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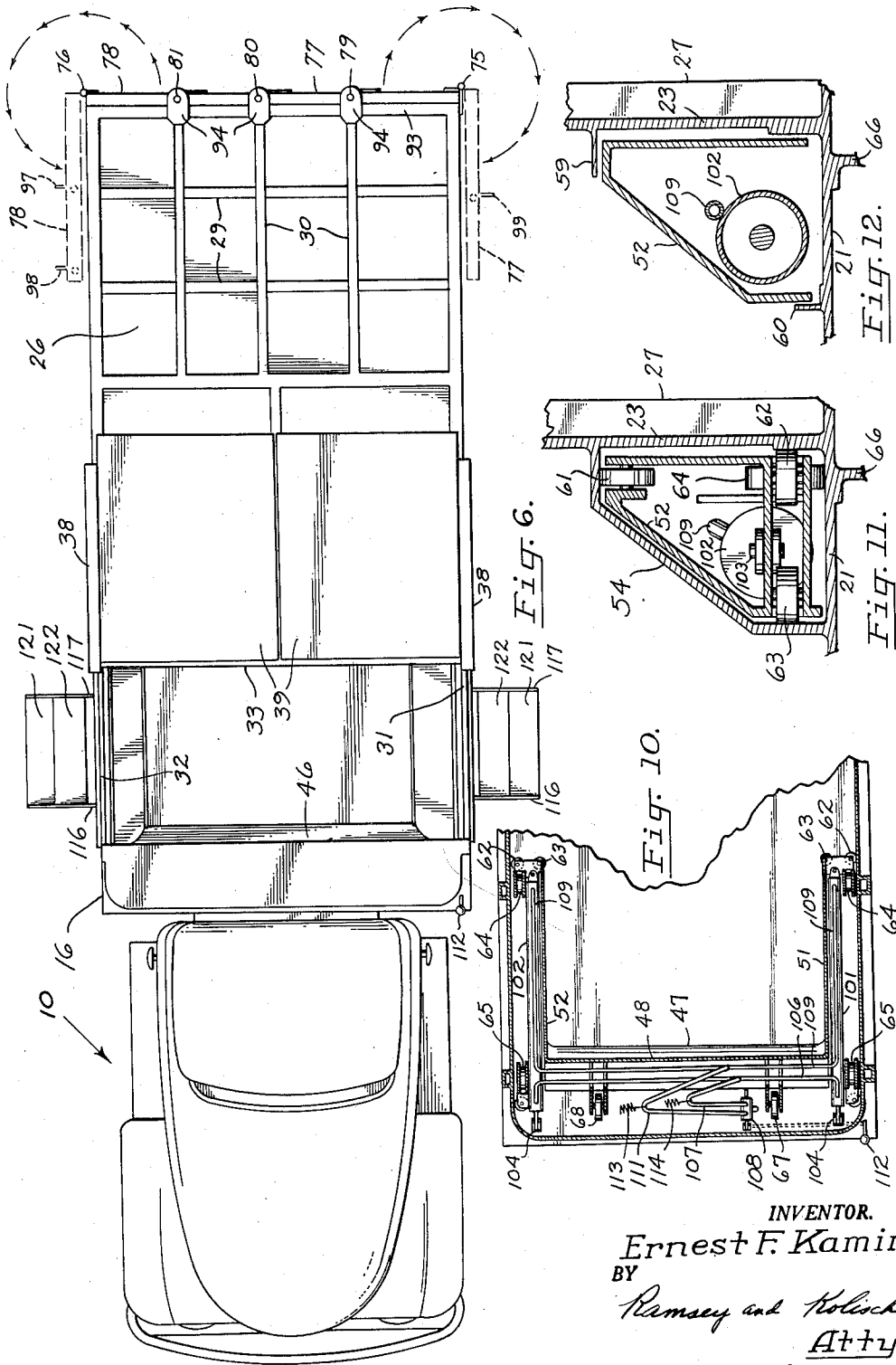
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REFUSE COLLECTION APPARATUS

