

[54] **PORTABLE BAG HOLDER**

[76] Inventor: **John Ernest Anderson**, 182 Park
Lawn Rd., Toronto 18, Ontario,
Canada

[22] Filed: **Dec. 30, 1970**

[21] Appl. No.: **102,797**

[52] U.S. Cl. **294/19 R, 248/99, 294/55**

[51] Int. Cl. **A47f 13/06**

[58] Field of Search **224/45 P, 45 Q, 45 R,**
224/45 D, 45 H; 294/1 R, 55; 248/99, 101

[56] **References Cited**

UNITED STATES PATENTS

3,688,483	9/1972	Hamilton	294/19 R X
1,265,996	5/1918	Cerny	248/99
2,989,277	6/1961	Michaud	248/101

FOREIGN PATENTS OR APPLICATIONS

737,747 0/1955 Great Britain 248/99

Primary Examiner—Robert G. Sheridan

Assistant Examiner—Jerold M. Forsberg

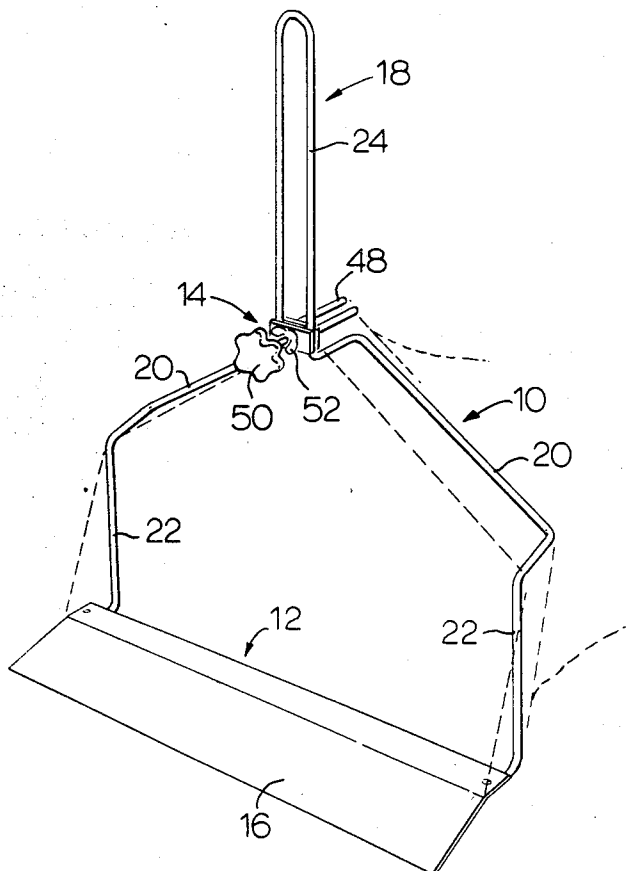
Attorney—Neill M. S. Johnston

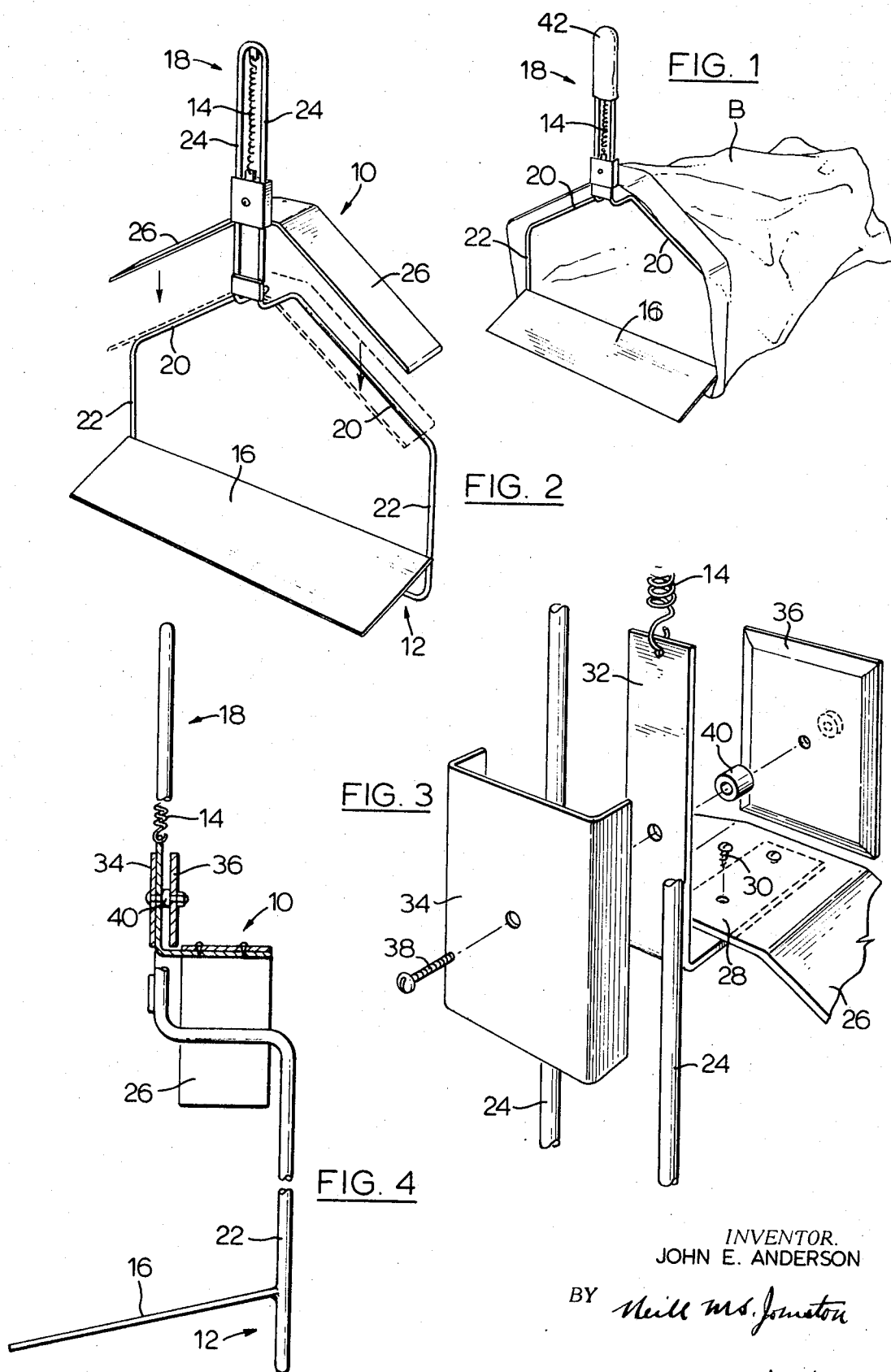
[57]

ABSTRACT

A portable bag holder for detachably mounting a flexible garbage bag thereon is described. Several embodiments described have, as common features, a handle, the provision of spaced supports for the mouth of the bag, devices for tensioning the mouth of the bag about said supports and a lip located to extend from the inside to the outside of the bag mouth for facilitating loading of refuse into the bag directly off the ground.

