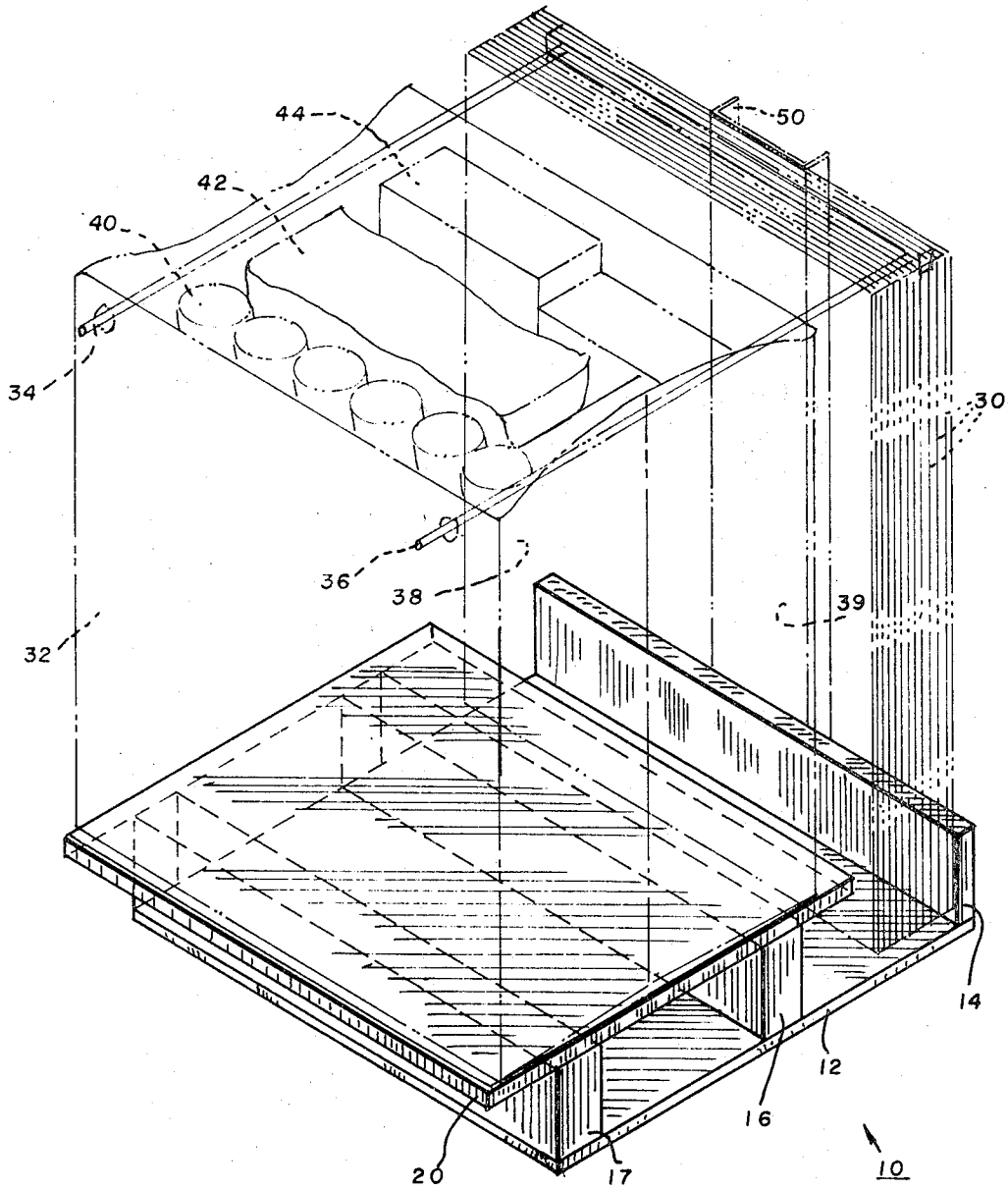


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AGENT

BAG SUPPORT STAND

CROSS REFERENCE TO RELATED APPLICATION

The invention relates to and is preferably used with the bag holder as shown and described in my application Ser. No. 647,360 as filed Jun. 20, 1967, now U.S. Pat. No. 3,439,891 and entitled Bag Holder. The grouping of plastic bags contemplated to be used with this bag holder and the stand of this invention is shown in my U.S. Pat. No. 3,380,579 issued Apr. 30, 1968.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The general field of art to which this invention pertains is in the class generally designated as Supports and more particularly to the subclass of "bag holders." Other subclasses of interest are holders with "mouth-holding frames" and those particularly with "prong or hook-type."