Filed Oct. 15, 1956

4 Sheets-Sheet 2



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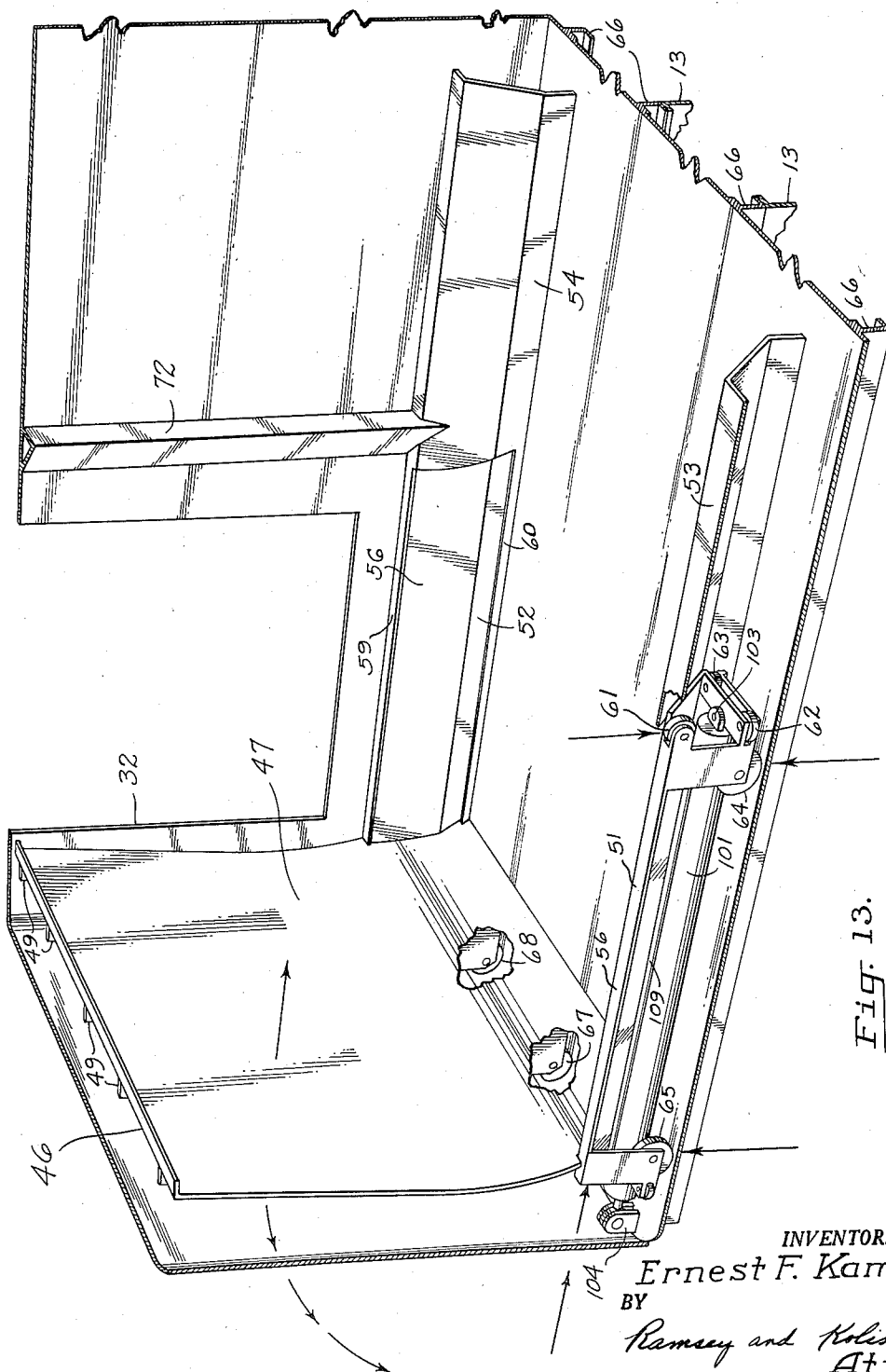
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REFUSE COLLECTION APPARATUS

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8 Claims. (Cl. 214—504)

This invention relates to a refuse collection vehicle and more particularly to refuse collection apparatus for such a vehicle having a hollow truck body and a packer blade movable longitudinally within the body for compacting refuse deposited therein.

