pair of scoops in a closed position.
- The refuse retrieval device of claim 1 further comprising:
  - alignment means connected to the outer frame member for aligning the inner frame member with the outer frame member.
- 3. The refuse retrieval device of claim 1 wherein the spring biasing mechanism comprises:
  - a first brace connected between a first and second side of the inner frame member;

a second brace connected between a first and second side of the outer frame member; and

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- a pair of springs connected between the first brace and the second brace one of the springs substantially parallel to the other spring.
- 4. The refuse retrieval device of claim 1 wherein each of the scoop means has an extended portion at each end, each extended portion having a hole therethrough for mounting on the mounting means, the extended portions of each scoop overlappingly positioned with the extended portions of the other scoop so that the hole in each extended portion at each end of one scoop is in alignment with a corresponding hole in the extended portion at each end of the other scoop.

\* \* \* \* \*

Exhibit C

# (12) United States Patent

(10) Patent No.: US 7,178,843 B2 (45) Date of Patent: Feb. 20, 2007

(54)	LITTER A	AND REFUSE RETRIEVAL DEVICE				
(75)	Inventor:	Barry Askinasi, Mt. Sinai, NY (US)				
(73)	Assignee:	Four Paws Products, Ltd., Hauppauge, NY (US)				
(*)	Notice:	Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.				
(21)	Appl. No.:	10/693,826				
(22)	Filed:	Oct. 23, 2003				
(65)		Prior Publication Data				
	US 2004/0130169 A1 Jul. 8, 2004					
Related U.S. Application Data						
(60)	Provisiona 23, 2002.	al application No. 60/420,497, filed on Oct.				
(51)	Int. Cl. A01K 29/0 E01H 1/1	99 (2006.01) 2 (2006.01)				
(52)	U.S. Cl					
(58)	24/6	Classification Search				
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4,005,897 A \*

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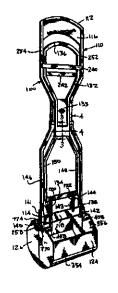
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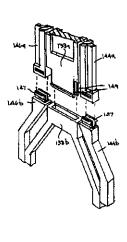
	5,503,442	A	٠	4/1996	Lee		294/1.4
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(57) ABSTRACT

A litter and refuse retrieval device is provided for sanitarily and single-handedly cleaning up after a pet. The device includes an outer frame having an upper and a lower portion and an inner frame also having an upper and a lower portion. The upper and lower portions of the respective frames can be connected together to form the assembled retrieval device by interlocking prongs with respective prong receiving openings. The device further includes an outer frame having a handle at one end and outer nipples at the other end for pivotally mounting two scoops. Each scoop includes extended disk portions with holes therethrough that overlap with the disk portions of the other scoop placing the holes in alignment for insertion of the outer nipples of the outer frame. An inner control frame is carried by the outer frame and includes linkage arms having outwardly extending cylindrical portions having nipples extending therefrom for pivotally mounting the two scoops adjacent to the outer nipples. In operation, the inner control frame is squeezed by the user toward a stop potion of the outer frame, causing the scoops to pivot in opposite directions. Also provided is a spring biasing mechanism for closing the scoops after the user has released the inner control frame.

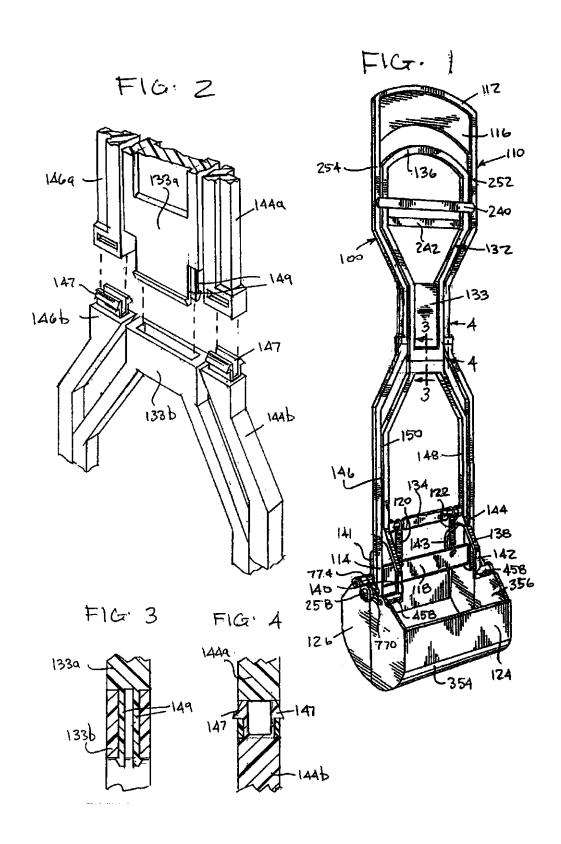
## 7 Claims, 1 Drawing Sheet





Feb. 20, 2007

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#### LITTER AND REFUSE RETRIEVAL DEVICE

