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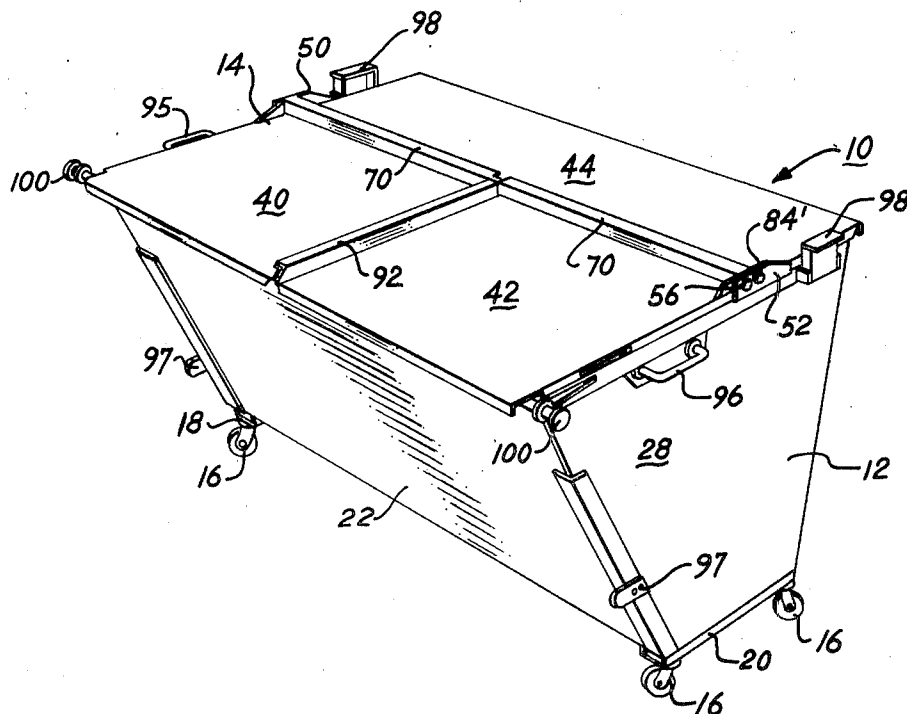
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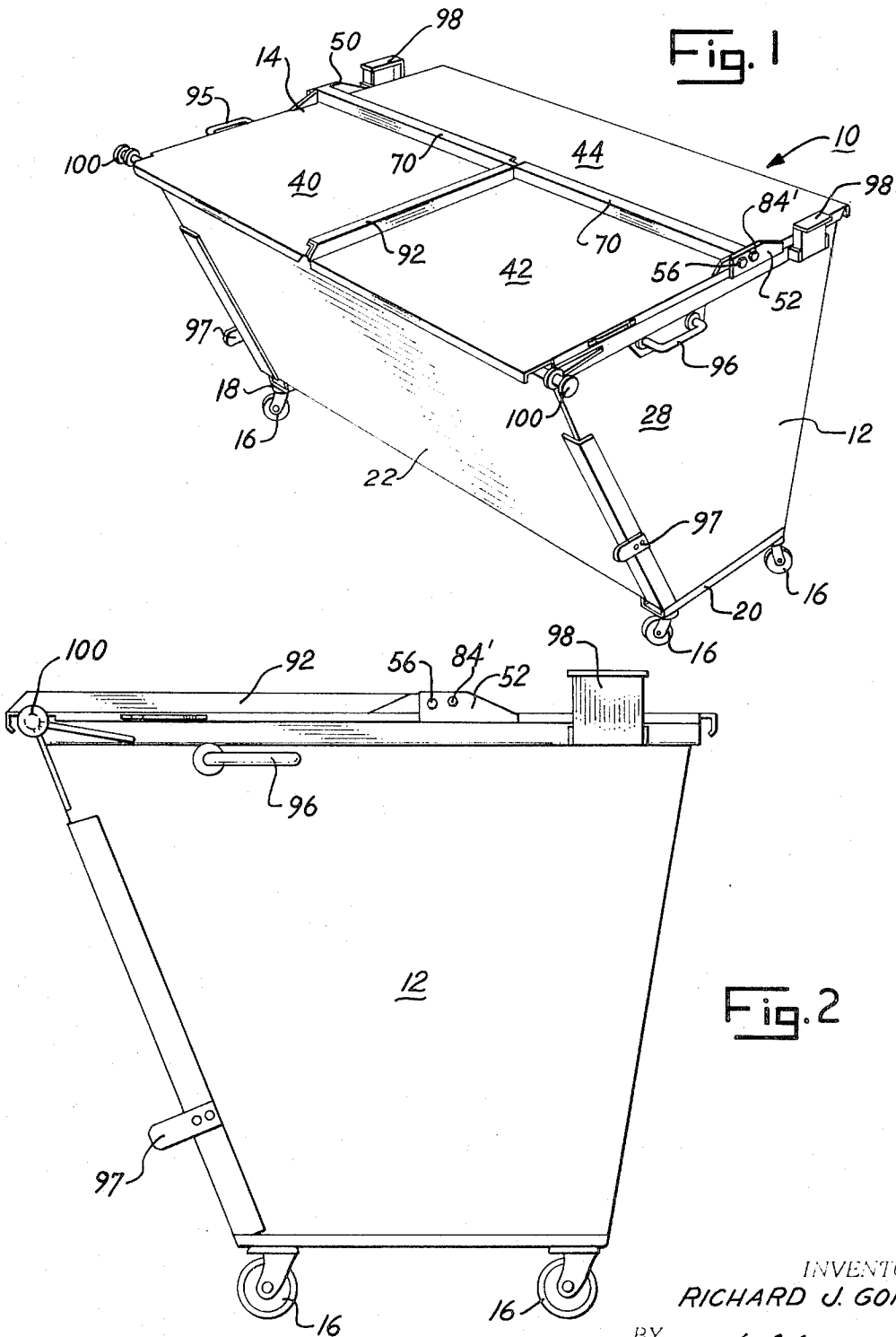
[54] **REFUSE CONTAINER**
9 Claims, 7 Drawing Figs.