One of the objects of this invention is to provide an improved packer mechanism for a refuse collection vehicle capable of moving refuse backwardly in the truck body in substantially a vertical plane and in such a manner that a maximum amount of refuse may be compacted within the body.

Refuse or garbage collection vehicles having hollow bodies for the collection of refuse and packer mechanisms disposed therein are conventional and well-known. Packer mechanisms are included within the body of the vehicle to increase the capacity of the vehicle and thus decrease the number of trips which must be made to unload the vehicle. The compression or plow faces of packer mechanisms known heretofore have been subject to a number of difficulties. For instance, plow faces which incline sharply from the bottom of the plow tend to roll refuse collected thereby into a wave which then dumps in front of the plow face as it is moved toward the rear of the truck body, the refuse thus collected tending to become compressed along the floor of the truck body. Such plow faces also have the disadvantage of leaving a decided undercut when they are retracted from a compression position so that the compacted refuse tends to slump back into the recess which remains.

After considerable experimentation, I have found that a plow face which is curved only slightly from its lower to its upper edge, according to the critical manner herein described, may be employed with a number of beneficial and quite surprising results. By proportioning the plow face in the manner contemplated, movement rearwardly of the refuse within the vehicle body tends to be substantially uniform without appreciable rolling over and redistributing of the refuse. A sufficient amount of curvature is present to effect a scraping up off the bottom of the body of the vehicle and a lifting thereof uniformly throughout the cross-section of the body but not enough to leave an appreciable undercut in the compacted refuse. Score lines along the sides of the truck body indicate that as the refuse is moved rearwardly in the body, it tends to move in upwardly curved sweeps resembling distorted parabolas which have high horizontal components at the forward end of the truck body and high vertical components towards the rear of the body. The upper portions of the plow face, which face downwardly to some degree, cause the layers of refuse which have been moved upwardly in this manner to be firmly compacted so that a uniformly compacted mass results. Redistributing and compacting of refuse in the manner described is particularly desirable in connection with the use of elongated, dump-type vehicle bodies where the length of the truck body introduces construction difficulties which make it impractical to employ packer mechanisms that travel the

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entire length of the body during a compression stroke. The plow face construction contemplated herein enables refuse to be evenly distributed using a relatively short compression stroke and, as a consequence, a maximum amount of refuse to be compressed within the truck body.

Another object of this invention is to provide refuse collection apparatus for a vehicle which includes novel arresting mechanism disposed within the vehicle body and operable to retain the refuse in its compacted state after the packer mechanism is retracted from its compression position.

A related and more specific object is to provide such arresting mechanism which includes upright members positioned along each side of the truck body which first compact the refuse laterally and then operate to check the expansion of the refuse after it has been compressed by presenting inwardly disposed retention planes which entrap the refuse.

Refuse vehicles having dump-type truck bodies generally are cleared of refuse by tilting the dump body, thereby to dump the refuse through a suitable opening provided at the rear of the dump body. In compressing the refuse, the refuse is compacted rearwardly toward this rear opening. It is obvious that if any considerable degree of compactness is to be attained in the refuse, the structure employed for covering this opening must be able to withstand considerable pressures generated by the packer mechanism. It is therefore another object of this invention to provide a novel means for covering the rear end opening of a dump body which may be readily opened and closed and which, when closed, presents a sturdy, relatively deflection free compacting surface capable of withstanding considerable pressure exerted thereagainst.

It is yet another object of this invention to provide for a refuse vehicle having a dump body and a packer mechanism disposed therein, a novel retractable step ladder facilitating the loading of refuse into the vehicle by presenting a novel step-up arrangement adjacent the path of the packer mechanism in the vehicle.

Still another object of this invention is to provide a refuse vehicle with novel packer mechanism having arms at each end of the compression face for the packer mechanism, these arms projecting from the compression face toward the rear of the vehicle and being telescopically received by a pair of guide tracks disposed within the body of the vehicle, the arms and guide tracks being so arranged as to resist tilting and skewing of the compression stroke.

Further, it is an object to provide such arms and guide tracks which are operable to deflect refuse or garbage to the interior of the body of the refuse vehicle and which are constructed so that they are protected from becoming jammed by miscellaneous bits of refuse.

