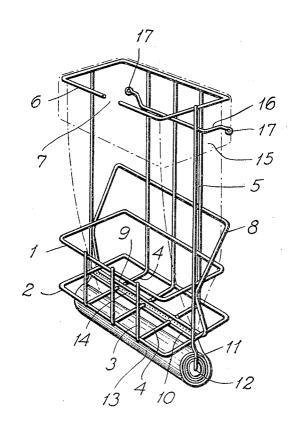
FRAME FOR HOLDING A BAG Filed Dec. 8, 1964



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3,313,504 FRAME FOR HOLDING A BAG Sven Thorkild Stoltze, Rorsangervej, Denmark, assignor to A/S Extrusion, Copenhagen, Denmark Filed Dec. 8, 1964, Ser. No. 416,713 Claims priority, application Denmark, Feb. 27, 1964, 962/64 4 Claims. (Cl. 248—99)

The invention relates to a frame for keeping a bag, more particularly a refuse bag of plastic foil in suspended or standing position with its mouth open, the said frame being of the kind having a ring-shaped or frame-shaped holder member above for the upper open part of the bag closed part of the bag.

It is an object of the present invention to provide such a frame which is suitable for household use, for example, for being mounted on the inner side of the doors of through rubbish chutes or for refuse bags in general. The invention is also concerned with larger frames, for example to be placed on kitchen floors or in other rooms, and another object of the invention is to adapt such a frame in such manner that it is easy to operate, more particularly in regard to exchange of bags, that is, removal of the filled bag and attachment of an empty bag as well as storing of new bags.

An essential feature of the frame according to the invention is that a freely rotatable magazine roller is 30 arranged in the frame, the roller comprising a web consisting of a plurality of bags separated from each other by means of transverse seams and a perforation or tearing line parallel therewith, the frame having such an opening that the web of bags may be pulled from the 35 magazine roller up through the frame.

In such a frame a comparatively large number of bags forming a continuous web is kept in readiness on a magazine roller in the frame itself, and the bag in use at any particular time forms part of the magazine web and is 40 exchanged by the filled bag removed from the holder member and lifted from the frame, whereby the succeeding bag of the magazine roller is pulled up into the place of the removed bag, simultaneously with a certain length of the web being unrolled and the filled bag subsequently torn off the web and the mouth edge of the new bag attached to the holder member.

The easy and prompt exchange of bags may be subject to be counteracted by a difficult operation of attachment to the holder member, and the invention is therefore also concerned with a very simple, yet effective attachment device. The essential feature of the said attachment device is that the holder member consists of an open ring or frame of bars made of resilient material and so formed and placed in a substantially horizontal plane that the upper edge section of the bag may be turned inside out over the ring or frame and passed down around the frame, whereby the bag is retained by the resilient action of the ring.

As a result, the mouth section of the bag may be attached to the holder member in simplest possible manner, its attachment being simply effected by passing the bag into a position high enough for the bottom seam to be brought to rest on the supporting member, after which the edge section projecting above the holder member is turned down over the ring or the frame while the same is being slightly compressed, and owing to the resilience of the frame the bag will then be kept distended above and the mouth edge prevented from sliding down.

An embodiment of a frame in accordance with the invention will now be described with reference to the drawing, which shows a perspective view of the frame.

The frame consists of a wire lattice work, each wire of which is preferably covered by a plastic layer. By means of two parallel horizontal frames 1 and 2 arranged below and connected with each other by vertical stiffeners 3 there is formed a basket, the rectangular horizontal bottom of which consists of bent extensions 4 of the stiffeners 3. The inner ends of the said extensions 4 are spaced apart at such a distance as to form a longitudinal slot at the bottom of the basket.

Some of the stiffeners 3 are extended vertically upwards to form supports 5 the upper ends of which carry a horizontal frame 6 having an opening 7 so that it may be compressed and rebound outwardly.