[52] U.S. Cl..... **220/29,**
16/163
 [51] Int. Cl..... **B65d 51/18**
 [50] Field of Search..... 220/29, 30,
 32; 16/146, 163

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ABSTRACT: A refuse container having walls and bottom forming an enclosed container with an open top, and a cover for the top having a rear and two front sections, with the rear section being pivoted to the upper edge of two opposite walls, and the front cover sections being pivoted to the rear cover section. A flange is provided on the front cover section which overlaps the axes between the pivot points of the rear cover section to form an insect restricting and water-repellent joint between the rear section and the two front sections. The two front sections are provided with overlapping flanges on the adjacent edges for forming a joint therebetween, and the container is mounted on casters and includes fixtures for use in lifting the container and dumping the contents into a refuse-collecting truck.





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Fig. 3

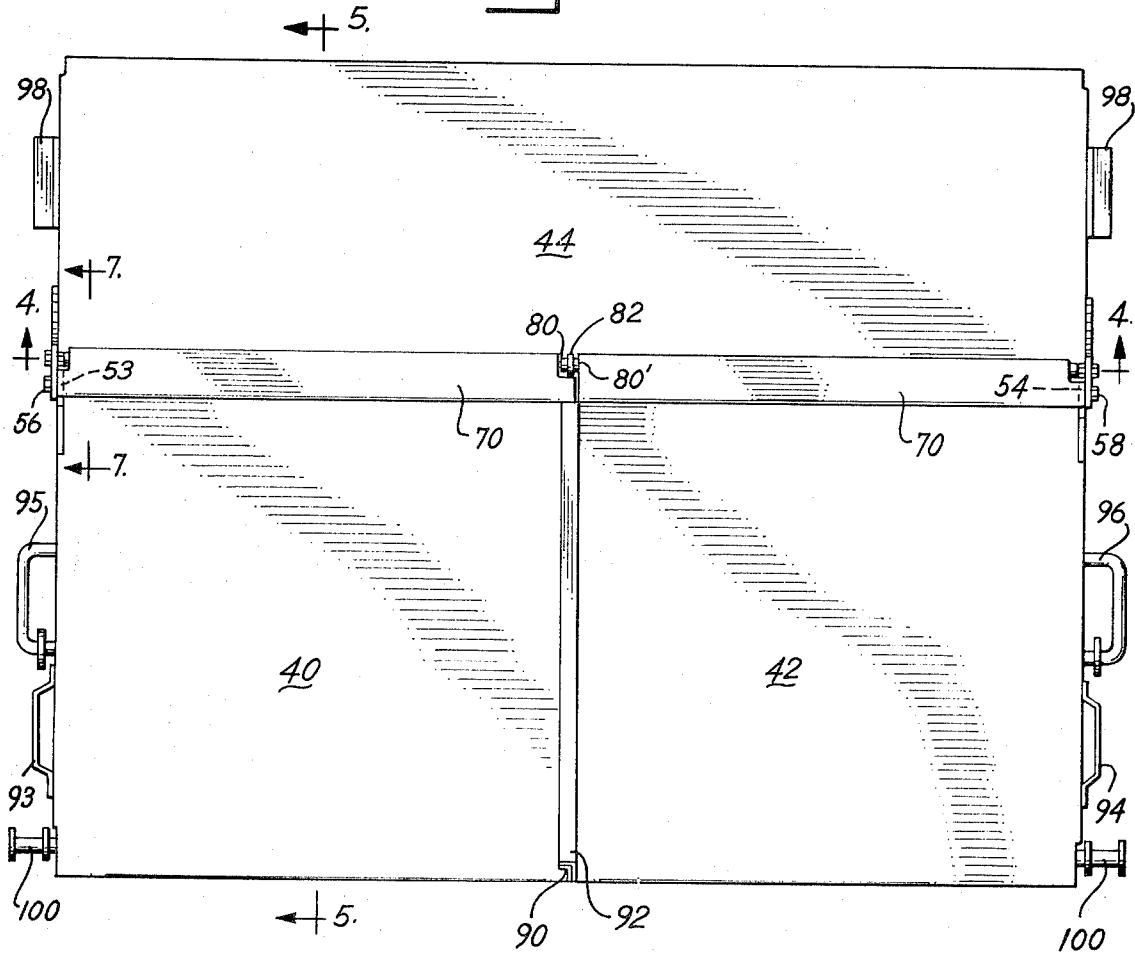
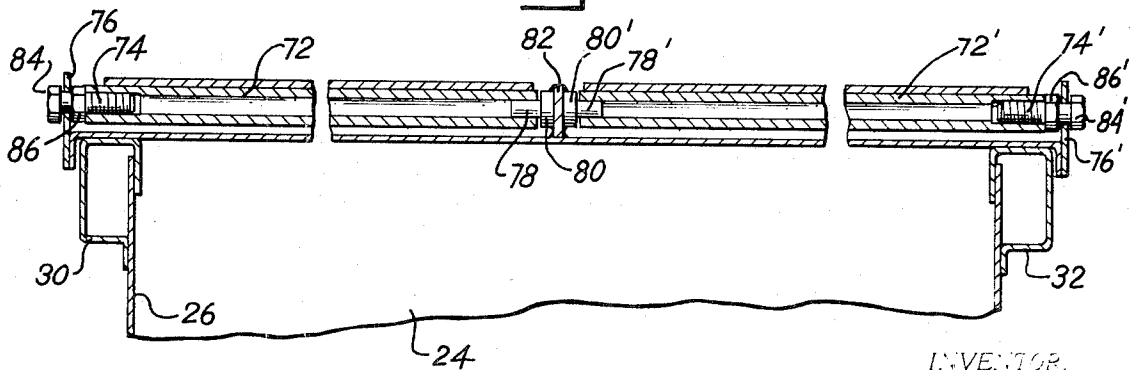
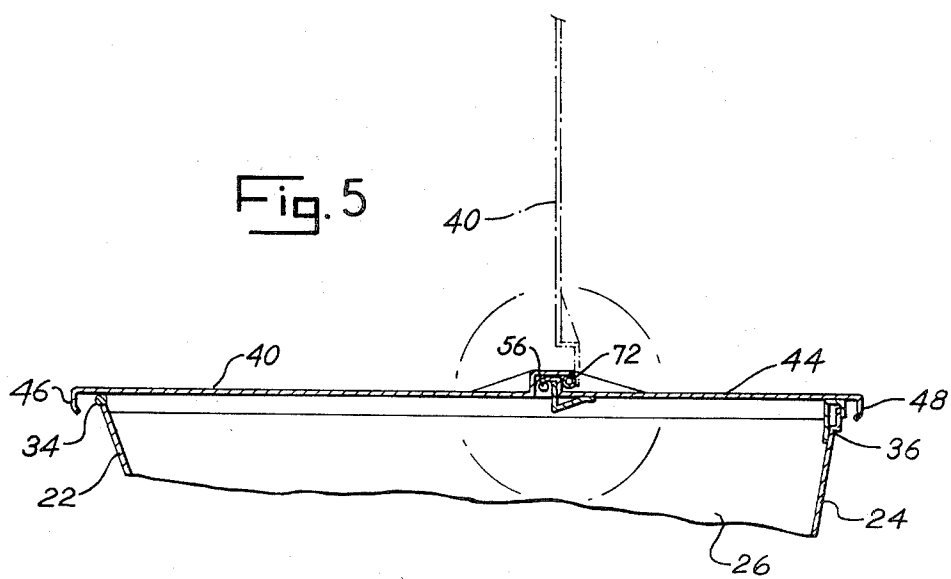
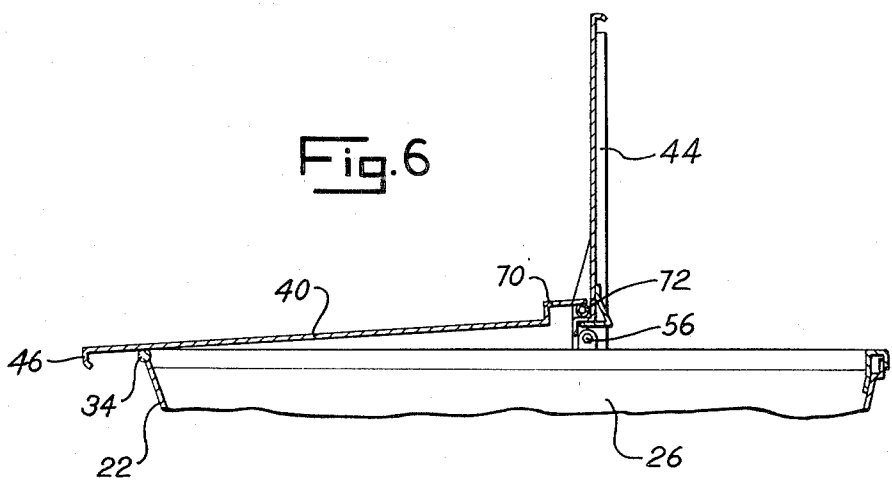
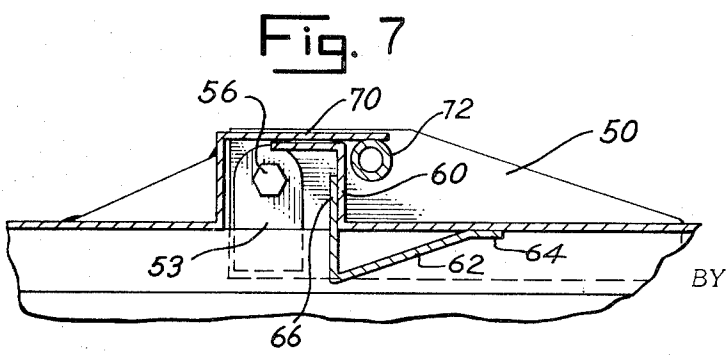


