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[54] **GARBAGE BAG HOLDER**

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[51] **Int. Cl.**.....**B65b 67/12**

[58] **Field of Search**.....248/97, 99, 100, 101, 300

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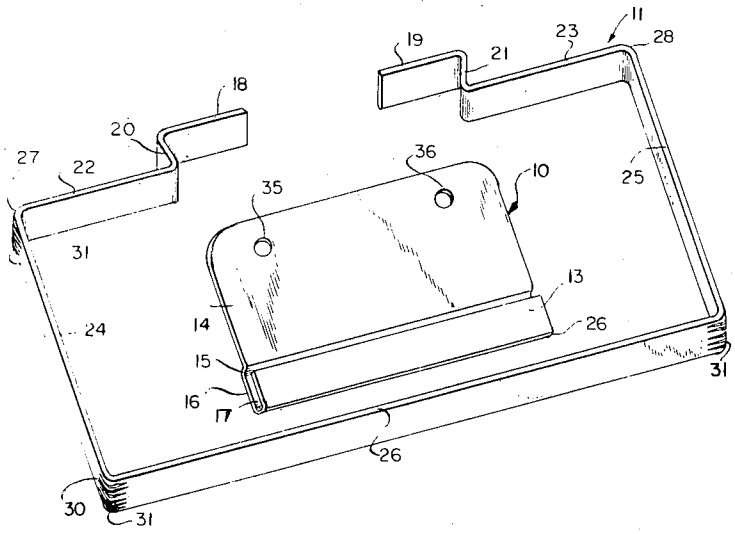
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[57] **ABSTRACT**

A garbage bag holder consisting of two pieces which when assembled and mounted are adapted to suspend a garbage bag in operative position, the holder being formed of a metal mounting plate adapted for mounting against a vertical supporting system and a bag supporting frame adapted to be secured by said brackets so as to provide a horizontal rectilinear frame with sharply pronounced corners within which a garbage bag may be suspended.