The present application claims the benefit of U.S. patent application No. 60/420,497, filed Oct. 23, 2002, which is hereby incorporated by reference in its entirety.

#### FIELD OF THE INVENTION

The present invention relates to a litter and refuse retrieval device. In particular, the present invention relates to a hand 10 of the present invention in a closed position; activated spring biased "pooper scooper" of the type disclosed in U.S. Pat. No. 5,601,321 which is incorporated herein by reference.

### BACKGROUND OF THE INVENTION

Pet refuse left on a sidewalk or on a street causes sanitary problems, particularly in large urban areas. Many cities have enacted local ordinances requiring that the pet owner clean up after their pets. Such a task is not only unpleasant to 20 perform but may be difficult to perform at the same time as holding a dog by a leash. Further, since it would be extremely inconvenient to have a device failure in mid-clean up, the device must be strongly constructed, yet must be inexpensive to manufacture and package for the consumer. 25 Therefore, there is a need to provide a device, requiring only single-handed operation, for cleaning up after a pet in a sanitary fashion that is also easily assembled and packaged.

U.S. Pat. No. 4,248,468 to Hastings discloses one such device. The Hastings patent discloses a litter retrieval appa- 30 ratus formed of an elongated unitary plastic frame having a handle section at one end, scoop-supporting arms at the other end, and an elongated central section having a passageway for receiving a control rod. The control rod extends through the passageway from the handle to the scoops. 35 Linkages connect the lower end of the control rod to the scoops and spring biasing means are provided for biasing the scoops in a closed position. While most of the device can be cheaply made of molded plastic, the patent discloses that the control rod is made of metal, therefore increasing the cost of 40 such a device. Since the control rod is narrow and extends down the length of the handle, it appears that it must be made of metal or another very strong material.

It is an object of the invention to provide an apparatus for retrieving litter that requires only one-handed operation that 45 is strong and reliable yet is also inexpensive to manufacture and package.

#### SUMMARY OF THE INVENTION

A litter and refuse retrieval device is provided for sanitarily and single-handedly cleaning up after a pet. The device includes an outer frame having an upper and a lower portion and an inner frame having an upper and a lower portion. The upper and lower portions of the respective 55 frames can be connected together to form the assembled retrieval device by interlocking prongs with prong receiving openings. The device further includes an outer frame having a handle at one end and outer nipples at the other end for pivotally mounting two scoops. Each scoop includes 60 extended disk portions with holes therethrough that overlap with the disk portions of the other scoop placing the holes in alignment for insertion of the outer nipples of the outer frame. An inner control frame is carried by the outer frame and includes linkage arms having outwardly extending 65 cylindrical portions having nipples extending therefrom for pivotally mounting the two scoops adjacent to the outer

nipples. In operation, the inner control frame is squeezed by the user toward a stop potion of the outer frame, causing the scoops to pivot in opposite directions. Also provided is a spring biasing mechanism for closing the scoops after the user has released the inner control frame.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the litter retrieval device

FIG. 2 is an exploded perspective view showing how the upper and lower portions of their respective inner and outer frame members are assembled;

FIG. 3 is a sectional view taken along lines 3—3 of FIG. 15 1; and

FIG. 4 is a sectional view taken along the line 4-4 of FIG. 1, illustrating the connection between a scoop portion and frames of the present invention.

#### DETAILED DESCRIPTION OF PREFERRED **EMBODIMENT**

FIG. 1 is a perspective view of a preferred embodiment of the present invention. Referring to FIG. 1, an elongated outer frame 110 is provided having a handle end 112 and a scoop end 114. Two scoops 124 and 126 are pivotally connected to the scoop end 114 of the outer frame 110 by means of outer nipples 774. The outer frame 110 includes an outer brace 118 extending from a first vertical side 144 to a second vertical side 146 for strengthening its scoop end 114 and for securing the lower end of two biasing springs 120 and 122 thereto.