1 Claim, 11 Drawing Figures





INVENTOR.
JOHN E. ANDERSON

BY *Willms Jonston*

Agent

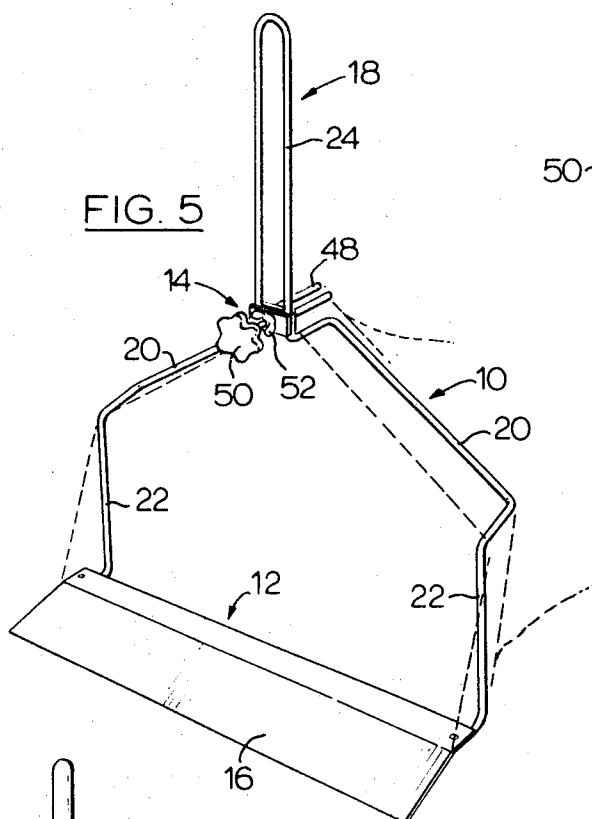


FIG. 5

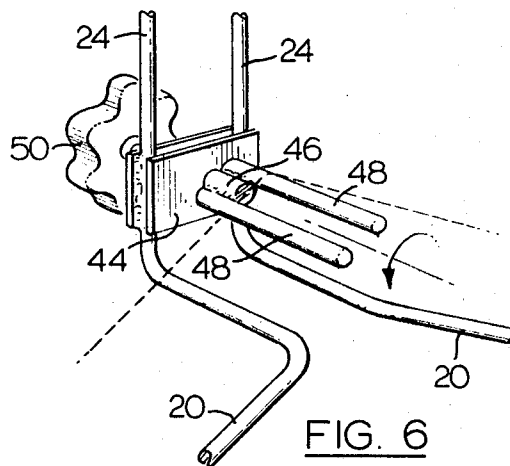


FIG. 6

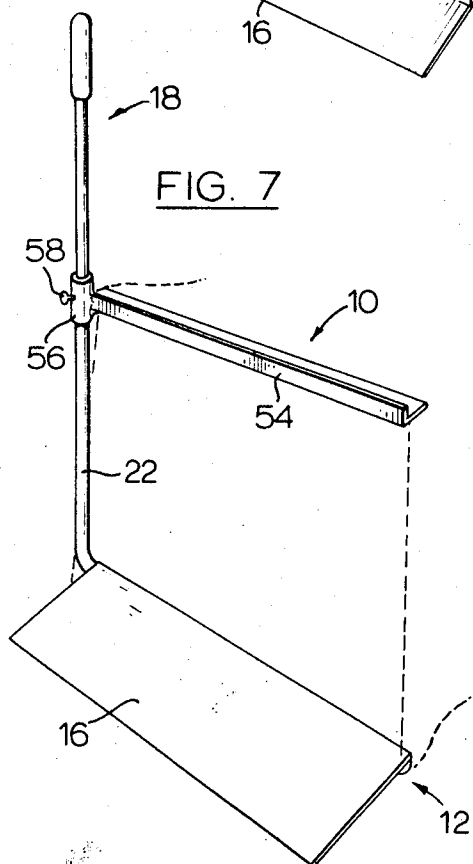


FIG. 7

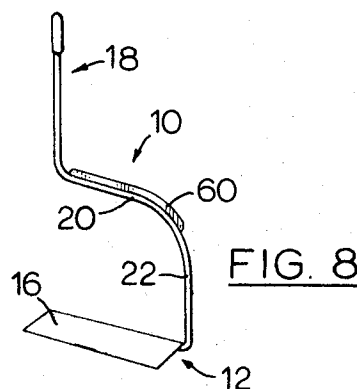


FIG. 8

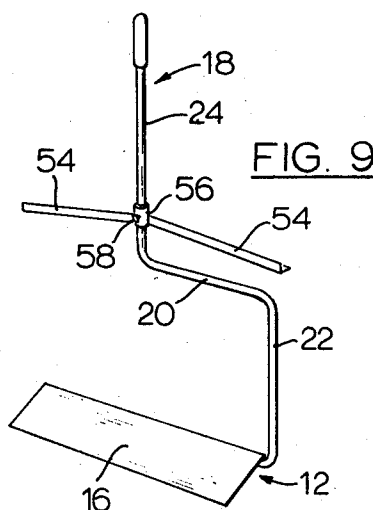


FIG. 9

INVENTOR.
JOHN E. ANDERSON

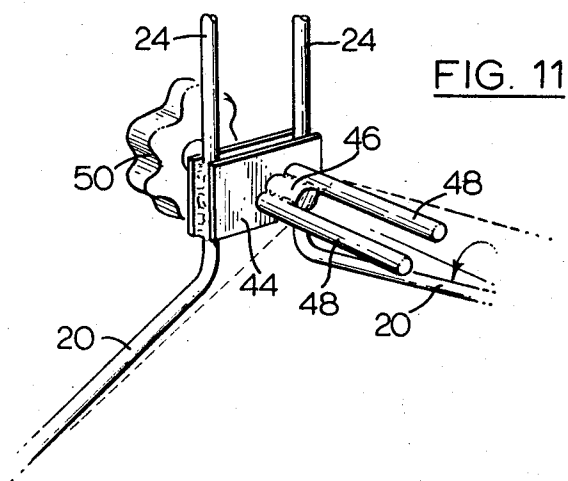
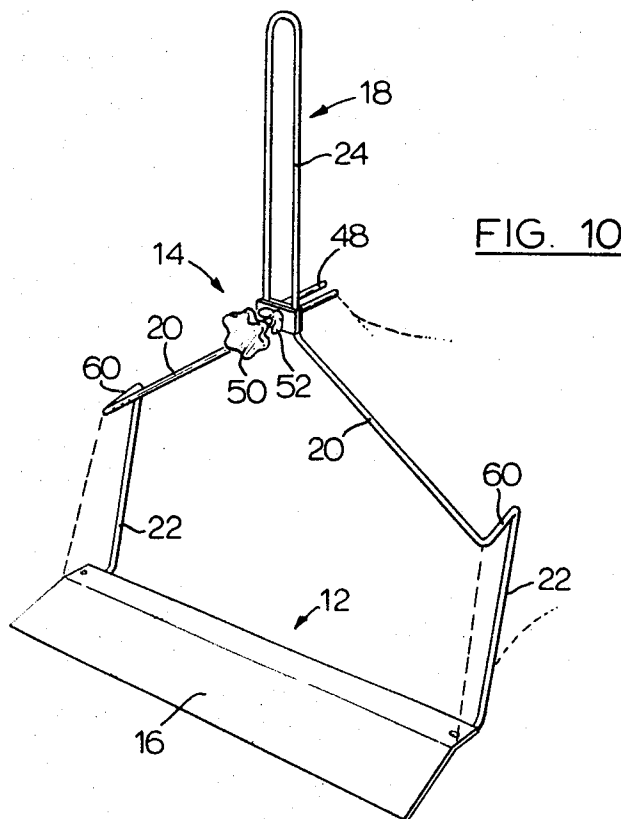
BY *Neil W. Johnston*

Agent

Patented Aug. 28, 1973

3,754,785

3 Sheets-Sheet 3



INVENTOR.
JOHN E. ANDERSON

BY *Neill W. Johnston*

Agent

PORTABLE BAG HOLDER

This invention relates to a portable bag holder such as may be utilized for example for holding a flexible garbage bag with its opening spread apart in such orientation as to facilitate the loading of refuse therethrough and into the interior of the bag.

Various devices for spreading the openings of bags and sacks are known in the prior art but many of these devices have been specifically designed to fulfill a required function in a fixed orientation; for example, for spreading the opening of a sack to receive grain from a hopper wherein the sack is retained in a vertical position with its opening uppermost.

It is one object of the present invention to provide a portable bag holder which is capable of holding a bag thereon with its mouth spread open and which is readily maneuverable to orientate the bag into whichever position is most convenient to the person filling the bag.

Other objects of the invention include the provision of such a bag holder which is economical to manufacture; which is designed to permit rapid and simple mounting and de-mounting of a bag thereon; which includes means for firmly retaining a bag in mounted position thereon with its mouth spread open and tensioned to take up slack and which includes means facilitating the ready and direct loading of materials into the bag without undue spillage.