13 Claims, 4 Drawing Figures



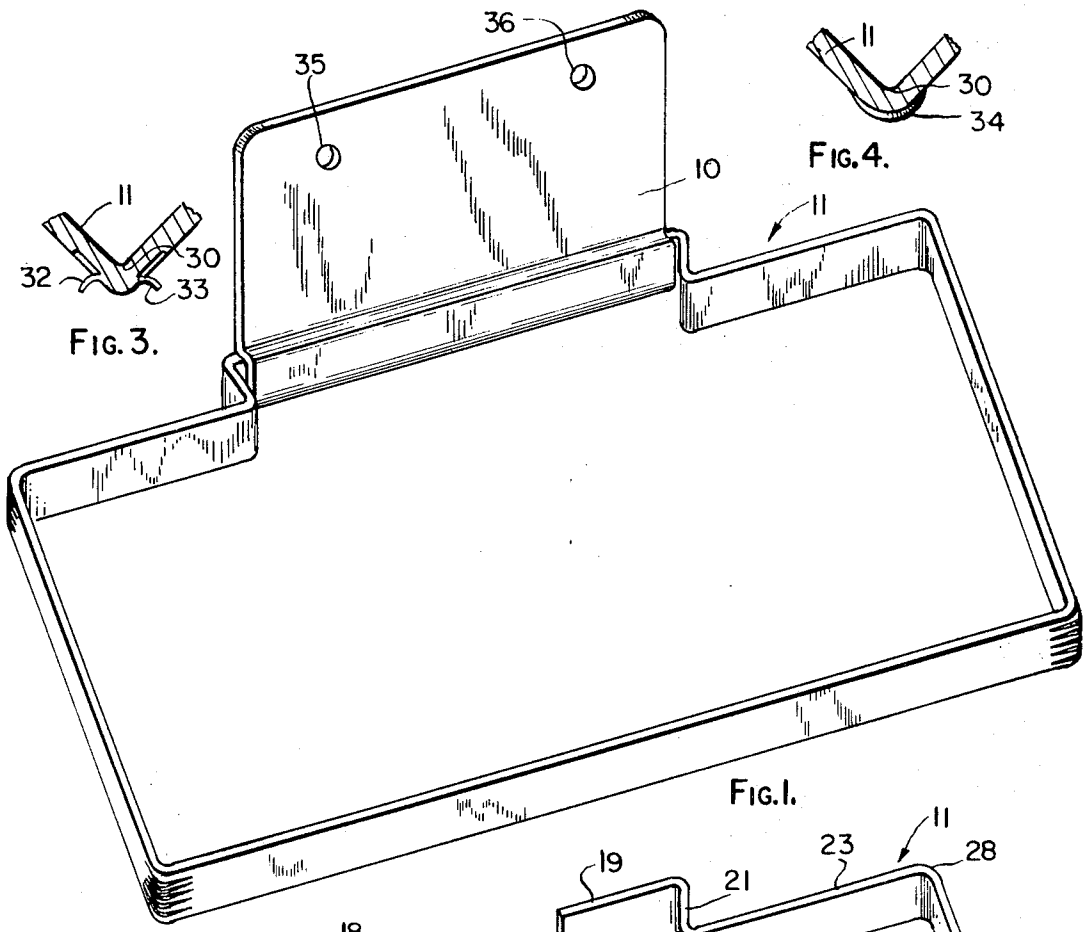


FIG. 1.

FIG. 3.

FIG. 4.

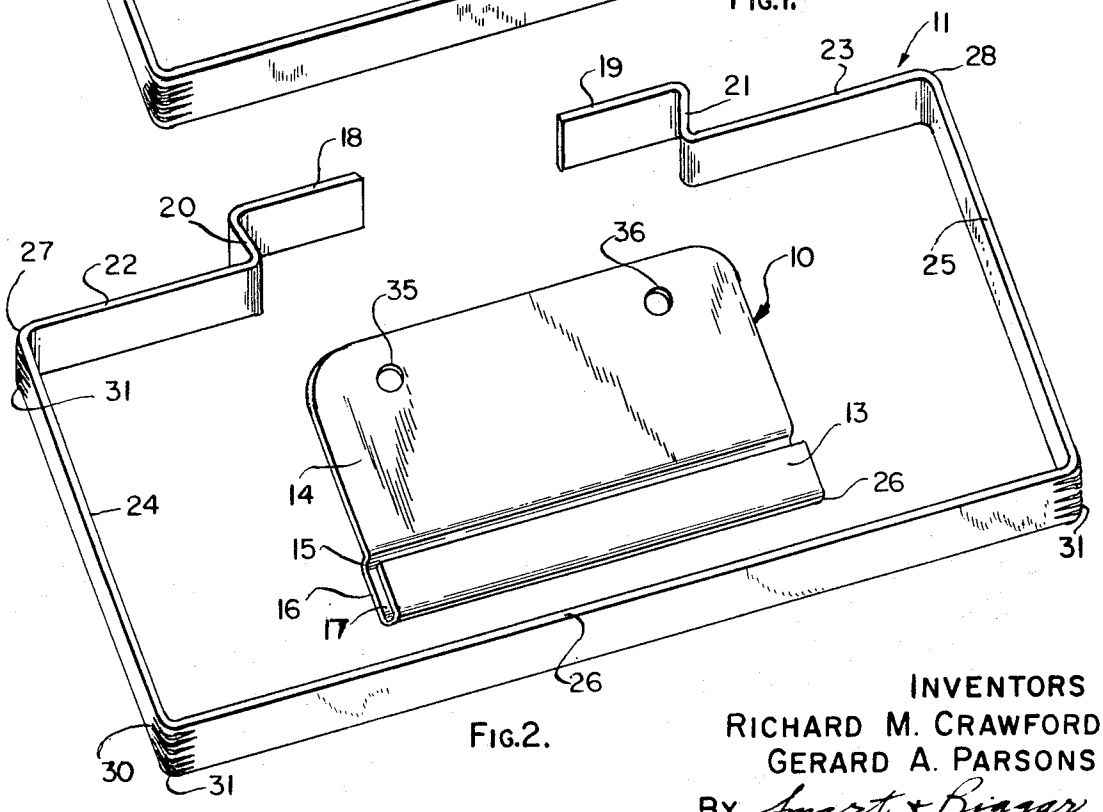


FIG. 2.

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GARBAGE BAG HOLDER

This invention relates to garbage bag holders and more particularly to a device whereby an appropriately sized garbage bag may be suspended in garbage receiving position from a convenient vertical surface such, for instance, as the side of a cupboard door, or a wall.

