United States Patent [19]

Wetzler

[11] **3,767,247**

[45] **Oct. 23, 1973**

[54] **PORTABLE COLLECTOR FOR DROPPINGS**

[76] Inventor: **Dallas G. Wetzler,** 1575 Bluff Dr., Florissant, Mo. 63031

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[21] Appl. No.: **234,078**

[52] **U.S. Cl.** ..... **294/1 R,** 15/104.8, 15/257.1, 294/16, 294/28

[51] **Int. Cl.** **A01k 29/00,** A47l 13/52

[58] **Field of Search** ..... 294/1 R, 16, 19 R, 294/28, 55; 15/104.8, 236 R, 257.1, 257.6; 206/47 R, 53; 229/55, 66; 119/1 R

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Primary Examiner—Evon C. Blunk
Assistant Examiner—Johnny D. Cherry
Attorney—Rey Eilers

[57] **ABSTRACT**

A readily-flexible, tear-resistant, bag-like receptacle has the open end thereof telescoped along the outer surface of that bag-like receptacle in a direction toward the closed end of that bag-like receptacle to cause a portion of that bag-like receptacle to lie in inverted condition over a further portion of that bag-like receptacle and thereby form an opening-defining fold. A manually-manipulable device is disposed at least partly inwardly of the inverted-condition portion of the bag-like receptacle, it is small enough to fit wholly within that bag-like receptacle, and it can be opened to accommodate a dropping. Thereafter, the free end of the bag-like receptacle can be telescoped along the outer surface of that bag-like receptacle in a direction away from the closed end of that bag-like receptacle and beyond the position occupied by the opening-defining fold to dispose the previously-exposed surface of the inverted-condition portion of that bag-like receptacle wholly at the interior of that bag-like receptacle.

31 Claims, 24 Drawing Figures

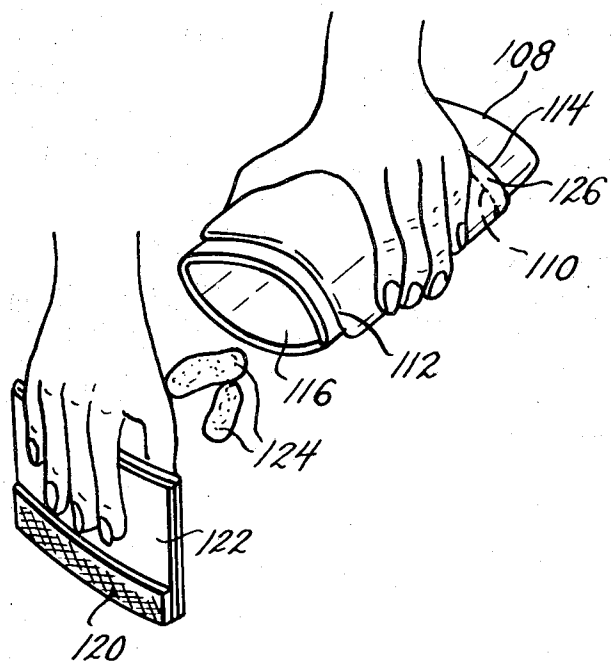


FIG. 1.

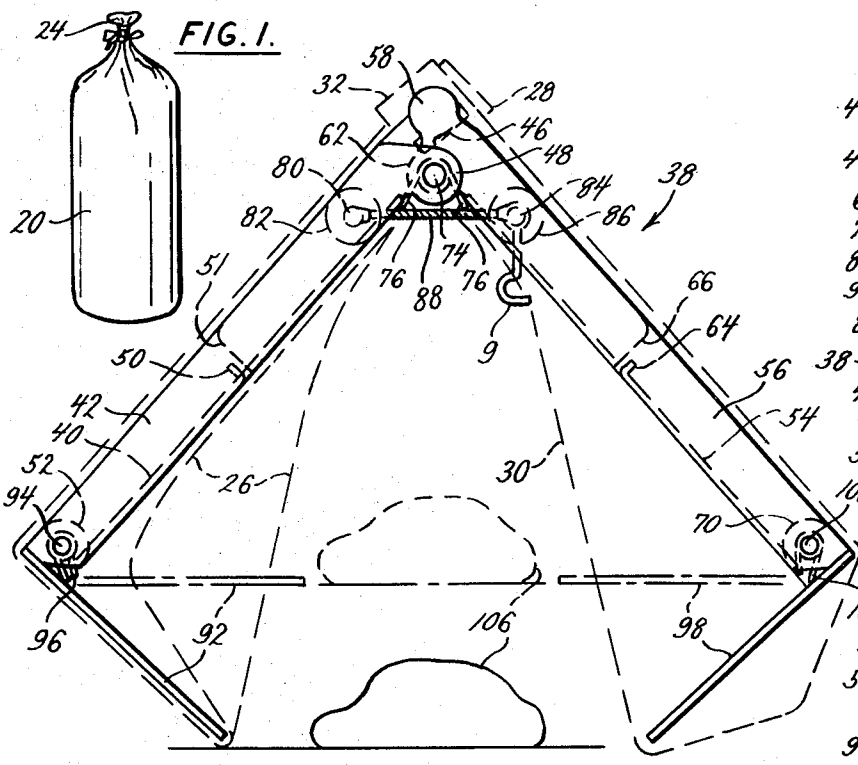


FIG. 5.

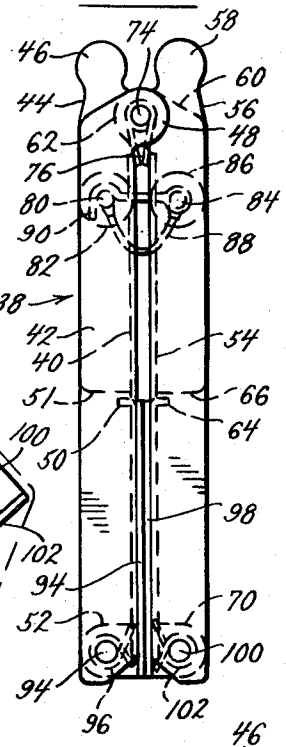


FIG. 3.

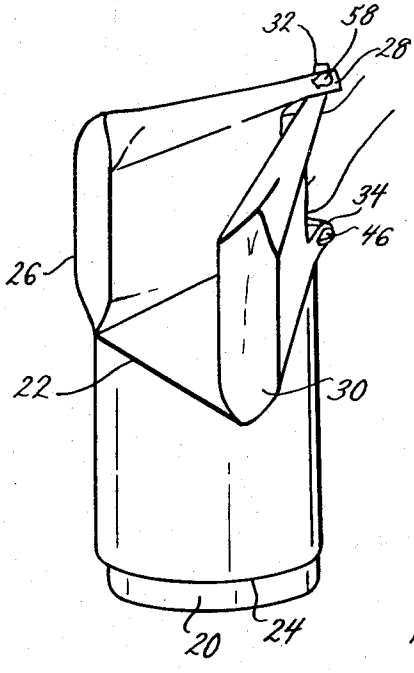


FIG. 2.

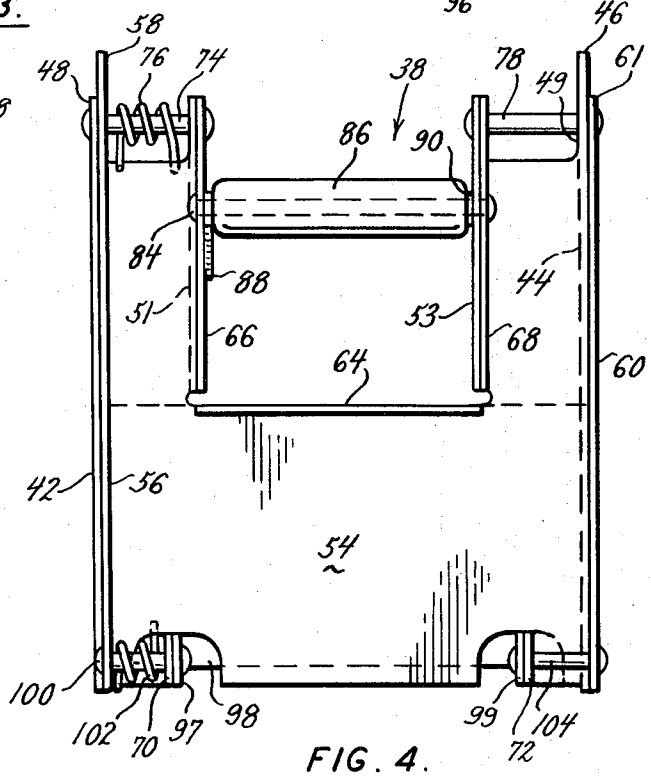


FIG. 4.

FIG. 10

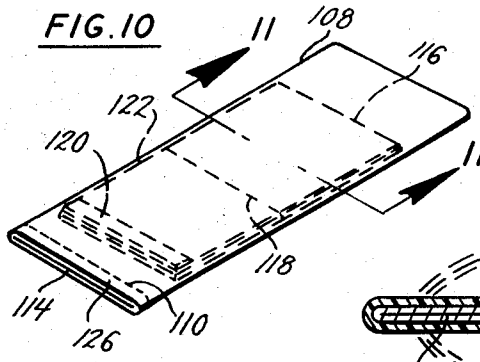
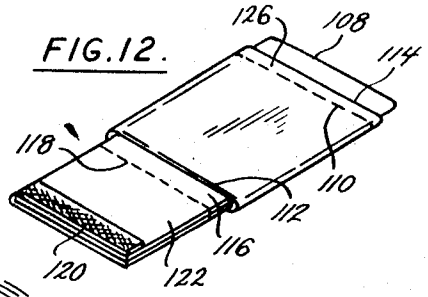


FIG. 12.



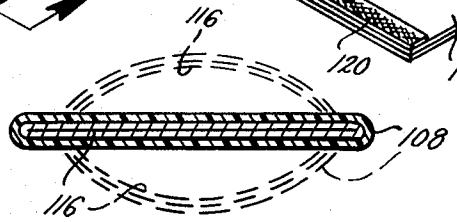


FIG. 11.

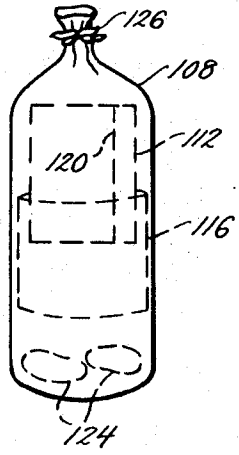


FIG. 14.

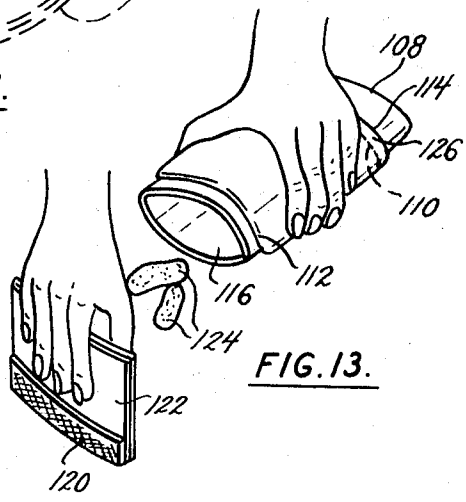
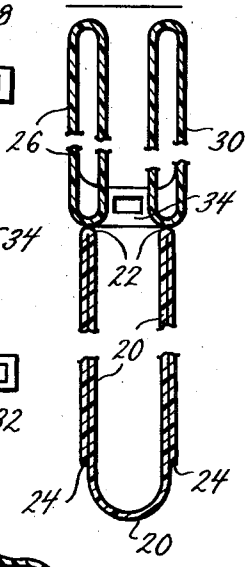


FIG. 13.

FIG. 7.



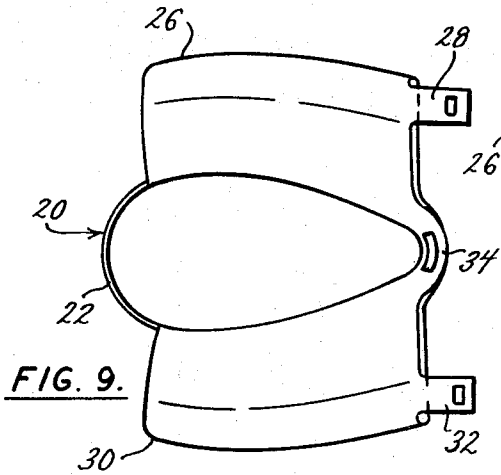


FIG. 9.