To the basket there is furthermore attached a rearand a supporting member below to support the lower 15 wardly inclining bow-shaped part 8 of the lower end of which forms a horizontal bar 9 which together with another horizontal bar 10 limits the said slot, the bars 9 and 10 being welded to the bars 4.

Two of the supports 5 are extended downwardly to kitchen cupboards, either for bags to be disposed of 20 form bows 11 which constitute a bearing for a magazine roller 12 on which is rolled a web 13 consisting of a plurality of bags of plastic foil separated from each other by means of transverse welding seams and a perforation line or tearing line 14 parallel therewith. web of plastic foil is passed up through the said slot between the bars 9 and 10 and up through the frame 6 as indicated by dot-dashed lines and the upper edge portion 15 of the bag is turned inside out around the frame 6 and down around the frame as illustrated. When the bag is being mounted, the frame 6 is compressed, and when the frame is released it rebounds thus retaining the bag rigidly distended at its upper end.

> At the upper end of the frame is attached a transverse bar 16 having eyes 17 by means of which the frame may be screwed on to a vertical wall, for example the inner side of the door of a kitchen cupboard. The frame may, however, also be formed with other means of suspension or support so that it may stand on the floor, for example.

> When a bag is to be arranged ready for use in the frame, the web of plastic foil is pulled up through the slot provided in the bottom of the frame, after which a corresponding length of web from the magazine roller is unrolled. The front part of the web, corresponding to the first bag, is passed up through the frame 6 to such height that the welding seam which represents the bottom of the bag and which is located directly above the perforation 14 is opposite the bars 4 which constitute the bottom of the frame or supporting member for the bag, after which the edge section 15 is turned inside out down over the frame as indicated by the dot-dash lines. The frame is now ready for use and the bag may be filled with refuse. When the bag is full and is to be replaced, the edge section 15 is removed from the frame 6 and is turned down over the contents of the bag, after which the bag is pulled up from the frame, that is, to such level that the perforation and tearing line 14 is located above the frame 6. The web of plastic foil is then torn off along the line 14 so that the filled bag is separated from the web, and the filled bag may then be disposed of whereas the edge section 15 as previously described is turned down over the frame 6, and the next bag of the row of bags is ready for use.

> The magazine roller 12 may be supported in other suitable ways, for example in a tubular or trough shaped container at the bottom of the frame in which the roller may rotate freely when the row of bags is pulled upwards. The magazine roller may be arranged in any suitable manner so that the row of bags may be pulled upwards as the bags are used.

The upper part of the bags may also be arranged and fastened in any desired manner to the upper part of the

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What I claim and desire to secure by Letters Patent is:

1. In combination, a frame for supporting a refuse bag of plastic foil in standing position and a freely rotatable magazine roller carrying a web consisting of a plurality of plastic foil bags that are separated form each other by means of parallel transverse seams and tearing lines, said frame having an upper holder member for supporting the upper open part of a bag and a lower supporting member for supporting the lower closed part of a bag, the freely rotatable magazine roller being mounted below the lower supporting member of the frame, and the lower frame member having a longitudinal opening such that the web of plastic foil bags may be pulled from the magazine roller up through the frame.

2. The combination of claim 1 wherein the upper holder member of the frame is an open frame member made of resilient material that is formed and placed in a substantially horizontal plane so that the upper edge section of the bag may be turned inside out over the frame member and down around the frame whereby the bag is 20 retained by the resilient action of the frame member.

3. The combination of claim 1 wherein the lower sup-

porting member of the frame is a substantially horizontal member with said opening being a slot, said magazine roller being disposed adjacent the slot.

4. The combination of claim 1 wherein the frame is a wire lattice work and the lower supporting member of the frame is a basket having a rectangular bottom, a number of supports projecting upwardly from said basket towards said upper holder member and supporting the upper holder member at the upper ends of the supports, two arms projecting downwardly from said basket and forming bearings for said magazine roller that is directly beneath said longitudinal opening in said basket.

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