These and other objects and advantages are attained by the various novel features hereinafter described in detail, taken in conjunction with the accompanying drawings, wherein:

Fig. 1 is a side view of a refuse collection vehicle according to this invention, shown partly broken away, to disclose details of the invention;

Fig. 2 is a simplified side view illustrating how refuse may be dumped from the vehicle;

Fig. 3 is a side view, taken along the line 3—3 in Fig. 1, illustrating the retractable step ladder employed in the invention;

Fig. 4 is another side view, similar to Fig. 3, showing the retractable step ladder in raised position;

Fig. 5 is a front view of the retractable step ladder of Fig. 4;

Fig. 6 is a top view of the refuse collection vehicle;

Fig. 7 is a rear end view of the body of the vehicle,

showing the covering means employed for closing the rear end opening of the vehicle;—

Fig. 8 is a section view, along the line 8—8 in Fig. 1;

Fig. 9 is a section view, along the line 9—9 in Fig. 8;

Fig. 10 is a section view, along the line 10—10 in Fig. 9, showing details of the motor mechanism employed for the packer mechanism;

Figs. 11 and 12 are sectional views taken along the lines 11—11 and 12—12, respectively, of Fig. 9; and

Fig. 13 is a perspective view, with parts removed, of the packer mechanism and truck body, showing the compression face and arms of the packer mechanism and the guide tracks for the arms.

Referring particularly to Figs. 1, 2, 6, 8, and 9, a refuse collection vehicle according to this invention comprises, in general, a standard truck 10, having front and rear support wheels 11 and 12, respectively, and a rearwardly extending frame 13. Pivoted to the rear end of frame 13, at pivot 14, is a dump body 16, which is moved into dumping position, illustrated in Fig. 2, in a conventional manner, the mechanism illustrated comprising a pair of extensible hydraulic rams 17 each pivotally connected at one of its ends 18 to a base portion of the dump body and at the other of its ends 19 to a mounting bracket projecting downwardly from one side of frame 13. The second hydraulic ram (not shown) is mounted on the other side of frame 13. Suitable pump and control mechanism are provided for raising and lowering the dump body, not illustrated as the details of their construction are conventional and are not considered material to the disclosure of this invention.

Dump body 16 of the refuse vehicle comprises a flat floor 21, vertical side walls 22 and 23, front wall 24 and top 26. Because of the rather substantial forces which are generated during the compression of refuse within the body when the packer mechanism is moved against the refuse, the sides and top may be reinforced with multiple structural members, which may be angle irons or the like, represented at 27, 28, 29, and 30.

An opening is provided at the rear end of body 16 for dumping refuse from the truck, and, as discussed hereinbelow, means are provided for covering the opening during the intervals that refuse is being collected within the body. In the embodiment illustrated, another opening is provided at the forward end of the dump body, that is the end of body 16 which lies adjacent the cab of the refuse vehicle, the opening extending across the top and down opposite sides of the dump body so as to accommodate depositing refuse into the interior of the dump body from either side thereof. The opening at the forward end comprises side openings 31, 32, and top opening 33, each side opening being provided with closure members such as a side door 36 which is pivoted to the side wall of the body and latched in closing position as by latch 37 and sliding side panel 38. Top opening 33 is provided with sliding top panel 39 arranged to reciprocate in a horizontal plane into covering position over opening 33. With reference to Figs. 1, 8, 9, and 13, where details within the interior of the dump body are more specifically disclosed, a packer mechanism 46 is mounted within the elongated dump body for movement longitudinally within the body from a retracted position wherein the packer mechanism lies adjacent the forward wall of the body, to a compression position located rearwardly from this position. The stroke of the packer mechanism is indicated in Fig. 9 by the double ended arrow 50. The packer mechanism includes a curved compression face or plow face 47 which, as can be seen with reference to the dotted outline in Fig. 9, occupies in the compression position a position rearwardly of side openings 31 and 32. Plow face 47 is comprised of a metal sheet or plate 48 mounted on a support structure 49 and has protruding therefrom a pair of arms 51 and 52 one at each end of the plow face and affixed to lower portions of its support structure.