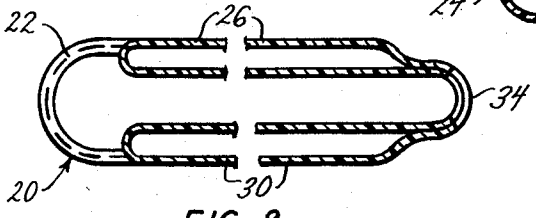


FIG. 8.

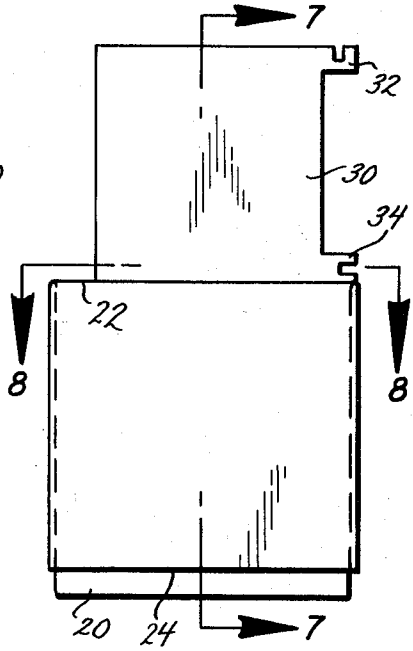


FIG. 6.

FIG. 20.

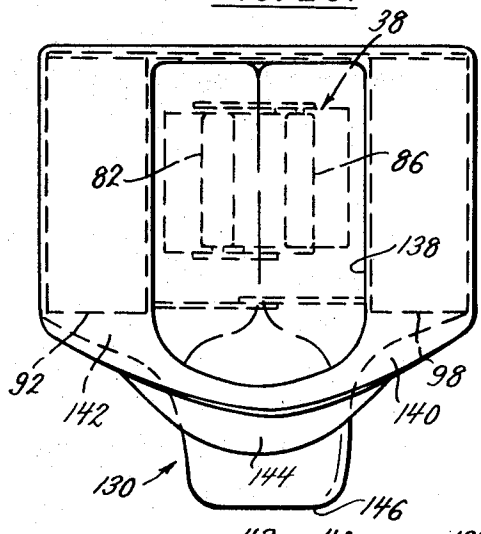
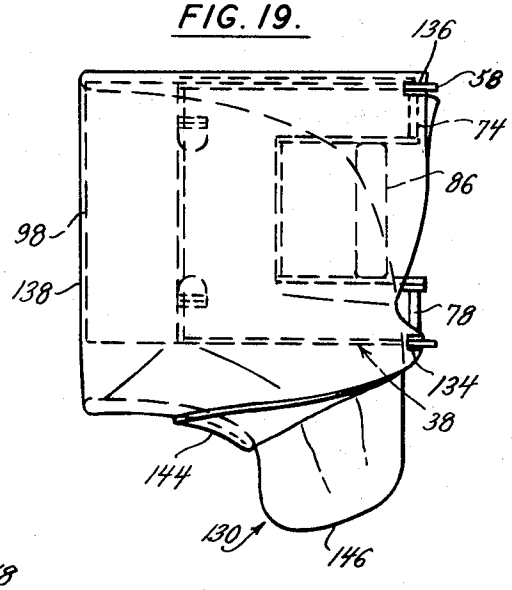


FIG. 19.



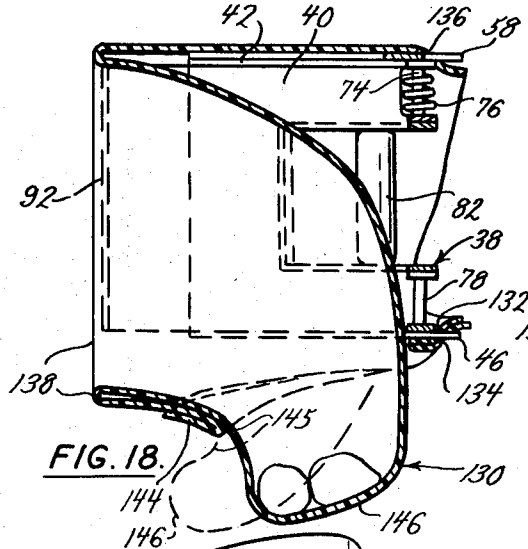


FIG. 18.

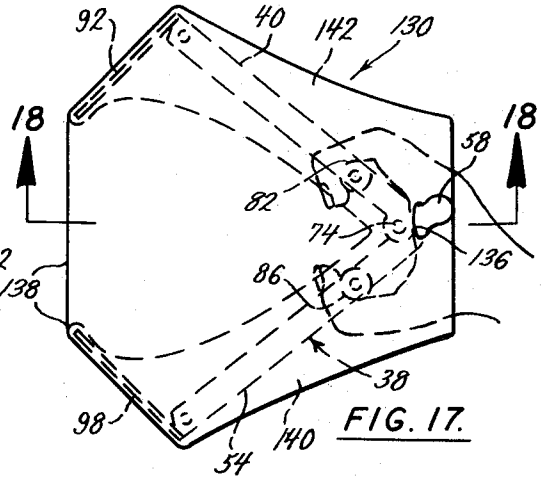


FIG. 17.

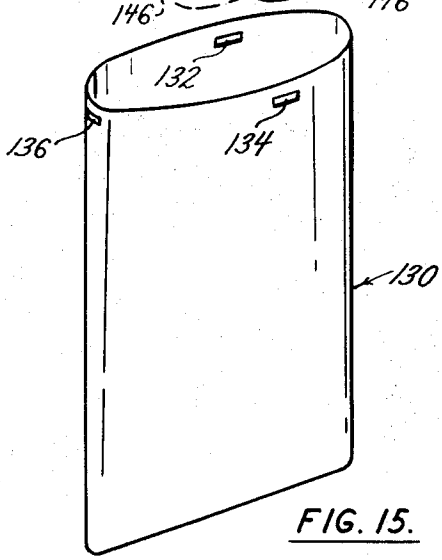


FIG. 15.

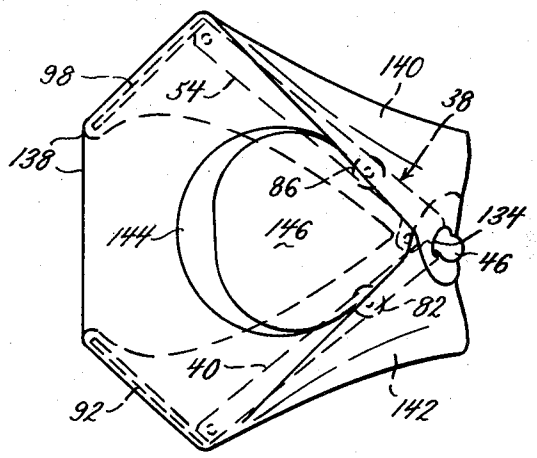
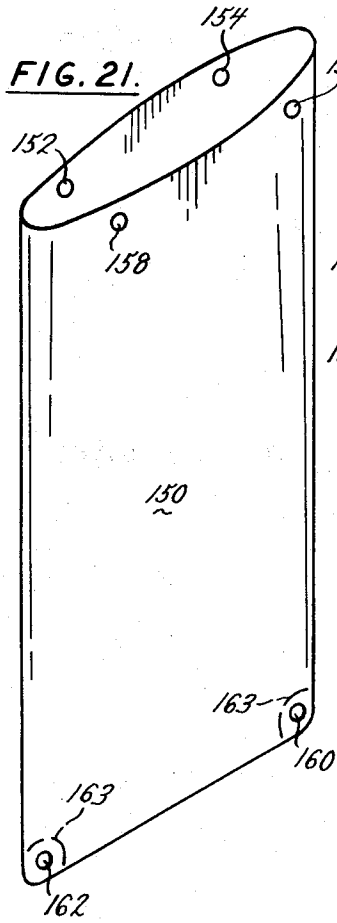


FIG. 16.

FIG. 21.



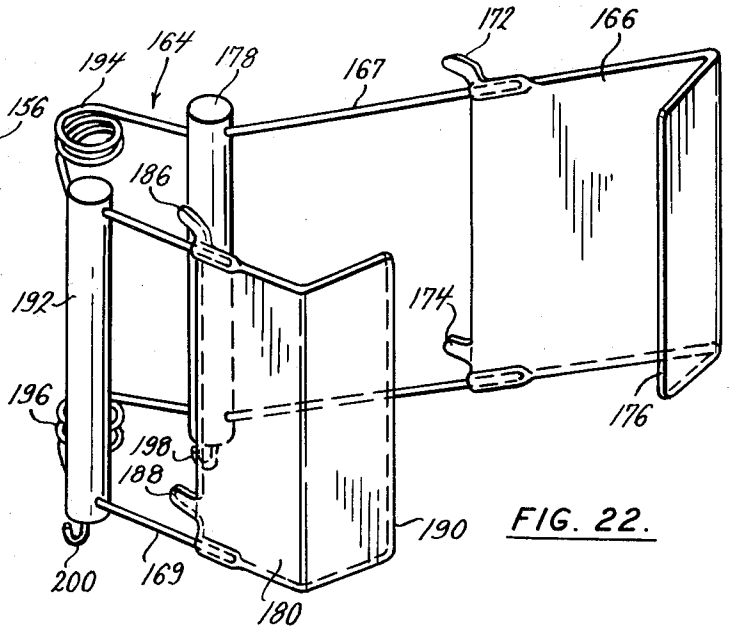


FIG. 22.

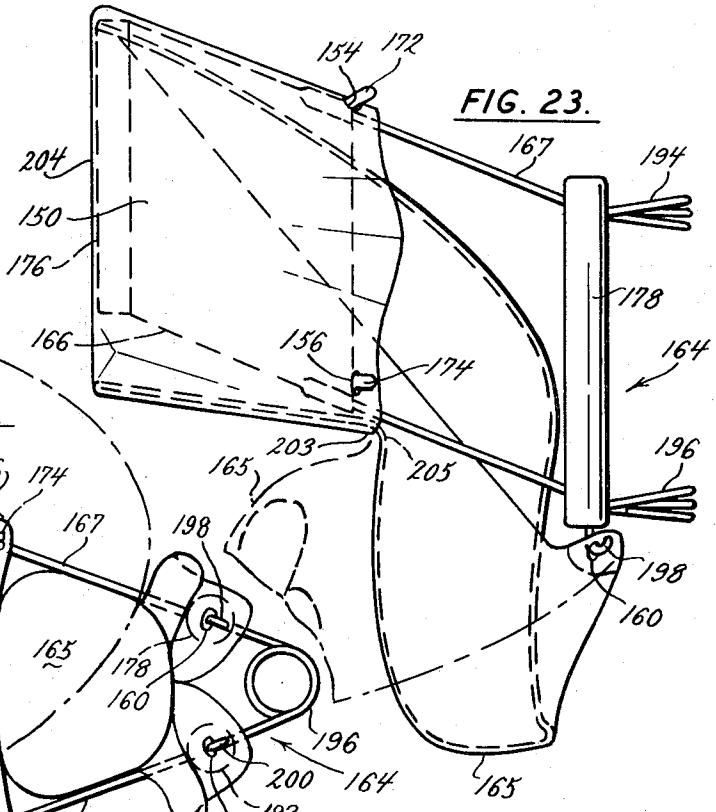


FIG. 23.

FIG. 24.

PORTABLE COLLECTOR FOR DROPPINGS

This invention relates to improvements in Portable collectors For Droppings. More particularly, this invention relates to an improved portable collector for droppings which is small enough to be held in a user's hand but which can be used without causing any of the droppings to contact that user's hand.

It is, therefore, an object of the present invention to provide an improved portable collector for droppings which is small enough to be held in a user's hand but which can be used without causing any of the droppings to contact that user's hand.

The problem of disposing of droppings from pets and other animals is a vexing and unpleasant problem. The present invention affords a practical solution to that problem; and it does so by providing a readily-flexible, tear-resistant, bag-like receptacle which can have the open end thereof telescoped along the outer surface thereof to lie in inverted condition over a further portion thereof, and by providing a manually-manipulable device which is disposed at least partly inwardly of that inverted-condition portion and which is small enough to fit wholly within that bag-like receptacle. That manually-manipulable device can be opened to accommodate a dropping; and then the open end of that bag-like receptacle can be telescoped away from the closed end of that bag-like receptacle and can be closed to confine and enclose the dropping, and also to leave all portions of the exterior surface of that bag-like receptacle free of any traces of that dropping. It is, therefore, an object of the present invention to provide a readily-flexible, tear-resistant, bag-like receptacle which can have the open end thereof telescoped along the outer surface thereof to lie in inverted condition over a further portion thereof, and to provide a manually-manipulable device which is disposed at least partly inwardly of that inverted condition portion and which is small enough to fit wholly within that bag-like receptacle.