In accordance with the invention the subject portable bag holder is comprised of spaced apart support portions for engaging corresponding parts of the edges of the mouth of the bag; means for tensioning the mouth of the bag about said support portions; an elongated lip facilitating passage of materials thereover and into the bag and a handle for orienting the bag in a cleared position.

Other features of the invention will become apparent from the following description thereof given herein solely by way of example with reference to the accompanying drawings wherein like reference numerals refer to the like parts therethrough the several views and wherein:

FIG. 1 is a front and top perspective view of one form of the subject bag holder with a bag mounted thereon;

FIG. 2 is a view similar to that of FIG. 1 but with the bag removed;

FIG. 3 is an enlarged exploded view of the tensioning means;

FIG. 4 is a side cross-sectional view of the bag holder;

FIG. 5 is a front and top perspective view of a further embodiment of subject bag holder;

FIG. 6 is an enlarged perspective view of the tensioning means of the FIG. 5 bag holder;

FIG. 7 is a front and top perspective view of a yet further embodiment of the bag holder;

FIG. 8 is a front and top perspective view of a still further embodiment;

FIG. 9 is a front and top perspective view of another embodiment;

FIG. 10 is a front perspective view of a further embodiment; and

FIG. 11 is an enlarged perspective view from the rear of the tensioning means employed in the embodiment of FIG. 10.