Carried by the outer frame 110 and aligned therewith is an elongated inner control frame 132 having a handle end 136 and a scoop end 138. The inner frame 132 includes an inner brace 134 extending from a first inner vertical side 148 to a second inner vertical side 150 for strengthening the scoop end 138 and for securing the upper end of the two biasing springs 120 and 122.

A rectangular portion 133 is also preferably provided between the first inner vertical side 148 and the second inner vertical side 150 at the central portion of the inner control frame 132 for providing additional strength to the inner control frame 132.

Included at the scoop end 138 of the inner control frame 132 is a pair of linkage arms 140 and 141 for flexibly and pivotally connecting one side of each scoop 124 and 126 to one side of the inner control frame 132. A second pair of 50 linkage arms 142 and 143 is provided for flexibly and pivotally connecting the other side of each scoop 124 and 126 to the other side of the inner control frame.

The inner control frame 132 can be moved upwardly against the force of biasing springs 120 and 122, until the handle end 136 of the inner control frame 132 meets a stop portion 116 of outer frame 112.

The entire retrieval device, except for the biasing springs 120 and 122, is preferably made from a hard plastic material with the linkage arms 140, 141, 142, and 143 at least slightly flexible. The device is therefore inexpensive to manufacture, yet strong so that is it not easily broken. Further, the plastic material can be easily cleaned.

The inner control frame 132 maintains its alignment within the outer frame 110 by means of first and second alignment members 240 and 242 extending between both sides of the outer frame 110. As shown, the first alignment member 240 is attached to the front of two top vertical 3

members 252 and 254 of the outer frame 110, while the second alignment members are similarly attached to the rear.

The linkage arms 142 and 143 connect the inner control frame 132 and the scoops 124 and 126. The linkage arms 142 and 143 outwardly and downwardly extend in an acute 5 angle for a distance from the inner control frame 132, in opposite directions and are preferably integral with the inner control frame 132. The two linkage arms 142 and 143 then extend vertically for a short distance so that each linkage arm 142 and 143 can be pivotally connected to a scoop, 10 linkage arm 142 being connected to the right end of scoop 126 and linkage arms 143 being connected to the right end of the scoop 124. Linkage arms 140 and 141 (shown in FIG. 1) are similarly connected to the left end of scoops 124 and 126 respectively.

The scoops 124 and 126 are formed to mate with each other so that they form a container having a closed bottom 354 and an open top 356. The scoops 124 and 126 are connected at central pivot points 258 that also connect both scoops 124 and 126 to the outer frame 110. When a user 20 pulls inner control frame 132 upwardly toward the stop portion 116, the linkage arms 142 and 143 cause the scoops 124 and 126 to pivot in opposite directions, opening the bottom portion 354. The structure and operation is fully described in U.S. Pat. No. 5,601,321.

According to the invention, the outer frame 110 and the inner frame 132 are each divided into upper and lower portions which can be connected together to form the assembled retrieval device. This enables the device to be packaged in a smaller package and thus occupy less shelf space when it is sold.

Specifically, referring to FIG. 2, the vertical sides 144 and 146 of outer frame 110 include upper and lower portions 144a, 144b and 146a, 146b. The lower portions 144b and 146b include integrally molded resilient prongs 147 which can be snap fit into the open bottom portions of the legs 144a and 146a (FIG. 4) to assemble a complete outer frame.

Likewise, the rectangular portion 133 of the inner control frame 132 includes an upper section 133a and a lower section 133b. In this case, it is the upper section 133a which includes prongs 149, integrally molded therewith, which are adapted to be latched into place within an opening in the lower portion 133b (FIG. 3). This arrangement enables the refuse retrieval device to be sold in two separate parts. The parts can be packaged side by side so that the overall length of the required package is about half of what would be required if it was necessary to package the fully assembled device.

While the present invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form from the spirit and scope of the invention.