Other and further objects and advantages of the present invention should become apparent from an examination of the drawing and accompanying description.

In the drawing and accompanying description several preferred embodiments of the present invention are shown and described but it is to be understood that the drawing and accompanying description are for the purpose of illustration only and do not limit the invention and that the invention will be defined by the appended claims.

BRIEF DESCRIPTION OF THE DRAWING

In the drawing,

FIG. 1 is a side elevational view, on a small scale, of one preferred embodiment of readily-flexible, tear-resistant, bag-like receptacle which is made in accordance with the principles and teachings of the present invention as that bag-like receptacle appears after it has been used to receive and confine droppings,

FIG. 2 is a perspective view, on a larger scale, of the bag-like receptacle in FIG. 1, and it shows that bag-like receptacle in its vertically-directed position,

FIG. 3 is a front elevational view, on a still larger scale, of a scoop which is used with the bag-like receptacle of FIG. 1, and it shows the moved positions of the movable plates of that scoop by dotted lines,

FIG. 4 is a side elevational view, on the scale of FIG. 3, of the right-hand movable frame of the scoop of FIG. 3,

FIG. 5 is another front elevational view, on the scale of FIG. 3, of the scoop of FIG. 3, but it shows that scoop in closed position,

FIG. 6 is a side elevational view, on the scale of FIG. 2, of the bag-like receptacle of FIG. 1,

FIG. 7 is a sectional view, on a scale intermediate those of FIGS. 1 and 2, through the bag-like receptacle of FIG. 1, and it is taken along the plane indicated by the line 7—7 in FIG. 6,

FIG. 8, is a sectional view, on the scale of FIG. 7 through the bag-like receptacle of FIG. 1, and it is taken along the plane indicated by the line 8—8 in FIG. 6,

FIG. 9 is a plan view, on a scale intermediate those of FIGS. 2 and 7, of the bag-like receptacle of FIG. 1,

FIG. 10 is a perspective view of a second preferred embodiment of readily-flexible, tear-resistant, bag-like receptacle which is made in accordance with the principles and teachings of the present invention,

FIG. 11 is a sectional view, on a larger scale, through the bag-like receptacle of FIG. 10, it shows the opened condition of that bag-like receptacle by dotted lines, and it is taken along the plane indicated by the line 11—11 in FIG. 10,

FIG. 12 is a perspective view of the bag-like receptacle of FIG. 10, and it shows that bag-like receptacle after the open end thereof has been telescoped along the outer surface thereof toward the closed end thereof,

FIG. 13 is a perspective view which shows the bag-like receptacle of FIG. 10 in opened condition, and it shows a pusher element being used to push droppings into the bag-like receptacle,

FIG. 14 is an elevational view of the bag-like receptacle of FIG. 10 after it has been used to collect droppings,

FIG. 15 is a perspective view of a third preferred embodiment of readily-flexible, tear-resistant, bag-like receptacle which is made in accordance with the principles and teachings of the present invention,

FIG. 16 is a bottom view of the bag-like receptacle of FIG. 15 after the open end of that bag-like receptacle has been telescoped along the outer surface of that bag-like receptacle toward and beyond the closed end of that bag-like receptacle and after the scoop of FIGS. 3–5 has been telescoped into the space between the inverted-condition and further portions of that bag-like receptacle,

FIG. 17 is a top view of the bag-like receptacle of FIG. 16,

FIG. 18 is a sectional view, through the scoop and bag-like receptacle of FIG. 16, and it is taken along the plane indicated by the line 18—18 of FIG. 17,

FIG. 19 is a side elevational view of the bag-like receptacle and part of the scoop of FIG. 16,

FIG. 20 is an elevational view of the left-hand end of the bag-like receptacle shown in FIG. 19,

FIG. 21 is a perspective view of a fourth preferred embodiment of readily-flexible, tear-resistant, bag-like receptacle which is made in accordance with the principles and teachings of the present invention,

FIG. 22 is a perspective view, on a scale larger than that of FIG. 21, of a scoop usable with the bag-like receptacle of FIG. 21,

FIG. 23 is a side elevational view of the bag-like receptacle and scoop of FIGS. 21 and 22, and

FIG. 24 is a bottom view of the bag-like receptacle and scoop of FIGS. 21 and 22.

Description of the Preferred Embodiments: Referring particularly to FIGS. 1–9, the numeral 20 denotes a readily-flexible, tear-resistant bag-like receptacle which normally has one end thereof open. That bag-like receptacle will preferably be made from an inexpensive, sturdy, readily-flexible, tear-resistant, light-opaque, flexible material such as polyethylene or other film. In using that bag-like receptacle, the normally-open free end 24 thereof will be telescoped along the outer surface of that bag-like receptacle in a direction toward the closed end of that bag-like receptacle until that open end is adjacent that closed end, as shown particularly by FIGS. 2 and 6. The resulting folded edge of that bag-like receptacle is denoted by the numeral 22; and the resulting lapping of the portion of the exterior surface of that bag-like receptacle, which is intermediate that folded edge and the closed end, by the inverted-condition portion of that bag-like receptacle will protect a substantial portion of that exterior surface.

A protective pocket 26 is attached to the inner surface of the bag-like receptacle 20 adjacent the folded edge 22, as indicated particularly by FIGS. 2 and 9. That protective pocket has the right-hand end thereof open; and a perforated tab 28 projects outwardly from the upper edge of that open right-hand end. The numeral 30 denotes a second protective pocket which is attached to the inner surface of the bag-like receptacle 20 adjacent the folded edge 22. The protective pocket 30 has the right-hand end thereof open; and a perforated tab 32 projects outwardly from the upper edge of that open right-hand end. A perforated web 34 extends between the lower portions of the open right-hand ends of the protective pockets 26 and 30, as shown by FIGS. 2, 6 and 9. The protective pockets 26 and 30 will preferably be made from the same type of material of which the bag-like receptacle 20 is made; and the lower edges of those protective pockets will be heat-seamed, cemented, or otherwise secured to the inner surface of the bag-like receptacle 20 adjacent the folded edge 22.

The numeral 38 generally denotes a scoop which can be used with the bag-like receptacle 20; and that scoop has a generally U-shaped frame 40 which is preferably made from metal or stiff plastic. That U-shaped frame has a flange 42 extending along one side edge thereof to help stiffen it, and it has a second flange 44 extending along the opposite side edge thereof to help stiffen it. An upwardly-directed extension 46 is provided at the upper end of the flange 44, as indicated by FIGS. 4 and 5; and a laterally-directed ear 48 is provided at the upper end of the flange 42, as shown by FIGS. 3 and 5. A generally-similar ear 49 is provided adjacent the upper end of the flange 44; and the ears 48 and 49 have openings therein which are aligned with each other and which define a line that is parallel to the plane of the U-shaped frame 40. A stiffening flange 50 is provided adjacent the bottom of the rectangular opening which is defined by the U-shaped frame 40; and stiffening flanges 51 and 53 are provided adjacent the sides of that rectangular opening. An opening is provided in the upper end of the flange 51 that is in register with the opening in the ear 48 adjacent the upper end of the flange 42; and an opening is provided in the upper end of the flange 53 that is in register with the opening in the ear 49 of the flange 44.

An ear 52 is provided on the U-shaped frame 40 adjacent the lower edge of that U-shaped frame; and that ear confronts, but is spaced laterally a short distance from, the flange 42. A similar ear, not shown, is formed on the U-shaped frame 40 adjacent the lower edge of that U-shaped frame; and that ear confronts, but is spaced laterally a short distance from, the flange 44. Openings are provided in the ear 52 and in its counterpart, and similar openings are provided in the lower ends of the flanges 42 and 44; and those openings define a second line which is parallel to the plane of the U-shaped frame 40.

The numeral 54 denotes a second generally U-shaped frame; and that frame will preferably be similar to the U-shaped frame 40. A flange 56 extends along one side edge of the U-shaped frame 54 to help stiffen it; and that flange has an upwardly-directed extension 58, as shown by FIGS. 3 – 5. A laterally-directed ear 62 is provided on the flange 56 adjacent the upper end of that flange, as indicated by FIGS. 3 and 5. A flange 60 extends along the opposite side of the U-shaped frame 54 to help stiffen it; and that flange has a laterally-directed ear 61 adjacent the upper end thereof which is similar to the ear 48. Openings in the ears 61 and 62 are aligned with the openings in the ears 48 and 49 of the U-shaped frame 40. A stiffening flange 64 is provided adjacent the bottom of the rectangular opening which is defined by the U-shaped frame 54; and stiffening flanges 66 and 68 are provided adjacent the sides of that rectangular opening. An opening is provided in the upper end of the flange 66 that is in register with the opening in the ear 62 adjacent the upper end of the flange 56; and an opening is provided in the upper end of the flange 68 that is in register with the opening in the ear 61 adjacent the upper end of the flange 60. Those various openings also are in register with the openings in the upper ends of the flanges 51 and 53 and in the ears 48 and 49 on the U-shaped frame 40.

An ear 70 is provided on the U-shaped frame 54 adjacent the lower edge of that U-shaped frame; and that ear confronts, but is spaced laterally a short distance from, the flange 56, as shown by FIG. 4. An ear 72 also is provided on the U-shaped frame 54 adjacent the lower edge of that U-shaped frame; and that ear confronts, but is spaced laterally a short distance from, the flange 60, as shown by FIG. 4. Openings are provided in the ear 70 and in the ear 72, and similar openings are provided in the lower ends of the flanges 56 and 60; and those openings define a second line which is parallel to the plane of the U-shaped frame 54.

The numeral 74 denotes a pivot which extends through the opening in the ear 48 on the flange 42 of the U-shaped frame 40, through the opening in the ear 62 on the flange 56 of the U-shaped frame 54, and through the openings in the upper ends of the stiffening flanges 51 and 66. That pivot will coact with those openings to permit the U-shaped frames 40 and 54 to rotate relative to each other. A torsion spring 76 encircles that pivot and bears against the upper edges of the U-shaped frames 40 and 54; and that torsion spring urges those U-shaped frames toward the open position shown by FIG. 3. However, that torsion spring can yield to permit those U-shaped frames to be moved to the closed position shown by FIG. 5. The numeral 78 denotes a pivot which extends through the opening in the

ear 61 on the flange 60 of the U-shaped frame 54, through the opening in the ear 49 on the flange 44 of the U-shaped frame 40, and through openings in the upper ends of the stiffening flanges 68 and 53. That pivot will coact with those openings, and also will coact with the pivot 74 and the openings therefor, to permit the U-shaped frames 40 and 54 to rotate relative to each other.

The numeral 80 denotes a pivot which is supported by the stiffening flanges 51 and 53 of the U-shaped frame 40, and that pivot rotatably supports a cylindrical handle 82. A pivot 84 is supported by the stiffening flanges 66 and 68 of the U-shaped frame 54, and that pivot rotatably supports a cylindrical handle 86. Those handles are in register with each other, as indicated particularly by FIGS. 3 and 5; and they can be gripped and urged toward each other to overcome the force which is provided by the torsion spring 76. As a result, the handles 82 and 86 can be used to move the U-shaped frames 40 and 54 from the open position of FIG. 3 to the closed position of FIG. 5.

A flexible restraining element 88, such as a flexible cord, is connected to the pivots 80 and 84. That flexible restraining element limits the extent to which the torsion spring 76 can rotate the U-shaped frames 40 and 54 away from each other; but that flexible restraining element is long enough to enable those U-shaped frames to subtend an angle of almost 90°. A hook 90 has one end thereof rotatably mounted on the pivot 84, and has the open end thereof dimensioned to telescope over the pivot 80. As shown particularly by FIG. 5, that hook can coact with those pivots to hold the U-shaped frames 40 and 54 in face-to-face engagement.

The numeral 92 denotes a plate which has two ears, not shown, adjacent one edge thereof. A pivot 94 extends through an opening in one of those ears, through an opening in the ear 52 adjacent the lower edge of the U-shaped frame 40, and through an opening in the lower end of the flange 42 on that U-shaped frame to rotatably secure one side of the plate 92 to that U-shaped frame. An opening in the other ear on the plate 92 will receive a pivot, not shown, which extends through an opening in the ear which is the counterpart of the ear 52 and through an opening in the lower end of the flange 44 on the U-shaped frame 40 to rotatably secure the other side of that plate to that U-shaped frame. A torsion spring 96 surrounds the pivot 94 and bears against the U-shaped frame 40 and the plate 92; and that torsion spring urges that plate toward the solid-line position shown by FIG. 3. However, that torsion spring can yield to permit that plate to be rotated to the dotted-line position in FIG. 3 and to the solid-line position in FIG. 5.