2. Description of the Prior Art

The use of bag holders and chutes or guides to assist or maintain bags in an open condition during the filling of the bag has been directed generally toward Kraft paper bags. Supermarkets, grocery stores and the like are constantly on the search for improved means for packaging, among which is the use of thin plastic bags for packaging the customer's purchases. Such bags are shown in U.S. Pat. No. 3,380,579 and are contemplated to be mounted on a bag holder shown in application Ser. No. 647,360. This grouping of plastic bags is mounted on the holder adjacent the upright or back support member. From this grouping, each bag is opened one-at-a-time for the loading or filling of the bag. Although other bag holders are known, they are generally for Kraft paper bags. Such a holder is shown in the Australian Pat. No. 270,432 as published Apr. 9, 1964 with the actual inventor being O. E. Franson. In this and other bag holders, the horizontal support portions are on the same level whereby in this invention the open bag support portion is positioned above the horizontal support portion and nearer the rods of the holder.

In the use of plastic bags wherein apertures formed therein are used to retain the bags on the extending rodlike arms of the bag holder, the loading or filling of the bag causes the plastic around the holes to stretch and tear unless the bag is supported on its bottom. By supporting the bag on its bottom, one avoids undue strain and tearing of the bag from the extending arms. For this reason the bag support stand of this invention comprises a platform disposed at a determined distance from the pair of arms, said platform being closer to the arms than the horizontally extending portion defining the recess provided for the retaining and storing of the grouping of unopened plastic bags.

SUMMARY OF THE INVENTION

The bag support stand of this invention is disposed to hold a bag holder as above-identified. This bag holder has a pair of arms extending at substantially right angles to a back support member. The bottom portion of the bag holder is adapted to be mounted to, or is made a part of, the support stand of this invention wherein a channel or receiving groove is formed adjacent the back wall of the support stand. This groove is of a determined width sufficient to hold a substantial grouping of bags of determined quantity. Adjacent this groove and outwardly of the back support of the bag holder, there is provided a platform which is substantially parallel to the arms of the bag holder. This platform is disposed a determined distance below the arms of the holder so that after the plastic bag is caused to be opened, the flat bottom of the bag is disposed to just sit or rest upon this platform and, as it is filled, to accept all of the load of the various items placed in the bag and to prevent a downward thrust or load being applied to the bag to cause the apertured portions of the bag to stretch or tear at the point of engagement of the apertures of the bag and the bag holder support rods. The size and position of the support platform from the rods is a function of the bag in its open condition, these

bags being, of course, the type commonly called self-opening flat-bottom.

BRIEF DESCRIPTION OF THE DRAWING

The drawing represents an isometric view of the bag support stand showing in relation to the stand and its platform a grouping of flat or unopened plastic bags and one opened plastic bag as it is retained upon the rods of the bag holder and rests upon the platform.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawing wherein like members refer to like parts throughout, there is shown a bag support stand 10 which may be made of wood, metal or plastic and which, as shown, includes a base or flat member 12 having attached or extending therefrom and at right angles thereto a back member 14. To the left or forwardly of this back member, there is provided a pair of spacers 16 and 17 of like height, which spacers are attached to the base 12 by means not shown such as screws or the like. Carried by these spacers and attached thereto is a platform member 20, which platform is spaced from the back member a determined distance to provide a channel or recess between the rightward edge of the platform and back member 14. The length and width of the platform 20 is selected to provide an adequate support for the open plastic bag to be hereinafter more fully described.

A grouping of plastic flexible bags which are like those to be used with this stand is described and claimed in my U.S. Pat. No. 3,380,579 issued Apr. 30, 1968. In this patent, as in the present application, the grouping of bags is contemplated as being made of thin plastic and in a stored and mounted condition, the grouping of bags is disposed in a flat position occupying a determined space. The grouping of unopened bags in the present drawing is indicated as 30 and is shown as carried by rods 34 and 36 of a bag holder such as described in my above-identified application Ser. No. 647,360. This opened bag 32 has gusseted sides 38 and 39 which, when expanded and opened, provide a square bag of known length and width and having a bottom portion which, when the bag is opened, is flat. This flat bottom rests upon the upper surface of the platform 20 and, with the bag in an opened condition, is supported by this platform while the clerk of the supermarket and the like fills the bag 32 with cans 40, and other items 42 and 44. Also shown in phantom outline is a backbrace 50 which may be attached to the back member 14 so as to position and carry the extending rods 34 and 36. The construction of the bag holder is more fully shown and described in the reference application.