Garbage bags made from stretchable plastic materials such as polyethylene, have become a common article of commerce. Certain of these plastic garbage bags have been intended to replace water resistant Kraft paper garbage bags which were previously used in association with receptacles usually suspended from the interior of sink cupboard doors. One serious difficulty encountered with such plastic garbage bags has been the difficulty of maintaining the mouth of the bag open when the bag is placed in such a receptacle so that a person using the same, for instance, to scrape leavings from diner plates, could scrape directly into the open mouth of the bag. Since the old fashioned water resistant Kraft paper garbage bag did not have any critical size relationship to the container in which it was placed there was no effective standardization of sizes for the garbage bag receptacles in which the bags were placed and this lack of standardization of size has carried through in the production of plastic garbage bags. It is well known that the stretchable material from which the plastic bags are made enables the mouths of the bags to be held open if the lip of the bag is stretched and folded back over the upper periphery of a receptacle. However, as the plastic garbage bags of any one manufacturer will not necessarily be of a suitable size to be stretched over the periphery of existing garbage receptacles, the sales of plastic garbage bags have, to a substantial extent, been dependent upon the purchaser having a garbage receptacle of suitable size in relation to the size of the garbage bag purchased. This difficulty has been recognized in the art and it is becoming the practice for producers of plastic garbage bags to supply, along with the bags, a rack providing a suitably sized suspending means for the bags sold along with it.

It is a prime requirement of such racks or holders that they be of minimal cost, be simple to install, effective in use, and adapted for efficient packaging along with the bags with which they are to be used.

Several garbage bag holders designed for this purpose have already been proposed but none has yet been proposed which meets all of the above criteria.

The present invention has as its object the provision of a garbage bag holder for garbage bags made of stretchable plastic material which meets all of the above criteria in being simple to manufacture at minimal cost, capable of being packaged flat together with garbage bags with which it is to be sold, and being simple to assemble and install.

GENERAL DESCRIPTION OF THE INVENTION

According to the invention there is provided a garbage bag holder consisting of two pieces, namely, a metal mounting plate formed in a manner to be hereinafter described with socket means at one horizontal edge thereof, and a loop of metal strapping formed in a manner which will be hereinafter described, adapted to be secured with its ends in the socket of the mounting plate to present a horizontal loop having a rectilinear configuration with four sharply pronounced corners over which the mouth of the garbage bag may be stretched and secured to suspend the bag therefrom in mouth-open position for the reception of garbage.

Preferably, according to the invention, the corners are provided on their exterior surfaces with means retaining the stretched over end of the bag against slipping off. Such means may be undulations either scored on the exterior surface of the corners or punched through from the interior side of the corners during the formation thereof, or alternatively some more positive means of retention as will be hereinafter described.

Preferably, the garbage bag holder of the invention is made from corrosion resistant material such as stainless steel or galvanized mild steel, suitable rigid moulded plastic, or extruded aluminum or other extrudable alloys.

The invention and its operation will be more fully understood from the following detailed specification taken in conjunction with the accompanying drawings which illustrate a particular embodiment of the invention by way of illustration.

GENERAL DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. **1** is a perspective view of a garbage bag holder according to the invention assembled ready for mounting.

FIG. **2** is a perspective view of the garbage bag holder illustrated in FIG. **1** disassembled and ready for packaging.

FIG. **3** is a fragmentary detail perspective view illustrating one form of bag retaining means.

FIG. **4** is another fragmentary detail perspective view illustrating another form of bag retaining means.

DETAILED DESCRIPTION

Referring now more particularly to the drawings, in the embodiment therein illustrated the garbage bag holder consists of a metal mounting plate **10** and a bag supporting frame **11** formed of metal strapping or like material. As best seen in FIG. **2**, where the mounting plate **10** has its back faced uppermost in order better to illustrate the configuration thereof, the back plate **10** is folded over upon itself adjacent one horizontal edge thereof at **12**, the bent over portion **13** lying in the same plane as the back surface portion **14** of the mounting plate **10** by reason of the forward offsetting at **15** of the mounting plate **10**. The folded over portion **13**, together with the offset portion **16** form a horizontally disposed socket **17** which is open at both ends and which is adapted to accommodate the ends **18** and **19** of the bag supporting frame **11**.

The bag supporting frame **11** is formed from a single piece of metal strapping comprising the two end portions **18** and **19**, the two spacer portions **20** and **21**, the two back portions **22** and **23** which lie in a plane substantially parallel to that of the end portions **18** and **19**, the two forwardly extending side portions **24** and **25** and the front portion **26** joining the side portions **24** and **25**.

The bag supporting frame **11** is formed with the sharply pronounced corners **27**, **28**, **29** and **30** and these corners are each provided with the scored

horizontal undulations **31** which are adapted to prevent the stretched over end of a garbage bag from slipping off the corner. As shown in FIGS. **1** and **2**, the undulations **31** are scored on the corners from the exterior surface thereof. Alternatively the undulations may be punched through from the interior side of the corner to take the form of horizontal ridges. This latter form has the advantage of increased strength since the full cross-sectional area of the bag supporting frame remains intact, whereas in the embodiment illustrated the cross-sectional area is reduced by the amount of material removed in the scoring operation.