The numeral 98 denotes a plate which can be identical to the plate 92; and it has ears 97 and 99 adjacent one edge thereof, as shown by FIG. 4. A pivot 100 extends through an opening in the lower end of the flange 56, through an opening in the ear 70 on the U-shaped frame 54, and then through an opening in the ear 97 on the plate 98 to rotatably secure the left-hand side of that plate to that U-shaped frame. A torsion spring 102 encircles the pivot 100 and bears against the plate 98 and the U-shaped frame 54; and that torsion spring urges that plate toward the solid-line position shown by FIG. 3. However, that torsion spring can yield to permit that plate to be rotated to the dotted-line position in FIG. 3 and to the solid-line position in FIG. 5. A pivot 104 extends through an opening in the flange 60, through an opening in the ear 72 on the U-shaped frame 54, and through the ear 99 on the plate 98 to rotatably secure the other side of that plate to that U-shaped frame.

The protective pocket 26 of the bag-like receptacle 20 is dimensioned to receive substantially all of the U-shaped frame 40 and all of the plate 92, and the protective pocket 30 of that bag-like receptacle is dimensioned to receive substantially all of the U-shaped frame 54 and all of the plate 98 — as indicated by dotted lines in FIG. 3. Further, the scoop 38 is small enough to be held in the user's hand and to be completely enclosed by the bag-like receptacle 20. When the plate 98 is in the solid-line position shown by FIG. 3, and the U-shaped frames 40 and 54 have not yet been moved toward each other to cause the protective pockets 26 and 30 to engage droppings 106, the protective pocket 30 will assume the dotted-line position shown in FIG. 3. However, after those U-shaped frames have been moved toward each other to cause the protective pockets 26 and 30 to engage droppings 106, the protective pocket 30 will assume a position comparable to the dotted-line position shown in FIG. 3 for the protective pocket 26.

As the spaced-apart ends of the U-shaped frames 40 and 54 of the scoop 38 are telescoped, respectively, into the protective pockets 26 and 30, the extension 58 at the end of the flange 56 on the U-shaped frame 54 will be inserted in the perforations of the perforated tabs 28 and 32, and the extension 46 at the end of the flange 44 on the U-shaped frame 40 will be inserted in the perforation of the perforated web 34. Those perforated tabs and that perforated web will thereafter coact with those extensions to prevent accidental separation of those protective pockets from that scoop.

In using the scoop 38 and the bag-like receptacle 20 to pick up droppings 106, the user will insert the thumb and fingers of one hand into the protective pockets 26 and 30 and will grip the handles 82 and 86. Thereupon, that user will urge the closed ends of the protective pockets 26 and 30 into engagement with the ground on opposite sides of the droppings 106, as indicated by FIG. 3. The protective pockets 26 and 30 will isolate the plates 92 and 98 from the ground and, more importantly, will isolate those plates from the droppings 106. As the U-shaped frames 40 and 54 of the scoop 38 are moved close to the ground, the plates 92 and 98 will engage the ground and be rotated from the solid-line positions to the dotted-line positions of FIG. 3; and thus will assume positions wherein they are immediately adjacent the ground and are close to the plane of the lower surfaces of the droppings 106. At this time, the user will force the handles 82 and 86 to move toward each other, by using the thumb and fingers on his or her hand to apply pressure to those handles and will thereby force the free ends of the U-shaped frames 40 and 54 to move toward each other. As those free ends approach each other, the confronting edges of the plates 92 and 98 will move into position beneath the droppings 106, and will thereby lift those droppings off of the ground. Because the plastic material of which the protective pockets 26 and 30 is made has a slippery "feel," those protective pockets will enable the plates 92 and 98 to slip under the droppings 106 with a minimum of resistance.

When the portions of the protective pockets 26 and 30 are in abutting relation, the user will lift the scoop 38, and hence the protective pockets 26 and 30, upwardly and away from the ground; and he will tilt those plates toward the vertical until the droppings 106 fall downwardly into the portion of the bag-like receptacle 20 which depends downwardly from the folded edge 22. Those droppings will fall directly downwardly into the lower portion of the bag-like receptacle 20, and they will come to rest on the closed end of that bag-like receptacle. As the user raises the scoop 38 and the bag-like receptacle 20, the restorative forces within the torsion spring 102 will cause the plates 92 and 98 to move toward positions wherein those plates coact with the generally U-shaped frames 40 and 54 to generally subtend right angles. However, as those restorative forces tend to move those plates to those positions, the user will continue to urge the handles 82 and 86 toward each other; and hence the confronting ends of the plates 92 and 98 will continue to be immediately adjacent each other — even though those confronting ends progressively move away from the pivots 74 and 78. As those confronting ends of those plates progressively move away from the pivots 74 and 78, they will move the adjacent portions of the protective pockets 26 and 30 with them, and hence the droppings will continue to be completely enclosed. Hence, those droppings can be picked up and stored within the bag-like receptacle 20 without any risk of their being released accidentally.

Subsequently, the scoop 38 and the protective pockets 26 and 30 can be moved back to the position of FIG. 3 and used to pick up any further droppings in the area; and that scoop will permit those droppings to fall downwardly into the closed end of the bag-like receptacle 20. The one hand of the user will remain in engagement with the handles 82 and 86, and thus will be displaced from the plates 92 and 98 and from any droppings picked up by those plates. Moreover, the inner surfaces of the protective pockets 26 and 30 will effectively interpose themselves between the user's hand and any such droppings.

The plates 92 and 98 constitute laterally-offset free ends for the U-shaped frames 40 and 54; and it will be understood that when the confronting edges of those plates are immediately adjacent each other, those plates will space other portions of those U-shaped frames apart to define a space which is bounded by those plates and by the inner faces of those U-shaped frames. That space is important; because it provides a passage through the scoop 38 which will enable the droppings 106 to fall downwardly into the closed end of the bag-like receptacle 20 while the plates 92 and 98 are adjacent each other, and thus will prevent escape of those droppings. As a result, a user of the bag-like receptacle 20 and scoop 38 of FIGS. 1–9 can pick up droppings 106 and transfer them to the closed end of that bag-like receptacle without any need of releasing his grip upon the handles 82 and 86, and without any need of moving the confronting edges of the plates 92 and 98 apart.

As the scoop 38 is moved toward the position of FIG. 3, the closed end of the bag-like receptacle 20 will respond to gravity and sag down below the level of the folded edge 22. Consequently, any droppings 106 within that closed end will not be able to fall out of that bag-like receptacle and, instead, will remain in that closed end. At the time the free ends of the plates 92 and 98 engage the ground, the portions of the bag-like receptacle 20 which are intermediate the folded edge 22 and the closed end will be essentially horizontal; and hence there will be no tendency of the droppings within that bag-like receptacle to move toward, or outwardly of, that folded edge. In this way, the present invention makes it possible for the user of the scoop 38 and the bag-like receptacle 20 to recurrently pick up and hold droppings without accidentally releasing any of those droppings.

After all of the droppings in a given area have been picked up by the scoop 38 and the protective pockets 26 and 30, and then permitted to drop into the closed end of the bag-like receptacle 20, the perforated tabs 28 and 32 will be separated from the extension 58 on the flange 56, and the perforated web 34 will be separated from the extension 46 on the flange 44 of the scoop 38. At such time, that scoop 38 can be withdrawn from the protective pockets 26 and 30; and those protective pockets and the bag-like receptacle 20 will then be supported by gripping the perforated tabs 32 and 28. Thereupon, the free end 24 of the bag-like receptacle 20 can be gripped and pulled upwardly above the upper edges of the protective pockets 26 and 30. The user will grasp a part of the free end 24 which has always been remote from those parts of the protective pockets 26 and 30 which engaged the droppings; and hence the user's hands will be spaced away from any residue of those droppings which may have clung to those parts of those protective pockets. Once the free end 24 of the bag-like receptacle 20 has been raised upwardly beyond the upper edges of the protective pockets 26 and 30, that free end can be tied in a knot, as indicated by FIG. 1, to confine and enclose all of the droppings therein, and also to confine and enclose the protective pockets 26 and 30. Alternatively, that free end can be held closed by a cord, rope or other fastener. During the use of the scoop 38 and of the protective pockets 26 and 30 to pick up droppings, the major portion of the exterior of the length of the bag-like receptacle 20 was folded back on itself and thus enclosed and protected from all contact with the droppings. Subsequently, when the free edge 24 was telescoped upwardly to enable the bag-like receptacle 20 to confine and enclose the droppings and to confine and enclose the protective pockets 26 and 30, the exterior of the length of that bag-like receptacle was clean and was completely devoid of any residue of the droppings. The knotted or tied bag-like receptacle 20 can then be stored until it is picked up by a trash hauler.

The center of gravity of the scoop 38 is located between the handles 82 and 86 and the plates 92 and 98, and thus is located close to the user's hand. This is desirable because it minimizes the gravitation-induced rotational forces which the user's hand must resist as that scoop and the bag-like receptacle 20 are used to pick up droppings.

Referring particularly to FIGS. 10–14, the numeral 108 denotes a bag-like receptacle which can be made of the same material of which the bag-like receptacle 20 of FIGS. 1–9 is made. That bag-like receptacle has a line 110 of perforations adjacent one end thereof; and that line of perforations makes it possible to tear off the adjacent portion 126 of that bag-like receptacle. The free end 114 of the bag-like receptacle 108 can be telescoped along the exterior of that bag-like receptacle in a direction toward the closed end of that bag-like re-

ceptacle; and, as that end is so telescoped, it will create a folded, opening-defining edge 112 for that bag-like receptacle. The free end 114 of the bag-like receptacle 108 will preferably be telescoped almost all of the way toward the closed end of that bag-like receptacle, as shown by FIG. 12.

The numeral 116 denotes a semi-rigid sleeve of cardboard, polyethylene or other suitable material, which is dimensioned to fit within the bag-like receptacle 108; and, initially, that semi-rigid sleeve will be wholly enclosed by the bag-like receptacle 108. That semi-rigid sleeve is normally flat, as shown by solid lines in FIG. 11; but it can respond to the application of inwardly-directed forces to the side edges thereof to assume the tubular configuration shown by FIG. 13. The semi-rigid sleeve 116 has a line 118 of perforations adjacent the outer end thereof; and that line of perforations makes it possible to free a pusher element 122 which is made as a part of that semi-rigid sleeve. Absorbent material 120 is secured to one end of one face of the pusher element 122, as by a cement or the like. The portion of the semi-rigid sleeve 116 which is disposed to the right of the line 118 of perforations in FIGS. 10 and 12 is secured in position within, and is secured to the inner surface of, the bag-like receptacle 108 by glue, cement or other means.

As shown by FIG. 10, the semi-rigid sleeve 116 is shorter than the bag-like receptacle 108; but the right-hand end of that semi-rigid sleeve will be held away from the closed end of that bag-like receptacle by the glue, cement or other means. The free end 114 of that bag-like receptacle can be telescoped along the exterior of that bag-like receptacle toward the closed end of that bag-like receptacle to expose the line 118 of perforations and the pusher element 122 of that semi-rigid sleeve, as shown by FIG. 12. At such time, that pusher element will be separated from the rest of the semi-rigid sleeve 116, as by tearing that semi-rigid sleeve along the line 118 of perforations. That tearing can be accomplished while the major portion of the length of the semi-rigid sleeve 116 is disposed inwardly of the inverted-condition portion of the bag-like receptacle 108, as shown by FIG. 12.

To pick up any droppings, the user will grip the inverted-condition portion of the bag-like receptacle 108 with one hand and thereby apply inwardly-directed forces to that position — causing the semi-rigid sleeve 116 to assume the tubular configuration indicated by FIG. 13. With his other hand, the user will grip the pusher element 122 and use it to move the droppings 124 into the semi-rigid sleeve 116. The semi-rigid sleeve 116 will be relatively stiff; and its outer end can be pressed against the ground in the manner in which the edge of a dust pan is pressed against a floor to facilitate the movement of debris into that dust pan.