# What is claimed is:

- A frame for a refuse retrieval device comprising: an upper end of said frame and a lower end of said frame; said lower end of said frame including refuse retrieval 60 scoop means;
- the frame including an outer frame member having at least one outer frame upper portion and at least one outer frame lower portion;
- at least one outer prong disposed on one of said at least 65 one outer frame upper portion and said at least one outer frame lower portion;

- at least one prong receiving opening disposed on the other of said at least one outer frame upper portion and said at least one outer frame lower portion opposite said prong;
- the frame further including an inner frame member having at least one inner frame upper section and at least one inner frame lower section;
- at least one inner prong disposed on one of said at least one inner frame upper section and said at least one inner frame lower section;
- at least one prong receiving opening disposed on the other of said at least one inner frame upper section and said at least one inner frame lower section opposite said prong; and
- wherein at least one of the inner and outer frame is movable with respect to the other frame.
- 2. The refuse retrieval device of claim 1 wherein when said at least one outer prong is disposed on said lower portion of said outer frame, at least one inner prong is disposed on said upper section of said inner frame.
- 3. The refuse retrieval device of claim 1, wherein said at least one outer prong is integrally formed with said outer frame.
- 4. The refuse retrieval device of claim 1, wherein said at 25 least one inner prong is integrally formed with said inner frame.
- 5. The frame for a refuse retrieval device of claim 1, wherein said at least one outer prong includes two prongs disposed on opposite sides of the lower portion of the outer 30 frame.
  - 6. A refuse retrieval device comprising:
  - an outer frame member and an inner frame member wherein at least one of the inner and outer frame is movable with respect to the other frame;
  - said outer and inner frame members adapted to cooperate with one another and being connected to form a frame having an upper end and a lower end;
  - refuse retrieval scoop means connected to said refuse retrieval device at the lower end of said frame;
  - said outer frame member comprising:
    - at least one outer frame upper portion and at least one outer frame lower portion;
    - at least one prong disposed on one of said at least one outer frame upper portion and said at least one outer frame lower portion;
    - at least one prong receiving opening disposed on the other of said at least one outer frame upper portion and said at least one outer frame lower portion opposite said prong;
    - whereby the upper and lower portions of the frame can be locked together by engagement of said prong and prong receiving opening;
  - said inner frame member comprising:

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- at least one inner frame upper section and at least one inner frame lower section;
- at least one prong disposed on one of said at least one inner frame upper section and said at least one inner frame lower section;
- at least one prong receiving opening disposed on the other of said at least one inner frame upper section and said at least one inner frame lower section opposite said prong; and
- whereby the upper and lower sections of the frame can be locked together by engagement of said prong and prong receiving opening.
- 7. A refuse retrieval device comprising: an outer frame member comprising:

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- at least one upper portion and at least one lower portion;
- at least one prong disposed on one of said at least one upper portion and said at least one lower portion;
- at least one prong receiving opening disposed on one of 5 said at least one upper portion and said at least one lower portion opposite said prong;
- whereby the upper and lower portions of the frame can be locked together by engagement of said prong and prong receiving opening;
- an inner frame member comprising:
  - at least one upper section and at least one lower section;
  - at least one prong disposed on one of said at least one upper section and said at least one lower section;
  - at least one prong receiving opening disposed on one of 15 said at least one upper section and said at least one lower section opposite said prong;
  - whereby the upper and lower sections of the frame can be locked together by engagement of said prong and prong receiving opening;
- said outer frame member further including a handle at one end and mounting means at another end;
- said inner frame member carried by the outer frame member having a handle at one end and two pair of linkage arms at another end, said linkage arms integrally formed with said inner frame member.
- a scoop means having a first end and a second end, said first end and said second end being pivotally mounted

on said mounting means, each end of the scoop means also pivotally connected to one pair of the linkage arms;

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- a spring biasing mechanism connected to said inner frame member and said outer frame member for biasing the scoop means in a closed position, said spring biasing member comprising:
  - a first brace connected to between a first and second side of said inner frame member;
  - a second brace connected to between a first and second side of said outer frame member; and
  - a pair of springs connected between the first brace and the second brace with one of the springs being substantially parallel to the other;
- alignment means connected to said outer frame member for aligning the inner frame member with said outer frame member; and
- said scoop means having a pair of scoops and an extended portion at each end, each extended portion having a hole therethrough for mounting on the mounting means, the extended portions of each scoop overlappingly positioned with the extended portions of the other scoop so that the hole in each extended portion at each end of one scoop is in alignment with a corresponding hole in the extended portion at each end of the other scoop.

\* \* \* \* \*