USE AND OPERATION

In use, the bag support stand 10 is sized to accommodate a particular class or size of plastic bags whereupon the platform 20 is a determined distance above the base 12 and has a determined length and width to more than accommodate the bottom of the opened bag 32. The platform is spaced from back 14 so that the channel or recess provided between the platform 20 and back member 14 is disposed to accept a grouping of bags 30 such as fifty or one hundred. This grouping of bags is a determined packaging quantity as provided by the supplier of the plastic bags. The extending rods 34 and 36 are a determined distance above the surface of platform 20. The user of the bag support stand and bag support holder will likely have this assembled and attached or securely mounted to a checkout stand or the like and after installation, a grouping of plastic bags in a flat or unopened condition 30 is mounted upon the rods 34 and 36 and pushed to the back portion of the bag holder with the free end or the lowermost portion of the grouping of bags 30 dropping into the channel or groove immediately in front of back member 14 and behind platform 20.

The user of the bag support platform and holder in the steps of opening and filling the bag with groceries or the like grasps the outer bag and opens it and slides the bag forwardly on the

rods until the flat bottom rests upon platform 20. As thus disposed, the open top of the bag is supported and extended between the two rods 34 and 36. The several items for packaging are placed within the bag with the load of those items placed therein being supported and carried by the platform 20 and with substantially no load or strain upon the front or back walls and side gussets 38 and 39 of the bag 32. After the bag has been filled to the desired height, it is slid from the platform and rods, after which it is carried by the customer or delivery boy. A plastic bag so packed has those items within the bag securely retained by the sidewalls of the bag and has in an unstretched and untorn condition those portions of the bag with apertures therein and with which the bags are carried by the holder.

It is, of course, contemplated that the spacers 16 and 17 may be made removable so that they may also be made higher or shorter so that the platform 20 can be raised and lowered in respect to the location of rods 34 and 36. The platform in its support of the bag in its opened and unloaded condition is positioned to be just contiguous with the bottom so that when filled, no load is applied to the apertures of the sidewall and gussets of the bag.

It is further contemplated that the bags are made of a tough film such as polyethylene having a thickness of one to four-thousandths of an inch. The many advantages of using such a plastic bag, as contrasted to a paper bag, is not only for an improvement in the aesthetic appearance of the package but plastic also provides greater tear strength and, of course, a plastic bag is not effected by wetting. The contemplated bags are known as automatic self-opening, square-bottom bags. These bags are grouped by attaching together by welding and with the apertures in the bags aligned for ready mounting on the rods. Of course, the bags may be shipped in a loose condition.

In the above specifications and the claims to follow, the terms used in conjunction with the description of the bag and its construction are to be defined in accordance with "Glossary of Packaging Terms" providing for standard definitions of trade terms commonly used in packaging. The "Glossary" as a reference is the third edition compiled and published by the Packaging Institute, Inc., of 342 Madison Ave., New York, N.Y. 10017 and copyrighted 1961.

The terms "back," "front," "up," "down," "length" and "width" and the like are applicable to the bag support stand as described in conjunction with the drawing. These terms as used are merely for the purpose of description and do not necessarily apply to the position in which the various portions

of the bag support stand may be constructed or used.

The conception of the bag platform is not limited to the example as shown but departure from this example may be made within the scope of the accompanying claims and protection is sought to the broadest extent that the prior art allows.

I claim.

1. A bag support stand for use with a bag holder having a pair of arms disposed to engage and retain by a pair of apertured openings formed in their wall portions a grouping of self-opening bags on said arms, the bags in their folded condition being slidably retained on the arms of said holder so that in this folded condition the lowermost portion of the bags hang further from the arms than the plane of the bottom of the bag in its open condition as it hangs from the same arms of the holder, said support stand including: (a) a base; (b) a back member extending upwardly from the base and disposed to receive and retain a pair of arms at a determined distance above said base, and (c) a platform surface of determined length and width and disposed above said base and forwardly of the back member so as to provide a channel within which the lowermost portion of a folded group of bags is retained in a suspended condition when hung from the arms of the bag holder, the platform surface being positioned from said arms so as to provide a support surface contiguous with the bottom of a bag when said bag is in an opened condition and is positioned and carried on the arms of the holder so that the bag bottom is forwardly of the channel and above the platform surface.

2. A bag support stand for use with a bag holder as in claim 1 in which the platform surface is the upper surface of a platform member carried on at least two spacer supports disposed between the base and platform member.

3. A bag support stand for use with a bag holder as in claim 1 in which the platform surface is the upper surface of a generally rectangular platform member carried on the base so that its rearwardly facing edge is disposed a determined distance forwardly of the back member which is attached to the base, the space between the platform member and back member providing the channel which is sufficient to receive a suspended grouping of at least fifty bags.

4. A bag support stand for use with a bag holder as in claim 3 in which the arms of the bag holder are substantially straight rods fixedly attached to said back member, said rods lying in a common plane substantially parallel to the platform surface and with the axis of the rods substantially parallel to each other.

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