After the droppings have been pushed into the semi-rigid sleeve 116, the user will tilt that outer end upwardly to enable gravity to move those droppings toward the closed end of the bag-like receptacle 108. Thereafter, the inner end of that semi-rigid sleeve will resist any tendency of those droppings to move toward and through the opening defined by the folded edge 112 of the bag-like receptacle 108. Further, the tendency of the semi-rigid sleeve 116 to resume its generally-flat state will resist any tendency of the droppings to move toward and through that opening. Additional droppings can be introduced into the bag-like receptacle 108 by placing the open end of the semi-rigid sleeve 116 adjacent those droppings and by pushing those droppings into that open end by appropriate manipulation of the pusher element 122.

As each dropping or group of droppings is introduced into the outer end of the semi-rigid sleeve 116, that semi-rigid sleeve will have its outer end tilted upwardly to cause that dropping or that group of droppings to move toward the closed end of the bag-like receptacle 108. The subsequent releasing of the inwardly-directed forces, which caused that semi-rigid sleeve to assume the tubular configuration of FIG. 13, will enable that semi-rigid sleeve to start to resume the essentially-flat, solid-line configuration of FIG. 11. If all of the droppings within the bag-like receptacle 108 are located between the inner end of the semi-rigid sleeve 116 and the closed end of that bag-like receptacle, that semi-rigid sleeve will essentially resume the solid-line configuration of FIG. 11, and will thereby prevent accidental release of any of those droppings. Even if some of the droppings are still within the inner end of the semi-rigid sleeve 116, that semi-rigid sleeve will tend to prevent accidental release of any of the droppings within the bag-like receptacle 108, as by flattening itself as much as it can, and by holding those droppings in position to block the escape of further droppings. Consequently, the semi-rigid sleeve 116 will effectively pprevent accidental release of any of the droppings introduced into the bag-like receptacle 108.

After the various droppings have been introduced into the bag-like receptacle 108, the absorbent material 120 on the pusher element 122 can be used to rub the surface on which the droppings were found. That absorbent material will be wide enough, deep enough, and absorbent enough to wipe away all or almost all traces of the droppings. At such time, the semi-rigid sleeve 116 will have the outer end thereof tilted upwardly, and it will be given the tubular configuration of FIG. 13; and then the pusher element 122 can be turned so its shortest dimension is in register with the open end of the semi-rigid sleeve 116. Thereafter, that pusher element can be released and thereby permitted to move down into that semi-rigid sleeve, as indicated by FIG. 14. Releasing of the inwardly-directed pressure on the side edges of the bag-like receptacle 108 will enable the semi-rigid sleeve 116 to move into gripping engagement with the pusher element 122. At this time, the free end 114 of the bag-like receptacle 108 can be telescoped away from the closed end of that bag-like receptacle until that bag-like receptacle assumes the configuration indicated by FIG. 14; and, thereupon, that bag-like receptacle will enclose and confine all of the droppings, the semi-rigid sleeve 116, and the pusher element 122. In addition, all areas of the inverted-condition portion of the bag-like receptacle 108 which could have been contacted by any of the droppings will be wholly at the interior of that bag-like receptacle, and thus can not soil the hand of the user.

The portion 126 of the bag-like receptacle 108 can then be torn away by applying tearing forces to the line 110 of perforations. Once that portion has been torn away, it can be used as a tie to close and secure the open end of the bag-like receptacle 108. That open end could, if desired, be tied in a knot, as was the open end of the bag-like receptacle 20 in FIG. 1. Alternatively, of course, the open end of that bag-like receptacle

could be closed and secured by a length of cord, twine or the like.

Referring particularly to FIGS. 15–20, the numeral 130 generally denotes a bag-like receptacle which has slots 132, 134 and 136 therein adjacent the open end thereof. As indicated particularly by FIG. 15, the slots 132, 134 and 136 are generally rectangular, and they have the long dimensions thereof extending circumferentially of that bag-like receptacle. That bag-like receptacle will preferably be made from a readily-flexible, tear-resistant, dark-colored material such as polyethylene or polypropylene.

In using the bag-like receptacle 130, a portion of the open end thereof will be inverted and telescoped along part of the exterior of that bag-like receptacle to define a folded edge 138, as shown particularly by FIGS. 16–18. The telescoping of that open end along that part of the exterior of that bag-like receptacle also will form pocket-like portions 140 and 142 between that part of the exterior and the inverted-condition portion of the bag-like receptacle; and those pocket-like portions are shown particularly by FIGS. 16 and 17. As the open end of the bag-like receptacle 130 is inverted and telescoped along part of the exterior of that bag-like receptacle, a short length 144 of that open end is folded back on itself to form a reentrant edge. The closed end 146 of the bag-like receptacle 130 will extend downwardly below the level of the reentrant edge 144 of the bag-like receptacle 130, as shown particularly by FIGS. 18–20.

The pocket-like portion 140 will accommodate the generally U-shaped frame 54 and the plate 98 of the scoop 38, as shown particularly by FIGS. 16 and 17. The pocket-like portion 142 will accommodate the generally U-shaped frame 40 and the plate 92, as shown particularly by FIGS. 16 and 17. The confronting edges of the plates 92 and 98 will engage portions of the inner surface of the folded edge 138 of the bag-like receptacle 130; and the closed end 146 of that bag-like receptacle will extend rearwardly toward the pivot 78 and then pass downwardly between the confronting surfaces of the generally U-shaped frames 40 and 54, as indicated particularly by FIGS. 16, 18 and 20.

The slot 136 will be telescoped over the extension 58 of the flange 56 on the U-shaped frame 54, and the slots 132 and 134 will be telescoped over the extension 46 on the flange 44 of the generally U-shaped frame 40, as indicated particularly by FIG. 18. The telescoping of those slots over those extensions will coact with the restorative forces within the bag-like receptacle 130 to prevent accidental separation of that receptacle from the scoop 38.

The user will insert the thumb and fingers of one hand through the open end of the bag-like receptacle 130, and will grasp the handles 82 and 86 of the scoop 38, as indicated by FIG. 17. The torsion spring 76 will bias the generally U-shaped frames 40 and 54 to the spaced-apart positions indicated by FIGS. 16, 17 and 20, and thus will tend to hold apart those portions of the folded edge 138 which are adjacent the confronting ends of the plates 92 and 98, as indicated by FIGS. 16, 17 and 20. The user will press those portions of the folded edge 138 into engagement with the ground on opposite sides of the droppings which are to be picked up, and then will apply forces to the handles 82 and 86 which will cause the plates 92 and 98 to move into essential parallelism with the ground — in the same manner in which those plates rotated from the solid-line positions to the dotted-line positions of FIG. 3. Thereafter, the user will apply inwardly-directed forces to the handles 82 and 86 which will cause the portions of the folded edge 138 that envelop the confronting ends of the plates 92 and 98 to move toward each other and thus in position beneath the droppings.

At this time, the droppings will be completely surrounded by the inner surface of the bag-like receptacle 130; and hence the user can lift the scoop 38 and that bag-like receptacle without any fear of permitting any of the droppings to escape. While still holding the confronting ends of the plates 92 and 98 immediately adjacent each other, the user will tilt the scoop 38 from a position comparable to the position shown in FIG. 3 to a position comparable to that shown by FIGS. 18–20. As the user raises and tilts that scoop that the bag-like receptacle 130, the restorative forces within the torsion spring 102 will cause the plates 92 and 98 to move toward positions wherein those plates coact with the generally U-shaped frames 40 and 54 to generally subtend right angles. However, as those restorative forces tend to move those plates to those positions, the user will continue to urge the handles 82 and 86 toward each other; and hence the confronting ends of the plates 92 and 98 will continue to be immediately adjacent each other — even though those confronting ends progressively move away from the pivots 74 and 78. As those confronting ends of those plates progressively move away from the pivots 74 and 78, they will move the adjacent portions of the folded edge 138 with them, and hence the droppings will continue to be completely enclosed by the inner surface of the bag-like receptacle 130.

As the user tilts the scoop 38 and the bag-like receptacle 130 toward the position shown by FIGS. 18–20, the droppings will respond to gravitational force to move down into the closed end 146 of that bag-like receptacle, and thus will move out of register with the plates 92 and 98 and also out of register with all portions of the folded edge 138 of that bag-like receptacle. When further droppings are to be picked up, the scoop 38 will again be rotated and moved to dispose the confronting ends of the plates 92 and 98 thereof in general parallelism with the surface on which those further droppings were deposited; but the previously-collected droppings will remain within the closed end 146 of the bag-like receptacle 130. Specifically, the weight of those previously-collected droppings will coact with the weight of the closed end 146 of the bag-like receptacle to cause that closed end to assume the dotted-line position shown in FIG. 18, wherein it is below the level of the reentrant edge 144. That reentrant edge will hold an adjacent portion 145 of the inner surface of the bag-like receptacle against downward movement; and that adjacent portion will serve as a barrier which will keep all previously-collected droppings from being released from that bag-like receptacle. Depending upon the length of the bag-like receptacle 130, very substantial numbers of droppings can be collected and held within the closed end 146 of that bag-like receptacle without any of those droppings escaping through the opening which is defined by the folded edge 138 of that bag-like receptacle. Whenever the scoop 38 and the bag-like receptacle 130 are moved to the position of FIGS. 17–20, wherein the plates 92 and 98 are vertically-directed, the closed end 146 of the bag-like receptacle 130 will

assume the solid-line position of FIG. 18, and thus will confine the droppings and will keep them from escaping through the opening defined by the folded edge 138. When that coop is moved to the position of FIG. 3, wherein the plates 92 and 98 are parallel to the ground, the closed end 146 of that bag-like receptacle will droop below the level of the portion 145 of the inner surface of that bag-like receptacle, as shown by dotted lines in FIG. 18; and that portion will act as a barrier to those droppings, and will keep them from escaping through the opening defined by the folded edge 138. In this way, the bag-like receptacle 130 can coact with the scoop 38 to pick up and hold a large number of droppings without accidentally releasing any of those droppings.

After the user has used the scoop 38 and the bag-like receptacle 130 to pick up all of the droppings in a given area, he will free the slots 132 aand 134 from the extension 46 on the flange 44 of the generally U-shaped frame 40. Thereupon, the weight of the closed end 146 of the bag-like receptacle 130 and the weight of any droppings within that closed end will cause that closed end to swing downwardly and to the left in FIG. 18. Simultaneously, the user can tilt the upper ends of the handles 82 and 86 forwardly and downwardly to enable the intermediate and lower portions of the bag-like receptacle to swing clear of the frames 40 and 54 of the scoop 38. At this time, the bag-like receptacle 130 will be supported by the engagement of the slot 136 with the extension 58 on the flange 56 of the U-shaped frame 54; and the user can telescope the free end of that bag-like receptacle upwardly until that bag-like receptacle assumes a configuration comparable to that of the bag-like receptacle in FIG. 1. Alternatively, the user could free the slot 136 from the extension 58 on the flange 56 of the frame 54 and also free the slots 132 and 134 from the extension 46 on the flange 42 of the frame 40. That user could then apply forces to the handles 82 and 86 of the scoop 38 which would force the confronting ends of the plates 92 and 98 into holding engagement with the adjacent portions of the folded edge 138 of the bag-like receptacle 130. While continuing to apply those forces to those handles, the user could telescope the free end of the bag-like receptacle 130 off of the generally U-shaped frames 40 and 54 of the scoop 38 until that bag-like receptacle assumed a configuration comparable to that of the bag-like receptacle 20 in FIG. 1.

In either instance, because some areas of the exposed surface of the inverted-condition portion of the bag-like receptacle 130 could have some residue of droppings thereon, the user should insert his hand within the pocket-like portions 140 and 142 to telescope the free end of the bag-like receptacle 130 into the position indicated by FIG. 1. In that way, the user could completely protect his hand against any and all contact with the droppings or any residue thereof. Where the user initially released the slots 132 and 134 from the extension 46 on the flange 42 of the frame 40, and then supported the bag-like receptacle 130 by the engagement of the slot 136 with the extension 58 on the flange 56 of the frame 54, that user could grip the upper portion of that bag-like receptacle and lift the slot 136 away from the extension 58. In the alternative instance, where the user freed the slot 136 from the extension 58 and also freed the slots 132 and 134 from the extension 46 and then gripped the bag-like receptacle 130 with the plates 92 and 98, that user could grip the upper portion of that bag-like receptacle and then release the forces which he had been applying to the handles 82 and 86. Thereupon, the torsion spring 76 would move the plates 92 aand 98 away from tthe exterior of the bag-like receptacle 130, and would thereby free that bag-like receptacle. In both instances, all portions of the exterior of the bag-like receptacle 130 would be clean and wholly free of residue of droppings; because all of the portions of that bag-like receptacle which were permitted to approach or touch any droppings would now be parts of the interior of that bag-like receptacle. Consequently, the user could tie a knot in the free end of that bag-like receptacle, or could use a short length of string, twine or cord to tie that open end, and could then set that bag-like receptacle aside for a trash hauler.