Fig. 4



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REFUSE CONTAINER

Refuse and other waste materials from commercial establishments such as restaurants, retail stores, hotels and motels, are often collected, stored and carried away in large steel containers which are so constructed and designed that they can be picked up and dumped into a refuse truck by a power-operated mechanism driven from the truck. While this practice and equipment permit the disposal of large amounts of refuse without its being directly handled by the personnel, the containers used in the past have been unsatisfactory in some respects, in that they are often not sufficiently tight around the lids or covers to prevent flies and other insects from entering and leaving the containers and using the containers as breeding places throughout the warmer months of the year. Further, since the containers are relatively large and the lids or covers heavy in order to give the containers sufficient strength to permit handling by the power driven lift mechanism without being damaged, they are difficult to use to collect the refuse and to move and handle in preparation for the power driven dumping operation. It is, therefore, one of the principal objects of the present invention to provide a refuse container, primarily for commercial and industrial use, which is sufficiently rugged and sturdy to withstand frequent handling and dumping by a power driven mechanism and yet is so constructed that it can be easily used without undue hardship when it is being used to collect and store the refuse.

Another object of the invention is to provide a fully enclosed refuse container having sealed sidewalls and bottom, with a hinged cover which is constructed in several sections for easy handling, yet which forms insect-restricting and water-repellent joints between the sections and between the cover and the container portion.