The subject bag holder is comprised essentially of support portions 10 and 12 upon which the mouth or

opening of a bag B is engageable; means 14 for tensioning the bag opening about the support portions 10 and 12; an elongated lip 16 for facilitating passage of materials thereover through the bag opening and into the interior thereof and a handle 18 for maneuvering the bag B into a desired position and orientation.

Referring first of all to the embodiment shown in FIGS. 1 through 4 of the drawings it will be noted that the support portions 10 and 12 are constituted as an upper support portion 10 adjacent the handle 18 and a lower support portion in spaced opposed relation thereto.

In this embodiment said upper and lower support portions 10 and 12 are relatively spread apart by the tensioning means 14 as will be further described herein.

The bag holder further includes a peripheral wire frame having upper convergent frame elements 20, parallel side elements 22 and a lower element constituting the lower support portion 12. The lip 16 which is of flat plate like form is co-extensive with said lower support portion 12, and is fixedly secured to the frame side elements 22, as by welding for example, to project forwardly therefrom in a direction inclined away from the handle 18.

The upper frame elements 20 are bent at their position of convergence into a pair of parallel members 24, the upper parts of which constitute the handle 18.

The upper support portion 10 is comprised of a plate-like member having convergent fins 26, the angle of convergence of which corresponds to that of the upper frame elements 20, and which is mounted for sliding movement upon the parallel members 24. The tensioning means acts to resiliently bias the fins 26 away from the upper frame elements 20 and the lower support portion 12.

The construction of the upper support portion 10 and the tensioning means 14 is shown in greater detail in FIGS. 3 and 4 wherein it will be seen that the tensioning means is comprised of a coil tension spring acting between the handle 18 and the fins 26 to bias them as foresaid. More specifically the fins 26 include a centre platform 28 secured as by screws 30 to an L-shaped bracket 32 having one arm parallel to the members 24 and to which one end of the spring is attached. The assembly also includes front and back plates 34 and 36 respectively secured together as by bolt 38 and spacer 40 to retain the fins 26 in position for sliding movement upon the members 24.

The bag holder assembly is conveniently completed by a sleeve 42, of plastic for example, placed over the upper ends of the members 24 and providing a convenient grip for the handle 18.

It may be noted at this juncture that the construction of the bag holder hereinbefore described is extremely simple and the materials thereof may be chosen to provide an extremely lightweight article when assembled.

In this embodiment, it is contemplated that the bag holder may be utilized to mount a garbage bag B thereon of the well-known plastic variety which may thereafter conveniently be utilized to receive garden refuse swept directly thereinto off the ground.

To mount the bag on the holder, the bag opening is spread by hand and placed around the peripheral frame and over the fins 26 which are depressed by hand adjacent the bias of the coil spring. As illustrated in FIG. 1, the bag opening is placed wholly around the peripheral frame so that all of the frame elements are located in-

ward of the edges of the bag opening with the lip 16 thus extending from the inside to the outside of the bag opening. Release of the fins 26 will permit them to move upwardly under the influence of the coil spring thereby tensioning the edges of the bag opening about those elements of the holder which engage the said opening so that no slack is left therearound.

When the bag is mounted as aforesaid, and as illustrated in FIG. 1, the user may then orientate the bag to its required position by picking up the whole assembly of holder and bag by the handle 18. In particular, when used for the reception of refuse off the ground, the holder may be positioned so that the forward edge of lip 16 is on the ground whereby refuse may be swept directly into the bag without any undue spillage thereon.

It will, of course, be evident that the subject bag holder will permit equally easy demounting of a bag therefrom and that it is adaptable to mount bags of differing mouth diameter in the tensed condition as aforesaid subject only to the dimensions of the peripheral frame and the degree of relative movement which is permitted between the upper and lower support portions 10 and 12.

Turning now to the embodiment illustrated in FIGS. 5 and 6 there is shown a somewhat similar bag holder to that aforescribed with the difference that there is no provision for relative movement between the support portions thereof; the tensioning of the bag opening being accomplished by a rotary device as will be further described.