Referring particularly to FIGS. 21–24, the numeral 150 generally denotes a bag-like receptacle which preferably is made from a sturdy, readily-flexible, tear-resistant, opaque plastic material such as polyethylene or other film. Openings 152, 154, 156 and 158 are provided in the upper end of that bag-like receptacle; and, as shown particularly by FIG. 21, those openings are spaced circumferentially of the open end of that receptacle. Openings 160 and 162 are provided adjacent the closed end 165 of the bag-like receptacle 150; and those openings are adjacent the opposite edges of that closed end, as indicated particularly by FIG. 21. Those openings will not permit anything to leak out of that bag-like receptacle, because the front and rear surfaces of that bag-like receptacle are sealed together adjacent those openings, as indicated by the arcuate lines 163.

The numeral 164 generally denotes a scoop which has a frame 167 and a frame 169; and the frame 167 has an L-shaped portion 166 with a laterally-offset leading edge 176. Abutments 172 and 174 are provided on the L-shaped portion 166; and those abutments incline outwardly of the frame 167. That frame also includes rods or heavy wires which connect the L-shaped portion 166 to a handle 178; and those rods or heavy wires enable all portions of that frame to move as a unit. The frame 169 has an L-shaped portion 180 with a laterally-offset leading edge 190. Abutments 186 and 188 are provided on the L-shaped portion 180; and those abutments incline outwardly of the frame 180. That frame also includes rods or heavy wires which connect the L-shaped portion 180 to a handle 192; and those rods or heavy wires enable all portions of that frame to move as a unit. Torsion springs 194 and 196 have the free ends thereof secured to the handles 178 and 192; and those torsion springs urge the frame 167 and 169, and the leading edges 176 and 190, away from each other. However, those torsion springs can respond to inwardly-directed forces on the handles 178 and 192 to permit the frames 167 and 169 and the leading edges 176 and 190 to move toward each other.

A hook 198 is secured to the rear end of the handle 178 in FIG. 22, and a hook 200 is secured to the lower end of the handle 192. As indicated particularly by FIG. 23, the rods or heavy wires of the frames 167 and 169 have the axes thereof inclined relative to the axes of the handles 178 and 192.

In using the bag-like receptacle 150, the user will telescope the open end and part of the adjacent length of that bag-like receptacle over the outer surface of the intermediate portion of that bag-like receptacle, as in-

dicated particularly by FIGS. 23 and 24. In doing so, that user will cause that bag-like receptacle to develop an opening-defining folded edge 204 plus pocket-like portions which are disposed between the intermediate portion of that bag-like receptacle and the inverted-condition portion of that bag-like receptacle. The user will insert the leading edges 176 and 190 into the pocket-like portions of the bag-like receptacle 150; and those leading edges will be adjacent the inner surface of the folded edge 204 of that bag-like receptacle. The opening 154 will be hooked over the abutment 172, the opening 156 will be hooked over the abutment 174, the opening 158 will be hooked over the abutment 188, and the opening 152 will be hooked over the abutment 186. The hooking of these openings over those abutments will coact with the restorative forces within the material of the open end of the bag-like receptacle 150 to prevent accidental separation of that bag-like receptacle from the scoop 164. The closed end 165 of that bag-like receptacle will be passed successively through the space defined by the leading edges 176 and 190, through the space defined by the inner ends of the frames 167 and 169, and then downwardly below the lower edges of those frames, as indicated by FIG. 23. The opening 160 will be telescoped over the hook 198, and the opening 162 will be telescoped over the hook 200; and the engagements between those openings and those hooks will keep the closed end 165 from drooping downwardly onto the surface on which droppings are deposited.

To pick up any droppings, the leading edges 176 and 190 will be placed on opposite sides of those droppings and in essential parallelism with the surface on which those droppings were deposited. Thereafter, the user will apply inwardly-directed forces to the handles 178 and 192 which will force the portions of the folded edge 204 of the bag-like receptacle 150, which are adjacent the leading edges 176 and 190, to move toward each other and into position beneath those droppings. At this time, those droppings will be completely surrounded by the bag-like receptacle 150; and hence the user can raise and rotate the scoop 164 and the bag-like receptacle 150 to the position shown by FIG. 23. The droppings will respond to gravity, during that raising and rotation, to move downwardly into the closed end 165 of that bag-like receptacle. The L-shaped configurations of the portions 166 and 180 will enable the frames 167 and 169 to define a passage through the scoop 164 to the closed end 165 of the bag-like receptacle 150 while the laterally-offset leading edges 176 and 190 are in engagement with each other. Consequently, those leading edges can effectively close the opening defined by the folded edge 204 of that bag-like receptacle, and thus prevent accidental release of any droppings, while those droppings are caused to pass into the closed end 165 of that bag-like receptacle.

When further droppings are to be picked up, the leading edges 176 and 190 will again be moved into essential parallelism with the surface on which those further droppings were deposited. The previously-picked up droppings will cause the closed end 165 of the bag-like receptacle 150 to tilt and droop downwardly below the level of the line defined by the abutments 174 and 188, as indicated by dotted lines in FIG. 23. However, those abutments will keep an adjacent portion 203 of the free end of the bag-like receptacle 150, and hence an adjacent portion 205 of the interior of that bag-like receptacle, from sagging down a corresponding distance. Consequently, that portion of that interior will act as a barrier between the closed end 165 and the opening which is defined by the folded edge 204; and thus will prevent accidental release of any of the previously-collected droppings. This enables the scoop 164 and the bag-like receptacle 150 to be used to pick up a very substantial number of droppings without accidentally releasing any previously picked up droppings.

As indicated by FIG. 23, the hooks 198 and 200 coact with the openings 160 and 162 in the bag-like receptacle 150 to keep the closed end 165 of that bag-like receptacle from sagging down onto the surface on which the droppings were deposited; and, in doing so, those hooks keep the closed end 165 from becoming soiled and unclean. However, those hooks will coact with those openings to permit the closed end 165 to sag downwardly below the level of the line defined by the abutments 174 and 188, as indicated by dotted lines in FIG. 23; and thus will enable the portion 205 of the interior of the bag-like receptacle 150 to act as a barrier to previously-collected droppings.

If desired, the closed end 165 of the bag-like receptacle 150 could be passed through the space between the inner end of the L-shaped portion 166 and the handle 178 of the frame 167, as indicated by dotted lines in FIG. 24. Alternatively, that closed end could be passed through the space defined by the inner end of the L-shaped portion 180 and the handle 192 of the frame 169. In either of these events, the openings 160 and 162 will not be telescoped over the hooks 198 and 200 and, instead, will permit the closed end 165 to assume the position shown by dotted lines in FIG. 24. Droppings can be picked up by disposing the leading edges 176 and 190 of the L-shaped portions 166 and 180 immediately adjacent a surface at opposite sides of those droppings, and then moving those leading edges into position beneath those droppings. Subsequent raising and tilting of the scoop 164 and the bag-like receptacle 150 into a position wherein the axes of the handles 178 and 192 are horizontal and wherein the closed end 165 of the bag-like receptacle 150 droops downwardly at right angles from the L-shaped portion 166 will permit the droppings to move downwardly past the L-shaped portion and into that closed end. Thereafter, when the leading edges 176 and 190 of the scoop 164 are moved adjacent a further surface on which further droppings were deposited, the previously-collected droppings will not be able to escape from the closed end 165 of the bag-like receptacle 150; because that closed end will sag downwardly to the dotted-line position of FIG. 24, and the portion of that bag-like receptacle which is adjacent the inner end of the L-shaped element 166 will act as a barrier to the escape of the previously-collected droppings.

After all of the droppings have been picked up and collected, the user can free the openings 160 and 162 from the hooks 198 and 200, respectively, and also can free the openings 156 and 158 from the abutments 174 and 188, respectively. Thereupon, the weight of the closed end 165 of the bag-like receptacle 150 and the weight of any droppings within that closed end will cause that closed end to swing downwardly and to the left in FIG. 23. Simultaneously, the user can tilt the upper ends of the handles 178 and 192 forwardly and ownwardly to enable the intermediate and lower portions of the bag-like receptacle 150 to swing clear of

the frames 167 and 169 of the scoop 164. At this time, the bag-like receptacle 150 will be supported by the engagement of the openings 152 and 154 with the abutments 186 and 172, respectively; and the user can telescope the free end of that bag-like receptacle upwardly until that bag-like receptacle assumes a configuration comparable to that of the bag-like receptacle in FIG. 1. Alternatively, the user could apply inwardly-directed forces to the handles 178 and 192 which would cause the leading edges 176 and 190 of the frames 167 and 169 to move toward each other and grip and hold adjacent portions of the folded edge 204 of the bag-like receptacle 150. The openings 152, 154, 156 and 158 of the bag-like receptacle 150 would be released, respectively, from the abutments 186, 172, 174 and 188; and, if the openings 160 and 162 had been telescoped over the hooks 198 and 200, respectively, those openings would be freed from those hooks. Thereafter, the open end of the bag-like receptacle 150 would be telescoped off of the frames 167 and 169 of the scoop 164 until the bag-like receptacle 150 had a configuration similar to that of the bag-like receptacle 20 in FIG. 1. In either instance, all portions of the bag-like receptacle 150 which could have touched any droppings, or any surface on which those droppings were deposited, will be at the inner surface of that bag-like receptacle; and hence the entire exterior of that bag-like receptacle will be clean and unsoiled. The open end of that bag-like receptacle can then be tied in a knot or can be suitably held closed by a short length of cord, twine or the like. In this way, the scoop 164 and the bag-like receptacle 150 can be used to collect droppings without exposing the user to any contact with those droppings or any residues therefrom.

The L-shaped portions 166 and 180 are shown as being made from plastic material, as by an injection molding process; and, further, those L-shaped portions are shown as being imperforate. However, if desired, those L-shaped portions could be made from rods or heavy wires; and, in that event, those L-shaped portions would have large openings therein. Those openings would be useful in reducing the overall weight of the scoop 164. In the event the L-shaped portions 166 and 180 were to be made from rods or heavy wires, they could be made integral with the rods or heavy wires of FIGS. 22–24 which connect those L-shaped portions to the handles 178 and 192. In such event, the abutments 172, 174, 186 and 188 could be formed on those rods or heavy wires, or could be formed on cross tie rods which could occupy positions corresponding to the positions occupied by the inner ends of the L-shaped portions 166 and 180.

The extensions 46 and 58 of the scoop 38 of FIGS. 3–5 are useful in holding the tabs and webs of the bag-like receptacle 20 and in holding the tabs and webs of the bag-like receptacle 130. Similarly, the abutments 172, 174, 186 and 188 and the hooks 198 and 200 of the scoop 164 of FIGS. 22–24 are useful in holding the bag-like receptacle 150. However, if desired, any one or more of those extensions, abutments or hooks could be replaced by another fastener; and, where that fastener was a spring-type clip, the corresponding perforation, slot or opening in the bag-like receptacle could be eliminated. Hence, it should be clear that unperforated bag-like receptacles could be used with the scoop 38 or the scoop 164 if those scoops were equipped with fasteners which did not require perforations, slots or openings. Further it should be understood that a user need not fit each of the openings 152, 154, 156 and 158 of the bag-like receptacle 150 over an abutment on the scoop 164 and that he need not fit both of the openings 160 and 162 in that bag-like receptacle over the hooks 198 and 200 on that scoop. All that is needed is that sufficient openings be fitted over the holding surface therefor to prevent accidental separation of that bag-like receptacle from that scoop, to keep the closed end 165 of that bag-like receptacle from drooping down onto the ground, and to enable the portion 205 of the interior surface of that bag-like receptacle to act as a barrier to previously-collected droppings. In addition, it should be noted that the abutments 172 and 174, which are angularly displaced to enable both of them to be shown in FIG. 24, will preferably be co-planar. Similarly, it should be noted that the abutments 186 and 188 will preferably be co-planar.