Still another object of the invention is to provide an all steel container with easy access covers, which can be easily cleaned and maintained in a satisfactorily sanitary condition, and which can be conveniently used in various locations in the commercial or industrial establishment and can be readily adapted to various types of power dumping mechanisms.

A further object is to provide a refuse container of the aforesaid type which is relatively simple in construction and design and can be fabricated without the use of any expensive tools and dies or other metal forming equipment, and which can be compactly and economically transported from the fabricating plant to the place where it is to be used.

Additional objects and advantages of the present invention will become apparent from the following description and accompanying drawings, wherein:

FIG. 1 is a perspective view of the present refuse container;

FIG. 2 is an end elevational view of the container shown in FIG. 1;

FIG. 3 is a top plan view of the container, showing the container in closed condition;

FIG. 4 is an enlarged cross-sectional view of a portion of the container shown in the preceding FIGS., the section being taken on line 4-4 of FIG. 3;

FIG. 5 is a fragmentary cross-sectional view of the container shown in the preceding figures, and also showing the manner in which the front cover sections operate, the section being taken on line 5-5 of FIG. 3;

FIG. 6 is a view similar to the view shown in FIG. 5 showing the rear cover section in its open position; and

FIG. 7 is an enlarged fragmentary cross-sectional view of the hinge portion between the container and the cover sections, the section being taken on line 7-7 of FIG. 3.

Referring more specifically to the drawings, numeral 10 designates generally the present refuse container having a body portion 12 and a cover 14 pivotally secured to the upper edge of the body. The container is mounted on a plurality of casters 16 secured to frame members 18 and 20 attached to the lower part of the body. The body consists of inclined front and rear walls 22 and 24 and end walls 26 and 28 and a bottom attached to the lower edges of the four walls by welding or other suitable securing means to form watertight joints between the bottom and the respective sides. The four walls

and bottom are constructed of steel plate or heavy sheet metal such that they are self supporting and require little reinforcing frame work incorporated in the body, and are joined together, preferably by welding, to form effective waterproof joints. The upper edges of the two end walls are provided with reinforcing members 30 and 32 of a generally rectangular cross section welded to the upper edge of the plates forming the two end walls. The front wall is reinforced by a bar 34 welded to the upper edge of the panel forming the front wall, and the rear wall is reinforced by an offset flange 36 forming a stiffening rib for the upper edge.

The cover 14 consists of two front sections 40 and 42 and a rear section 44, the three cover sections being formed of steel plate and preferably reinforced at the edges by flanges 46 on the two front sections and flange 48 on the rear section. The rear section 44 is pivoted on the upper edge of the body by plates 50 and 52 secured to the opposite edges of the rear cover section by lugs 53 and 54 secured to the upper edge of the respective end panels 26 and 28 and pivot bolts 56 and 58 extending through the respective lugs 53 and 54 and plates 50 and 52. In order to retain the inner edge of section 44 rigidly on substantially the same plane, the inner edge is reinforced by an inverted L-shaped flange 60 extending the full length of the rear section 44, and by an angularly shaped longitudinal member 62 also extending substantially the full length of the section and being welded thereto at the two edges 64 and 66. The inverted L-shaped reinforcing member 60 also performs an additional function of assisting in forming an effective seal and water-repellent joint between the front sections 40 and 42 and the rear section 44.

The front sections 40 and 42 are pivoted to the rear section by an L-shaped flange 70 extending the full length of the rear edge of each section and by tubular member 72 pivotally supported at one end by a stud or bolt 74 extending through plate 76 and at the other end by a stud 78 supported by a lug 80 and a plate 82. Since the hinge mechanism for plate 42 is essentially the same as the hinge mechanism of section 40, the former will not be described in detail but will be given the same numerals plus a prime to identify like parts. Plates 76 and 76' are secured to the side of rear cover section 44 and plate 82 is secured to the upper surface at the rear of section 44 at the center thereof. Bolts 74 and 74' are threaded into the end of the tubes 72 and 72' and pivot in holes in plates 76 and 76' between head 84 and nut 86. When the front sections 40 and 42 are moved to closed position while the rear section 44 is in closed position, the undersurface of L-shaped flange 70 seats on or is in close proximity to L-shaped flange 60 to form an effective seal along the rear edge between the front sections and the rear section.