As an alternative to the undulations either scored or punched through, the means for retaining the stretched over end of the bag against slippage may be provided by forming a part of the metal of the bag supporting frame **11** in the region of the corners **27**, **28**, **29** and **30** into a form adapted to grip the bent over corners of the garbage bag, for instance, in FIG. **3** a portion of the lower edge of the bag supporting frame **11** in the region of the corner **30** is formed outwardly to provide the outwardly projecting lugs **32** and **33**. In FIG. **4** the lower portion of the corner **30** is formed downwardly to provide a downwardly projecting portion **34**. Various other ways of forming the material of the bag supporting frame in the region of the corners to provide the bag retaining effect will be readily apparent to those skilled in the metal forming and stamping art.

In operation the disassembled garbage bag holder of the invention is assembled by inserting the end portions **18** and **19** of the bag supporting frame **11** into the open ends of the socket **17** with the upset portion **16** facing the interior of the bag supporting frame **11**. Thus the back surface portion **14** of the mounting plate **10** and the bent over portion **13** form a flat surface facing rearwardly from the frame **11**. The mounting plate **10** may be secured to a vertical supporting surface by screws extending through suitable holes **35** and **36**. Alternately, and in most instances preferably, however, the entire back surface **14** of the mounting plate is coated with an adhesive (which may be readily packaged and sold in the same package as the garbage bag holder and garbage bags) and the back surface of the mounting plate **10** is pressed against a vertical supporting surface in the position in which it is desired to mount the garbage bag holder. Various suitable adhesives for the foregoing purpose are readily available on the market and it is not desirable to limit the present disclosure to any particular adhesive, it being understood that any adhesive capable of effectively bonding metal to wood, plastic or painted wood or plastic surfaces will be satisfactory.

It will be observed that in assembling the garbage bag holder of the invention in accordance with the foregoing the mounting plate has a continuous surface facing the supporting frame **11**. This is an important feature inasmuch as there are no cracks or crannies in which garbage may tend to collect. For most purposes the garbage bag holder when mounted in position for use may be kept clean and sanitary simply by wiping with a damp cloth and the usual kitchen detergents and/or disinfectants. If more thorough cleaning should become desirable in a particular instance the bag supporting frame **11** may be removed and washed with the dishes and then replaced.

What we claim as our invention is:

1. A two piece garbage bag holder adapted, when assembled and mounted, to suspend in garbage receiving position an appropriately sized garbage bag made of stretchable plastic material by stretching and folding the mouth of said bag over four sharply pronounced corners thereof, said holder comprising, a metal mounting plate adapted for mounting of a back surface thereof against a vertical supporting surface, said mounting plate having socket means formed therein adjacent a horizontal edge thereof by being bent over upon itself in a rearward direction and offset in a forward direction so that the bent over portion lies in substantially the same plane as said back surface and forms between itself and the offset portion a horizontal substantially rectilinear narrow socket which is open at both ends; and a bag supporting frame formed of a single length of metal strapping, the ends whereof are adapted to fit within the ends of said socket, said strapping being bent to provide an end portion at each end thereof adapted to fit within the ends of said socket, a forwardly projecting spacer portion adjacent each of said end portions and a substantially rectangular loop portion having a back portion parallel to said end portions adjacent each said spacer portion, a forwardly extending side portion adjacent each of said back portions, and a front portion joining said side portions, with sharply pronounced corners between said side portions and said back portions and said side portions and said front portion.

2. A two piece garbage bag holder according to claim **1** wherein the exterior surface of each of said of corners is provided with means to retain a stretched over portion of said garbage bag against slipping off.

3. A two piece garbage bag holder according to claim **2** wherein said means comprise horizontal undulations scored on the exterior of said corners.

4. A two piece garbage bag holder according to claim **2** wherein the said means comprise undulations stamped through from the interior of said corners.

5. A two piece garbage bag holder according to claim **2** wherein said means comprises a portion of the material of said metal strap adjacent the said corners formed to provide a projection adapted to engage the stretched over corners of said garbage bag.

6. A two piece garbage bag holder according to claim **1** formed from stainless steel.

7. A two piece garbage bag holder according to claim **2** formed from stainless steel.

8. A two piece garbage bag holder according to claim **1** formed from galvanized mild steel.

9. A two piece garbage bag holder according to claim **2** formed from galvanized mild steel.

10. A two piece garbage bag holder according to claim **1** formed from rigid moulded plastic.

11. A two piece garbage bag holder according to claim **2** formed from rigid moulded plastic.

12. A two piece garbage bag holder according to claim **1** formed from extruded aluminum or other extrudable metal alloys.

13. A two piece garbage bag holder according to claim **2** formed from extruded aluminum or other extrudable metal alloys.

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