If desired, the sleeve 116 of FIGS. 10–14 could be merely telescoped into, rather than secured within, the bag-like receptacle 108. In such event, that sleeve could be removed from that bag-like receptacle, could be forced to assume the tubular configuration of FIG. 13, and could then have the longitudinally-folded or pleated closed end of that bag-like receptacle telescoped into the left-hand end thereof. If just one dropping were to be picked up, that closed end could be unfolded or smoothed out and left wholly within that sleeve. However, if several droppings were to be picked up, the closed end of that receptacle would be passed all the way through that sleeve and disposed outwardly of the opposite end of that sleeve and then unfolded or smoothed out. Thereafter, the free end 114 of that bag-like receptacle would be folded back along the outer surface of the sleeve 116 toward the closed end of that bag-like receptacle; and, at that time, the left-hand end of that sleeve would be adjacent the folded edge 112, and would be enclosed within the pocket-like portion defined by the inverted-condition portion and the portion telescoped through that sleeve. After the sleeve 116 and the bag-like receptacle 108 had performed their function of picking up the dropping or droppings, the inverted-condition portion of that bag-like receptacle would be telescoped off of that sleeve and suitably held closed, as indicated by FIG. 14.

Whereas the drawing and accompanying description have shown and described several preferred embodiments of the present invention, it should be apparent to those skilled in the art that various changes can be made in the form of the invention without affecting the scope thereof.

What I claim is:

1. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold and also thereby form pocket-like portions between said inverted-condition portion and said further portion of said bag-like receptacle, a manually-manipulable scoop which has relatively-movable frames disposable within said pocket-like portions of

said bag-like receptacle and which has the free ends of said frames disposable adjacent said opening-defining fold of said bag-like receptacle, said free ends of said relatively-movable frames being laterally offset from other portions of said relatively-movable frames and confronting and extending toward each other, said laterally-offset free ends of said relatively-movable frames acting to hold said other portions of said relatively-movable frames in laterally spaced-apart relation and thereby coacting with said other portions of said relatively-movable frames to bound and define a space between said relatively-movable frames whenever said laterally-offset free ends of said relatively-movable frames are moved into position adjacent each other, said closed end of said bag-like receptacle being dimensioned to extend through and out of said space between said relatively-movable frames and being disposable laterally of said further portion of said bag-like receptacle, said closed end of said bag-like receptacle being adapted to receive and hold a dropping which enters said bag-like receptacle through the opening defined by said opening-defining fold and which passes through said further portion of said bag-like receptacle, said closed end of said bag-like receptacle being adapted to respond to the weight of said dropping therein to sag below a part of said further portion of said bag-like receptacle when said laterally-offset free ends of said relatively-movable frames are disposed adjacent to and generally in parallel relation with a surface bearing a further dropping, said part of said further portion of said bag-like receptacle serving as a barrier between said closed end of said bag-like receptacle and said opening defined by said opening-defining fold whenever said laterally-offset free ends of said relatively-movable frames are disposed adjacent to and generally in parallel relation with said surface bearing said further dropping, said scoop being manipulable and being tiltable into different angularly-displaced positions to cause a multiplicity of droppings to be successively underlain by said laterally-offset free ends of said relatively-movable frames and to be passed through said space between said relatively-movable frames and over said part of said further portion of said bag-like receptacle into said closed end of said bag-like receptacle, said part of said further portion of said bag-like receptacle thereafter keeping said multiplicity of droppings from passing to and escaping through said opening defined by said opening-defining fold as said laterally-offset free ends of said relatively-movable frames are disposed adjacent to and generally in parallel relation with the surfaces bearing said multiplicity of droppings, and said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said multiplicity of droppings within said bag-like receptacle.

2. A portable collector as claimed in claim 1 wherein the other ends of said relatively-movable frames coact with said part of said further portion of said bag-like receptacle to define an opening that is contiguous to said space between said relatively-movable frames, and wherein said closed end of said bag-like receptacle passes through said opening as it extends through and out of said space between said relatively-movable frames to be disposed laterally of said further portion of said bag-like receptacle.

3. A portable collector as claimed in claim 1 wherein one of said relatively-movable frames has an opening therein that is contiguous to said space between said relatively-movable frames, and wherein said closed end of said bag-like receptacle passes through said opening as it extends through and out of said space between said relatively-movable frames to be disposed laterally of said further portion of said bag-like receptacle.

4. A portable collector as claimed in claim 1 wherein interacting surfaces on said scoop and on said bag-like receptacle prevent accidental separation of said bag-like receptacle from said scoop as said laterally-offset free ends of said relatively-movable frames are disposed adjacent to and generally in parallel relation with a surface bearing a dropping.

5. A portable collector as claimed in claim 1 wherein said scoop has a plurality of holding elements thereon to releasably hold said bag-like receptacle, wherein one of said holding elements releasably holds said inverted-condition portion of said bag-like receptacle, and wherein another of said holding elements releasably holds said closed end of said bag-like receptacle.

6. A portable collector as claimed in claim 1 wherein interacting surfaces on said scoop and on said bag-like receptacle prevent accidental separation of said bag-like receptacle from said scoop as said laterally-offset free ends of said relatively-movable frames are disposed adjacent to and generally in parallel relation with a surface bearing a dropping, and wherein said interacting surfaces hold said closed end of said bag-like receptacle above and out of engagement with a surface which bears a dropping when said laterally-offset free ends of said relatively-movable frames are disposed adjacent to and generally in parallel relation with said surface.

7. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings or any part of said portable collector which has contacted any of said droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, manually-manipulable means which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said manually-manipulable means having a portion thereof adjacent said opening-defining fold of said bag-like receptacle which enables said portable collector to provide a stiff edge that can be forced to move between a dropping and a surface on which said dropping rests, said manually-manipulable means helping define a passage which is contiguous to and in register with, but which extends in said direction away from said opening-defining fold, said closed end of said bag-like receptacle extending in said direction beyond said portion of said manually-manipulable means and

beyond said passage to define a space in which a dropping can be held, said space being remote from said opening-defining fold and being displaced, at least in part, out of register with said passage, whereby any dropping that was held within said space would have at least a portion thereof located out of register with the adjacent end of said passage, and whereby said dropping would have to move into register with said passage and then would have to change direction and move through said passage toward said opening-defining fold to escape from said portable collector, said manually-manipulable means being manipulable to accommodate a dropping and thereafter being tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and through and beyond said passage to enter said dropping-holding space that is defined by said closed end of said bag-like receptacle and to move, at least in part, out of register with said adjacent end of said passage, and said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said dropping within said bag-like receptacle.

8. A portable collector as claimed in claim 7 wherein said manually-manipulable means is a sleeve which normally is essentially flat but which can be given an essentially tubular configuration to enable said manually-manipulable means to accommodate said dropping and to enable said dropping to respond to tilting of said manually-manipulable means to pass through and beyond said manipulable means and enter said closed end of said bag-like receptacle.

9. A portable collector as claimed in claim 7 wherein said manually-manipulable means is a sleeve which normally is essentially flat, wherein said manually-manipulable means can respond to inwardly-directed forces applied to the side edges thereof to assume an essentially-tubular configuration, and wherein said bag-like receptacle is sufficiently flexible to receive and transmit said inwardly-directed forces to said side edges of said manually-manipulable means.

10. A portable collector as claimed in claim 7 wherein said manually-manipulable means is made from a material that is stiffer than the material of which said bag-like receptacle is made, and wherein one end of said manually-manipulable means projects outwardly beyond said opening-defining fold of said bag-like receptacle to serve as said one portion of said manually-manipulable means, whereby said one end of said manually-manipulable means can serve as a stiff edge which can be pressed against said surface on which said dropping rests and can be disposed immediately adjacent and can directly receive said dropping.

11. A portable collector as claimed in claim 7 wherein said manually-manipulable means is made from a material that is stiffer than the material of which said bag-like receptacle is made, and wherein one end of said manually-manipulable means projects outwardly beyond said opening-defining fold of said bag-like receptacle to serve as said one portion of said manually-manipulable means, whereby said one end of said manually-manipulable means can serve as a stiff edge which can be pressed against said surface on which said dropping rests and can be disposed immediately adjacent and can directly receive said dropping, but wherein said manually-manipulable means has the greater portion of the length thereof disposed within and enclosed and protected by said further portion of said bag-like receptacle.

12. A portable collector as claimed in claim 7 wherein said manually-manipulable means is a sleeve which is disposed within said bag-like receptacle, wherein said manually-manipulable means is made from a material that is stiffer than the material of which said bag-like receptacle is made, and wherein one end of said sleeve is said portion of said manually-manipulable means and can serve as a stiff edge which can be pressed against said surface on which said dropping rests and can be disposed immediately adjacent and can directly receive said dropping, but wherein said manually-manipulable means has the greater portion of the length thereof disposed within and enclosed and protected by said further portion of said bag-like receptacle.

13. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings or any part of said portable collector which has contacted any of said droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, manually-manipulable means which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said manually-manipulable means having a portion thereof adjacent said opening-defining fold of said bag-like receptacle which enables said portable collector to provide a stiff edge that can be forced to move between a dropping and a surface on which said dropping rests, said manually-manipulable means helping define a passage which is contiguous to and in register with but which extends in said direction away from said opening-defining fold and toward said closed end of said bag-like receptacle, said manually-manipulable means being a sleeve, said manually-manipulable means being manipulable to accommodate a dropping and thereafter being tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and into said passage, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said dropping within said bag-like receptacle, a pusher element integral with said manually-

manipulable means, said pusher element being readily separable from said manually-manipulable means, said pusher element being usable to push said dropping into position within said manually-manipulable means, and said pusher element being subsequently insertable into said further portion of said bag-like receptacle.

14. A portable collector as claimed in claim 7 wherein said manually manipulable means is a scoop which has relatively-movable frames, wherein the free ends of said relatively-movable frames are disposable in pocket-like portions of said bag-like receptacle between said inverted-condition portion and said further portion.

15. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings or any portion of said portable collector which has contacted any of such droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the said closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, a manually-manipulable means that is stiffer than said bag-like receptacle and that has a portion thereof which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said portion of said manually-manipulable means remaining at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle throughout the entire period of use of said portable collector in picking up said dropping, said portion of said manually-manipulable means being adjacent said opening-defining fold of said bag-like receptacle, said manually-manipulable means helping define a passage which is contiguous to and in register with but which extends in said direction away from said opening-defining fold, said closed end of said bag-like receptacle extending in said direction beyond said portion of said manually-manipulable means and constituting a closure for that end of said passage which is remote from said opening-defining fold, said manually-manipulable means being manipulable to accommodate a dropping and said manually-manipulable means and said bag-like receptacle thereafter being readily tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and through said passage to approach said closed end of said bag-like receptacle, whereby a dropping adjacent said closed end of said bag-like receptacle would have to move through said passage toward said opening-defining fold to escape from said portable collector, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said dropping within said bag-like receptacle, said manually-manipulable means being dimensioned so said user's hand is close to said bag-like receptacle and is relatively close to said opening-defining fold of said bag-like receptacle whenever said manually-manipulable means is held and manipulated by said user's hand.

16. A portable collector as claimed in claim 15 wherein said manually-manipulable means is a sleeve which normally is essentially flat, wherein said manually-manipulable means can respond to inwardly-directed forces applied to the side edges thereof to assume an essentially-tubular configuration, and wherein said bag-like receptacle is sufficiently flexible to receive and transmit said inwardly-directed forces to said side edges of said manually-manipulable means.

17. A portable collector as claimed in claim 15 wherein said manually-manipulable means is a scoop which has relatively-movable frames, wherein the free ends of said relatively-movable frames are disposable in pocket-line portions of said bag-like receptacle between said inverted-condition portion and said further portion.

18. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, a manually-manipulable means which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said manually-manipulable means having a portion thereof adjacent said opening-defining fold of said bag-like receptacle, said manually-manipulable means being manipulable to accommodate a dropping, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, said open end of said bag-like receptacle being closable to enclose and confine said dropping within said bag-like receptacle, and interacting surfaces on said manually-manipulable means and on said bag-like receptacle to prevent accidental separation of said bag-like receptacle from said manually-manipulable means.

19. A portable collector as claimed in claim 15 wherein a pusher element can be used to push said dropping into position within said manually-manipulable means, wherein said pusher element has absorbent material on a portion of the surface thereof to enable said pusher element to be used to clean the surface upon which said dropping was deposited, and wherein said pusher element can subsequently be inserted into said further portion of said bag-like receptacle.

20. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings and which com-

prises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, a manually-manipulable means which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said manually-manipulable means having a portion thereof adjacent said opening-defining fold of said bag-like receptacle, said manually-manipulable means having relatively-movable frames, and said relatively-movable frames having handles thereon which can be gripped by the thumb and fingers of a user's hand to move said relatively-movable frames relative to each other, said handles being adjacent said bag-like receptacle but being spaced away from said portion of said manually-manipulable means which is adjacent said opening-defining fold, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said droppings within said bag-like receptacle.