In order to seal the joint between the two sections 40 and 42, an inverted L-shaped upstanding flange 90 is formed on the inner transverse edge of section 40, and an inverted L-shaped flange 92 is formed on the inner transverse edge of section 42. The latter flange overlaps flange 90 and preferably firmly engages the upper surface of flange 90. This construction not only forms an effective insect-restricting and water-repellent joint between the two sections 40 and 42, but permits both sections to be raised by raising section 40. Handles 93 and 94 joined to the outside transverse edge of sections 40 and 42, respectively, are provided to assist in the raising and lowering of the two sections. Handles 95 and 96 rigidly joined to the upper edge of sides 26 and 28, respectively, are preferably provided to assist in maneuvering the container on its casters 16 to and from the refuse truck.

As mentioned previously herein, the present refuse container is intended for use with a power lifting mechanism operated by a refuse pickup truck. The body contains fixtures 97 and 98 secured to the front and upper edges thereof on opposite sides, and a fixture 100 secured to the upper front corner on opposite sides, to which the lift mechanism may be attached to raise, dump, and lower the container after cover sections 40 and 42 have been fully opened. When the sections are open and are lying on rear section 44, a hook or other

fastener connected to the rear side of the body is attached to section 40 to retain the sections in their open position while the container is being dumped.

In the use and operation of the present refuse container, it is normally placed in a convenient location in a commercial or industrial establishment for the collection of refuse, and the cover consisting of sections 40, 42, and 44 is normally left in closed position. When refuse is to be dumped into the container, section 44 is or sections 40 and 42 are opened, and the refuse is dumped in the container. When the sections are fully closed as viewed in FIG. 5, the L-shaped flange 70 seats on or in close proximity to the upper edge of L-shaped section 60, thus forming a substantially closed joint throughout the length of the rear edge of the three sections, providing an insect-restricting and water-repellent seal. Both the two front cover sections 40 and 42 can be opened fully onto the surface of section 44 and, likewise, section 44 can be opened fully onto the two front sections when the container is being filled with refuse. When the container is to be dumped, the power mechanism of a refuse truck is connected to fixtures 97, 98, and 100, and after lid sections 40 and 42 have been opened by pivoting them rearwardly onto the upper surface of section 44 and latched by a suitable hook or tying means, the container is lifted by the power mechanism and dumped and returned to its original position. Cover sections 40 and 42 are then closed again and the container is ready for refilling.

While only one embodiment of the present refuse container has been described in detail herein, various changes and modifications may be made without departing from the scope of the invention.

I claim:

1. A refuse container comprising a body having front, rear and two sidewalls and a bottom forming an open top compartment for receiving and retaining refuse, a cover for said compartment including a rear cover section, pivot means at each end of the inner edge of said section connected at opposite ends to said sidewalls and having common axes, two front cover sections disposed in side-by-side relation, means separately pivoting said front cover sections to the inner edge

of said rear cover section, and flange means on each of said front cover sections extending rearwardly beyond said common axes when said sections are closed to form an insect-restricting and water-repellent joint between the rear cover and the two front covers.

2. A refuse container as defined in claim 1 in which the adjacent edges of said front cover sections are provided with inverted L-shaped overlapping flanges for forming a joint between said sections.

3. A refuse container as defined in claim 1 in which the inner edge of said rear cover section is provided with an upwardly extending inverted L-shaped flange for forming a joint between the flange means on each of said front cover sections.

4. A refuse container as defined in claim 3 in which said flange means on said front cover sections are horizontally positioned L-shaped members extending upwardly above the common axes of said first-mentioned pivot means.

5. A refuse container as defined in claims 3 or 4 in which two inverted overlapping L-shaped flanges are provided on the adjacent edges of said two front sections for forming a joint therebetween.

6. A refuse container as defined in claim 1 in which the pivot means for each of said front cover sections includes a tubular member, a stud means extending into said tubular member at each end, and a means supporting each of said stud means on said rear section.

7. A refuse container as defined in claims 4 or 5 in which the pivot means for each of said front cover sections includes a tubular member, a stud means extending into said tubular member at each end, and a means supporting each of said stud means on said rear section.

8. A refuse container as defined in claim 1 in which said front and rear walls slope inwardly and downwardly from top to bottom and fixtures are provided on said body for use in lifting the container to dump the contents thereof into a refuse truck.

9. A refuse container as defined in claim 2 in which handles are provided on the outside edge of each of said front sections for lifting said sections.

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