Turning more specifically to a description of the plow

face, the plow face is mounted within the dump body for movement approximately one-third of the length of the dump body. Face 47 has its bottom edge lying closely adjacent the floor of the body and its top edge spaced a substantial distance above the bottom edge and toward the forward end of body 16, or forwardly of the bottom edge. The face lies in more or less a vertical plane, deviating therefrom by means of a slight curvature which is sufficient to scrape refuse from the floor of the vehicle and redistribute it upwardly as the plow face is moved rearwardly in the body (as indicated by the curved arrows in Fig. 9), yet which is slight enough so that rolling over and massing of the refuse in a wave is substantially eliminated. Further, the upper portions face downwardly, to some degree, to compress refuse diverted upwardly by the lower edge of the face. To this end, it has been found that the face of the plow should be formed upon substantially an unbroken curve which is indented toward the forward end of the dump body with its maximum indentation spaced vertically from the bottom edge a distance equal to about one-third to one-fourth the distance from the bottom to the top edge. The maximum indentation should be spaced toward the front of the dump body or forwardly of the bottom edge a distance equal approximately to one-fourth or less the vertical distance between the maximum indentation and the bottom edge. Preferably, the top edge of the plow face should be spaced forwardly of the bottom edge a distance of about one-half or more of this horizontal spacing between the forward edge and the maximum indentation. By way of an example, a plow face approximating 67 inches in height which was indented forwardly from the bottom edge about 5 inches, the maximum indentation being spaced vertically about 22 inches from the bottom edge and the bottom edge protruding rearwardly in the dump body approximately 3 inches of the upper edge, is found to be highly satisfactory.

As can best be seen in Fig. 13, arms 51 and 52 extend rearwardly in the dump body with their ends received within a pair of hollow guide track elements 53 and 54, respectively. These guide tracks lie adjacent the sides and floor of the dump body and are adapted telescopically to receive the arms as the packer mechanism moves rearwardly in the dump body.

Guide tracks 53 and 54, in general, consist of plates affixed to the sides and base of the body, the plates extending outwardly and then downwardly toward the floor of the body at an oblique angle relative to the floor so as to deflect refuse thrown upon the guide tracks toward the interior of the truck. Arms 51 and 52, as can be seen with reference to arm 51 in Fig. 13, each include an elongated mounting plate 56 which extends outwardly and then downwardly at an angle toward the floor thereby to deflect in a similar manner refuse which may be thrown upon the arms. Referring to Figs. 8 and 13, guide tracks 53, 54 have top and bottom edge extensions 57, 58 and 59, 60, respectively, projecting forwardly in the body and encompassing peripheral edge portions of the arms, thereby shielding the arms from matter which might otherwise accumulate within the arms.

As may best be seen in Figs. 11 and 13, each of the arms carries a number of rollers which serve to position the arms within the guide tracks, thereby steadying the arms so as to resist skewing and twisting of the plow face. Counterclockwise movement of the plow face about its lower edge is counteracted by a roller 61 rotatably carried by rearwardly projecting ear portions of each mounting plate 56, roller 61 traveling along the underside of horizontal overlying portions of hollow guide tracks 53, 54. A roller 65 rotatably carried by depending ear portions at the forward end of each arm assists in resisting this counterclockwise movement. Additional rollers 62, 63 steady the plow face from skewing laterally as it travels in its path to-

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ward the rear of the truck body. Clockwise rotation of the plow face about its lower edge is resisted by a roller 64 rotatably carried in depending ear portions at the rear of each mounting plate 56. Rollers 64 and 65 travel along the floor of the body generally parallel to the side walls and preferably are mounted over underlying floor frame members, such as member 66, to insure firm foundation for the rollers.

Rollers 67 and 68, rotatably supported in support structure 49 of the packer mechanism forwardly of the plow face, are included to assist rollers 61 in inhibiting counterclockwise movement of the plow face. These rollers are preferably positioned over the frame members of frame 13 so as to obtain firm support for the rollers.