21. A portable collector for droppings which can be used to collect droppings without requiring a user's hands to contact any of said droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle and a scoop, said scoop having relatively-movable frames with free ends that are offset laterally from other portions of said relatively-movable frames and that confront and extend toward each other, said laterally-offset free end of said relatively-movable frames acting to hold said other portions of said relatively-movable frames in laterally spaced-apart relation and thereby coacting with said other portions of said relatively-movable frames to bound and define a space between said relatively-movable frames whenever said laterally-offset free ends of said relatively-movable frames are moved into position adjacent each other, and said laterally-offset free ends of said relatively-movable frames being encased by portions of said bag-like receptacle and being movable into position beneath a dropping resting on a surface.

22. A portable collector as claimed in claim 21 wherein a further portion of said bag-like receptacle is spaced from said encasing portions of said bag-like receptacle, and wherein said dropping can respond to tilting of said scoop to pass through said space between said relatively movable frames and enter said further portion of said bag-like receptacle while said laterally-offset free ends of said relatively-movable frames are immediately adjacent each other.

23. A portable collector as claimed in claim 21 wherein said portions of said bag-like receptacle are pocket-like in configuration, and wherein said portions of said bag-like receptacle are contiguous with the inner surface of said bag-like receptacle.

24. A portable collector as claimed in claim 21 wherein the laterally-offset free end of one of said relatively-movable frames is pivoted relative to said one relatively-movable frame, and wherein the laterally-offset free end of the other of said relatively-movable frames is pivoted relative to said other relatively-movable frame, and wherein said laterally-offset free ends of said relatively-movable frames are able to lie generally parallel to a dropping-bearing surface as said laterally-offset free ends of said relatively-movable frames are moved toward each other while being immediately adjacent said dropping-bearing surface.

25. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings or any portion of said portable collector which has contacted any of such droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, a manually-manipulable means that is stiffer than said bag-like receptacle and which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said manually-manipulable means having a portion thereof adjacent said opening-defining fold of said bag-like receptacle, said manually-manipulable means helping define a passage which is contiguous to and in register with but which extends in said direction away from said opening-defining fold, said closed end of said bag-like receptacle extending in said direction beyond said portion of said manually-manipulable means and constituting a closure for that end of said passage which is remote from said opening-defining fold, said manually-manipulable means being manipulable to accommodate a dropping and said manually-manipulable means and said bag-like receptacle thereafter being readily tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and through said passage to approach said closed end of said bag-like receptacle, whereby a dropping adjacent said closed end of said bag-like receptacle would have to move through said passage toward said opening-defining fold to escape from said portable collector, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said droppings within said bag-like receptacle, said manually-manipulable means having a further portion thereof which is close to the center of gravity thereof and which receives gripping forces when said manually-manipulable means is held by said user's hand, whereby said manually-manipulable means can be gripped and manipulated by said hand of said user's hand with minimal effort and minimal fatigue.

26. A portable collector as claimed in claim 7 wherein said closed end of said bag-like receptacle is displaced laterally of said manually-manipulable means, wherein said closed end of said bag-like receptacle droops downwardly toward a dropping-bearing surface whenever said manually-manipulable means is moved toward said surface to enable a dropping on said surface to be picked up, and wherein a portion of the interior of said bag-like receptacle which is intermediate said opening-defining fold and said closed end of said bag-like receptacle does not droop to the same extent as said closed end of said bag-like receptacle, whereby said portion of said interior of said bag-like receptacle acts as a barrier to any previously-collected dropping within said closed end of said bag-like receptacle.

27. A portable collector as claimed in claim 15 wherein a portion of said bag-like receptacle that initially is integral with said bag-like receptacle subsequently is readily separable from the rest of said bag-like receptacle and is usable to tie said open end of said bag-like receptacle.

28. A portable collector as claimed in claim 15 wherein said manually-manipulable means has a portion thereof disposed within a pocket-like portion of said bag-like receptacle between said inverted-condition portion and said further portion of said bag-like receptacle.

29. A portable collector as claimed in claim 15 wherein said manually-manipulable means is secured to said bag-like receptacle and is disposable along with, and as a part of, said bag-like receptacle.

30. A portable collector as claimed in claim 15 wherein said manually-manipulable means is a sleeve, wherein said closed end of said bag-like receptacle is telescoped into one end of said sleeve to enable said one end of said sleeve to fit into a pocket-like portion of said bag-like receptacle between said inverted-condition portion and said further portion of said bag-like receptacle.

31. A portable collector as claimed in claim 7 wherein said closed end of said bag-like receptacle is displaced laterally of said manually-manipulable means, wherein said closed end of said bag-like receptacle droops downwardly towards a dropping-bearing surface whenever said manually-manipulable means is moved toward said surface to enable a dropping on said surface to be picked up, wherein interacting surfaces on said bag-like receptacle and on said manually-manipulable means hold a portion of the interior of said bag-like receptacle from drooping downwardly a corresponding amount, wherein said portion of said interior of said bag-like receptacle is intermediate said opening-defining fold and said closed end of said bag-like receptacle, whereby said portion of said closed end of said bag-like receptacle acts as a barrier to any previously-collected dropping within said closed end of said bag-like receptacle.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No 3,767,247 Dated October 23, 1973

Inventor(s) Dallas G. Wetzler

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

The present columns 25 - 28 should be cancelled and the attached columns 25 - 28 substituted therefor, as part of the Letters Patent.

This certificate supersedes Certificate of Correction issued April 30, 1974 with respect to columns 25 - 28 only.

Signed and sealed this 16th day of July 1974.

(SEAL)
Attest:

McCOY M. GIBSON, JR.
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents

FORM PO-1050 (10-69)

USCOMM-DC 60376-P69
* U.S. GOVERNMENT PRINTING OFFICE : 1969 O—366-334.

being a sleeve, said manually-manipulable means being manipulable to accommodate a dropping and thereafter being tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and into said passage, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said dropping within said bag-like receptacle, a pusher element integral with said manually-manipulable means, said pusher element being readily separable from said manually-manipulable means, said pusher element being usable to push said dropping into position within said manually-manipulable means, and said pusher element being subsequently insertable into said further portion of said bag-like receptacle.

22. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings or any portion of said portable collector which has contacted any of such droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the said closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, a manually-manipulable means that is stiffer than said bag-like receptacle and that has a portion thereof which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said portion of said manually-manipulable means remaining at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle throughout the entire period of use of said portable collector in picking up said dropping, said portion of said manually-manipulable means being adjacent said opening-defining fold of said bag-like receptacle, said manually-manipulable means helping define a passage which is contiguous to and in register with but which extends in said direction away from said opening-defining fold, said closed end of said bag-like receptacle extending in said direction beyond said portion of said manually-manipulable means and constituting a closure for that end of said passage which is remote from said opening-defining fold, said manually-manipulable means being manipulable to accommodate a dropping and said manually-manipulable means and said bag-like receptacle thereafter being readily tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and through said passage to approach said closed end of said bag-like receptacle, whereby a dropping adjacent said closed end of said bag-like receptacle would have to move through said passage toward said opening-defining fold to escape from said portable collector, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said dropping within said bag-like receptacle, said manually-manipulable means being dimensioned so said user's hand is close to said bag-like receptacle and is relatively close to said opening-defining fold of said bag-like receptacle whenever said manually-manipulable means is held and manipulated by said user's hand.

23. A portable collector as claimed in claim 22 wherein said manually-manipulable means is a sleeve which normally is essentially flat, wherein said manually-manipulable means can respond to inwardly-directed forces applied to the side edges thereof to assume an essentially-tubular configuration, and wherein said bag-like receptacle is sufficiently flexible to receive and transmit said inwardly-directed forces to said side edges of said manually-manipulable means.

24. A portable collector as claimed in claim 22 wherein said manually-manipulable means is a scoop which has relatively-movable frames, wherein the free ends of said relatively-movable frames are disposable in pocket-line portions of said bag-like receptacle between said inverted-condition portion and said further portion.

25. A portable collector as claimed in claim 22 wherein a pusher element can be used to push said dropping into position within said manually-manipulable means, wherein said pusher element has absorbent material on a portion of the surface thereof to enable said pusher element to be used to clean the surface upon which said dropping was deposited, and wherein said pusher element can subsequently be inserted into said further portion of said bag-like receptacle.

26. A portable collector as claimed in claim 22 wherein a portion of said bag-like receptacle that initially is integral with said bag-like receptacle subsequently is readily separable from the rest of said bag-like receptacle and is usable to tie said open end of said bag-like receptacle.

27. A portable collector as claimed in claim 22 wherein said manually-manipulable means has a portion thereof disposed within a pocket-like portion of said bag-like receptacle between said inverted-condition portion and said further portion of said bag-like receptacle.

28. A portable collector as claimed in claim 22 wherein said manually-manipulable means is secured to said bag-like receptacle and is disposable along with, and as a part of, said bag-like receptacle.

29. A portable collector as claimed in claim 22 wherein said manually-manipulable means is a sleeve, wherein said closed end of said bag-like receptacle is telescoped into one end of said sleeve to enable said one end of said sleeve to fit into a pocket-like portion of said bag-like receptacle between said inverted-

condition portion and said further portion of said bag-like receptacle.

30. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings or any part of said portable collector which has contacted any of said droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, a manually-manipulable means which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said manually-manipulable means having a portion thereof adjacent said opening-defining fold of said bag-like receptacle which enables said portable collector to provide a stiff edge that can be forced to move between a dropping and a surface on which said dropping rests, said manually-manipulable means helping define a passage which is contiguous to and in register with, but which extends in said direction away from said opening-defining fold, said closed end of said bag-like receptacle extending in said direction beyond said portion of said manually-manipulable means and beyond said passage to define a space in which a dropping can be held, said space being remote from said opening-defining fold and being displaced, at least in part, out of register with said passage, whereby any dropping that was held within said space would have at least a portion thereof located out of register with the adjacent end of said passage, and whereby said dropping would have to move into register with said passage and then would have to change direction and move through said passage toward said opening-defining fold to escape from said portable collector, said manually-manipulable means being manipulable to accommodate a dropping and thereafter being tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and through and beyond said passage to enter said dropping-holding space that is defined by said closed end of said bag-like receptacle and to move, at least in part, out of register with said adjacent end of said passage, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, said open end of said bag-like receptacle being closable to enclose and confine said dropping within said bag-like receptacle, and interacting surfaces on said manually-manipulable means and on said bag-like receptacle to prevent accidental separation of said bag-like receptacle from said manually-manipulable means.

31. A portable collector for droppings which can be used to collect droppings without requiring a user's hand to contact any of said droppings or any portion of said portable collector which has contacted any of such droppings and which comprises a readily-flexible, tear-resistant, bag-like receptacle which has an open end dimensioned to telescope freely along the outer surface of said bag-like receptacle in a direction toward the closed end of said bag-like receptacle to cause a portion of said bag-like receptacle to lie in inverted condition over a further portion of said bag-like receptacle and thereby form an opening-defining fold, a manually-manipulable means that is stiffer than said bag-like receptacle and which is at least partly disposed inwardly of said inverted-condition portion of said bag-like receptacle, said manually-manipulable means having a portion thereof adjacent said opening-defining fold of said bag-like receptacle, said manually-manipulable means helping define a passage which is contiguous to and in register with but which extends in said direction away from said opening-defining fold, said closed end of said bag-like receptacle extending in said direction beyond said portion of said manually-manipulable means and constituting a closure for that end of said passage which is remote from said opening-defining fold, said manually-manipulable means being manipulable to accommodate a dropping and said manually-manipulable means and said bag-like receptacle thereafter being readily tiltable to cause said dropping to pass through and beyond said portion of said manually-manipulable means and through said passage to approach said closed end of said bag-like receptacle, whereby a dropping adjacent said closed end of said bag-like receptacle would have to move through said passage toward said opening-defining fold to escape from said portable collector, said open end of said bag-like receptacle being adapted to be subsequently telescoped freely along said outer surface of said bag-like receptacle in a direction away from said closed end of said bag-like receptacle and beyond the position occupied by said opening-defining fold to dispose the previously-exposed surface of said inverted-condition portion of said bag-like receptacle wholly at the interior of said bag-like receptacle and to expose the previously-protected said further portion of said bag-like receptacle, and said open end of said bag-like receptacle being closable to enclose and confine said droppings within said bag-like receptacle, said manually-manipulable means having a further portion thereof which is close to the center of gravity thereof and which receives gripping forces when said manually-manipulable means is held by said user's hand, whereby said manually-manipulable means can be gripped and manipulated by said hand of said user's hand with minimal effort and minimal fatigue.

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