In this embodiment, the holder again includes a peripheral wire frame having convergent upper frame elements 20 which however actually constitute the upper support portion 10. The side frame elements 22 are relative to the upper elements 20 and have lower ends directly attached to opposite ends respectively of the lip 16. Said lip 16 has a rear flange bent out of the plane of the remainder of the lip and which constitutes the lower support portion 12 of the holder.

At the lower ends of the members 24 there is provided a fixed block 44 providing a plain bearing for a threaded shaft 46 of the rotary tensioner 14. Such tensioner also includes a tongue in the form of a pair of parallel fingers 48 fixedly secured on diametrically opposed sides of shaft 46 and extending rearwardly of the handle 18.

The other end of shaft 46 extends through the block 44 and is provided with a knob 50 for facilitating rotation thereof. A wing nut 52 threadably mounted on the shaft 46 between the block 44 and knob 50 serves as a locking means to bind against the block and lock shaft 46 in a desired angular orientation. It will, of course, be understood that any suitable fastening means may be employed.

In use, the dilated opening of the bag, which may or may not be folded at the option of the user, is drawn over the peripheral frame elements including the upper and lower support portions 10 and 12 and an edge of the bag opening is between the fingers 48 of the tensioning means 14. Rotation of the shaft 46 by means of knob 50 will thus furl the edge of the bag opening about the fingers 48 contracting the bag opening and tensioning it about the support portions of the holder. When the bag opening is suitably tensioned as aforesaid, the lock nut 52 is rotated to bind against block 44 thereby

locking the shaft 46 in position and retaining the bag opening in its tensed condition.

FIG. 7 illustrates a somewhat simplified embodiment of the subject bag holder being comprised of a straight side frame element 22 and a lower frame element constituting the lower support portion 12 carrying the lip 16 co-extensively thereon.

The upper support portion 10 is constituted by a single flanged bar 54 slidably mounted at its one end by a collar 56 upon the frame element 22 and lockable in position thereon by a thumb screw or the like 58. In this embodiment, said bar 54 also constitutes the tensioning means and, in use, the bag opening is placed over the bar 54, around frame element 22 and under lower support portion 12; upward movement of the bar 54 relative to portion 12 thus tensioning the bag opening about the support portions.

FIG. 8 illustrates an even more simplified embodiment which is really only adapted to mount one particular size of bag opening thereon. This bag holder is comprised of a partial peripheral frame having upper frame element 20, side frame element 22 and a lower frame base element constituting the lower support portion 12.

The lip 16 is co-extensive with and fixedly secured to said lower support portion 12.

The upper support portion 10 is provided by a flange 60 fixedly secured to upper frame element 22 and curved therewith as illustrated. In this embodiment, the side frame element 22 at least is formed of a resilient material such as spring steel and constitutes tensioning means resiliently biasing upper and lower support portions 10 and 12 away from another.

It will be apparent that, in use, the opening of a bag is placed around the support portions 10 and 12 and frame element 22 whilst the latter is deformed to permit such placement. Subsequent release will permit the resilience of element 22 to bias the support portions 10 and 12 away from one another tensioning the bag opening as desired.

The embodiment of FIG. 9 is basically similar to that shown in FIG. 7 except that a partial peripheral frame is provided affording a side frame element 22 and simple member 24 which itself affords a bearing for a pair of opposed slidable bars 54 constituting both the upper support portion 10 and the tensioning means as described with respect to the FIG. 7 embodiment.

In the embodiments shown FIGS. 10 and 11 support for the upper bag edge is provided by the tensioning means 48 which engages the bag edge and upon rotation holds the bag taut over frame portion 60. The upper frame element 20 through its form prevents rakes and brooms or the like from making contact with the edge of the bag.

I claim:

1. The claim:

A portable bag holder comprising:

a substantially rigid elongate lip member;

a bag support frame and handle comprising a substantially inverted Y-shaped member comprising a pair of downwardly depending arms and an upwardly extending arm providing a handle;

said depending arms having parallel first lower straight portions secured adjacent each end of said lip adjacent the rear edge thereof and rising upward substantially normally therefrom;

a second intermediate portion extending substantially parallel to said lip, and an upper portion extending inwardly toward said handle;

and tensioning means on said handle for securing the edges of a bag solely under tension against the outer surfaces of said lip and said arms.

* * * * *