A trash container for use in a trash compactor employs a round outer container in which is nested first a plastic liner and then a disposable plastic bag. A number of arcuate shield plates placed about the side wall of the container and over the disposable bag protect the latter during compaction of trash.
TRASH CONTAINER FOR TRASH COMPACTOR

BACKGROUND OF THE INVENTION

The shape and construction of the container in which trash is disposed for compacting therein are deficiencies of previous trash compactors, especially of the domestic type. A non-round, such as a rectangular-shaped, container is rather unsatisfactory because a hard object, such as a round bottle, can lie along one wall of the container so that the ram when it descends contacts the bottle in a manner tending to urge it against the container wall rather than against the container floor, whence the container is pushed aside, sometimes even enough to injure or halt the machine. A round container, on the other hand, is much freer of that vice. Moreover, both round and non-round containers previously employed lack protection for the disposable bag with which the container is customarily lined in order for the compacted trash to be removed. During the compacting stroke the bag is often torn by sharp objects, such as cans and bottles, thus soiling the interior of the container and perhaps even rendering the bag ineffective for disposing of the trash, or in any event making it impossible to seal against emission of odors.

SUMMARY OF THE INVENTION

The trash container of the present invention consists of a bucket-like outer container which tapers from a greater to a lesser diameter top to bottom. Within the outer container is nested first a permanent, polyethylene liner which protects the interior of the former. A disposable plastic bag is placed in the liner together with a cardboard insert to form a protective cushion for the bottom of the bag. Several arcuate shield plates are disposed around the side wall of the container and against the bag in order to protect the latter from tearing during compaction of trash. The shield plates are slidably removable from the top of the container and each is equipped at its top edge with handles which fit over the top edge of the container, the liner and the bag in order to retain the latter and the shield plates in position as well as to serve as convenient means by which the shield plates can be withdrawn. After compaction of trash and removal of the shield plates the disposable bag can be readily lifted out owing to the taper of the outer container and the absence of the shield plates.

BRIEF DESCRIPTION OF THE DRAWINGS

The FIGURE is an exploded view of a trash container according to the present invention illustrating its components.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The trash container assembly 10 consists of a round, outer bucket 11 equipped with handles 12 (or cutouts). Within the bucket 11 are nested first a polyethylene liner 13 and then a disposable plastic bag 14, folded over the top of the bucket 11 and liner 13, having a circular, corrugated paperboard insert 15 forming a protective cushion for the bottom of the bag 14. The latter is protected by three arcuate, overlapping metal shield plates 16 having handles 17 which fit over the rims of the bucket 11, liner 13 and bag 14 in order to retain the bag 14 and shield plates 16 against the wall of the liner 13. The bucket 11 and liner 13 taper from top to bottom. As a practical working example, the bucket 11 may be formed from 16 gage galvanized steel with top and bottom outside diameters of 14\% inches and 14 inches respectively and a height of about 15 inches. The shield plates 16 may be of similar material while the wall thickness of the liner 13 can be about 0.060–0.125 inch.

When the container is used in a trash compactor having a vertically descending ram, the arcuate shield plates 16 protect the sides of the disposable bag 14 from tearing during the compacting stroke, the bags 14 being readily available standard items so that no specially formed or shaped bags are necessary, most any bag which generally fits within the liner 13 will do the job. When the shield plates 16 are withdrawn, the bag 14 with the trash compressed therein can be readily removed from the liner 13 owing both to the absence of the shield plates 16 and the overall taper of the bracket 11 and liner 13. The polyethylene liner 13 is preferably included to insure cleanliness of the interior of the bucket 11 since the latter is necessarily quite heavy to lift for cleaning. In addition, the liner 13 also serves to protect the walls of the bucket 11 should the shield plates 16 not be used for some reason. In that case, too, should the bag 14 tear or the liner 13 become damaged, the latter can be much more readily cleaned or replaced than the heavy bucket 11.

Though the present invention has been described in terms of a particular embodiment, being the best mode known of carrying out the invention, it is not limited to that embodiment alone. Instead, the following claims are to be read as encompassing all modifications and adaptations of the invention falling within its spirit and scope:

1. An open top trash container for use in a trash compactor having ram means movable to compact trash disposed in said container, said container comprising: a circular bottom wall; a side wall having a circular configuration in a plane normal to the axis of said bottom wall, the interior diameter of the top of said container being greater than that at its bottom, whereby said container is tapered; open top liner means fitting within said container and lining said bottom and side walls thereof, said liner means including a permanent liner formed to removably nest within said container and a disposable liner fitting within and lining said permanent liner; and shield means disposed around and over the entire side wall of said disposable liner in protective relation thereto, said shield means having a configuration to accord with that of said container side wall and slidably removable from said container through the top thereof when said container is filled with compacted trash.

2. The container of claim 1 wherein said shield means comprises a plurality of arcuate plates individually slidably removable from said container as aforesaid.

3. The container of claim 2 including means releasably securing the top ends of said shield plate and liner means to the top end of said container and maintaining the surface of said plates in engagement with the surface of said liner means.

4. The container of claim 1 wherein said disposable liner is a flexible plastic bag and including a disposable cushioning member located within said bag and over its exposed bottom end.

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