Rearwardly of side openings 31, 32 is an arresting and laterally compressing mechanism positioned along the sides of the dump body and operable to retard the movement of refuse forwardly past the arresting mechanism while accommodating relatively free passage of refuse rearwardly toward the rear of the dump body. More specifically, referring to Figs. 8 and 13, positioned within the body on each side of the body are a pair of upright members 71 and 72 of triangular section arranged with their forward sides or deflection planes inclined at an oblique angle relative to the sides of body 16 and their rear sides or retention planes inclined at a considerably greater angle, preferably at right angles, to the side walls, refuse tending to be entrapped behind these upright members when the plow face is pulled forwardly to its retracted position. Expansion of the refuse which occurs when pressure ceases to be exerted by the packer mechanism aids members 71, 72 in retaining the refuse in position rearwardly in the dump body, the refuse tending to become locked by reason of its re-expansion. As discussed hereinbefore, by using a plow face curved in the manner described, a relatively uniform wall of refuse may be collected in the rear portions of the dump body so that these upright members act to retain the refuse in this condition as it is packed into the vehicle body.

Commonly, refuse may contain a considerable amount of material such as crushed boxes, cartons, and the like. Much of this material requires that a substantial amount of pressure be generated by the packer mechanism if any large degree of compression in the refuse is to be obtained. While some lateral pressure is exerted against the side walls, the greatest amount of pressure tends to be created longitudinally of the body and thus be directed directly against the covering structure used to cover the rear end opening of the body. This invention contemplates a novel arrangement for closing the rear end and offering a compacting surface for the packer mechanism.

More specifically referring to Figs. 6, 7, and 9, swung at pivots 75, 76 at each of the side walls of the dump body are a pair of doors 77 and 78. These doors may be pivoted from the open position shown in dotted lines in Fig. 6 to the closed position shown in solid lines in Fig. 6 wherein the nonpivoted, lateral edges of the doors lie proximate one another and the doors cover the rear end of the dump body. On the outer face of the doors, that is, on their rearward faces, is a series of latch pins. Upper latch pins 79, 80, and 81 and lower latch pins 82, 83, and 84 are arranged with their outer ends lying adjacent top and bottom edges of the doors. These latch pins are slidably mounted in frame members 86, 87, 88, and 89 extending horizontally along the outer face of the doors and affixed thereto. The inner ends of opposite pairs of these latch pins are link connected, as by links 91, 92, to a toggle member 90 which, as viewed in Fig. 7, may be rotated in a clockwise direction to withdraw the pins inwardly toward each other. Rotation in the opposite direction serves to thrust the latch pins away from each other with their ends pro-

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truding over upper and lower portions of the truck body. Secured to cross members 93 and 95, which are part of the frame of the truck body, along the top and bottom portions of the body adjacent doors 77, 78 are upper and lower eye members 94 and 96. When the doors are closed, the outer ends of the latch pins project through these eye members thereby fixing the doors in a closed position.

Extending across the inner face of the doors, generally underlying the latching mechanism described and affixed to the doors throughout their length as by welding, are a series of strong backs 97, 98, and 99. These may be made of any suitable structural material such as angle irons, which have the requisite strength to resist bowing and deflection of the doors. The ends of each strong member lie adjacent upper and lower edges of the door to which it is attached and proximate the ends of a pair of latch pins mounted on the outer face of the door. Thus the strong backs and latch pins co-operate to form a rigid covering for the rear opening of the dump body, the strong backs preventing deflection and bowing of the doors and the latch pins rigidly securing the doors releasably to the frame of the body at edge portions directly overlying and proximate the ends of the strong backs.

Referring to Figs. 10 and 13, a pair of double acting expandable hydraulic motors 101, 102, positioned within each of the arms 51 and 52, respectively, are provided for moving the packer means back and forth within the body. The cylinder end of each is pivoted, as at pivot 103, to the rear end of each arm, and the piston rod for each motor is pivotally connected to a mounting 104 secured to the floor at the forward end of the dump body. These motors are arranged with their piston rod ends connected to forward portions of the dump body and their cylinder ends connected to rear portions of each arm in order to present the greatest possible access to the interior of each arm and thereby reduce cleaning difficulties.

Suitable conduits are provided for admitting fluid under pressure to one side of each motor and exhausting fluid from the other side of each motor. Thus, as may be seen with reference to Fig. 10, flexible conduits 106 and 107 connect the forward end of each motor with a control valve 108, and flexible conduits 109 and 111 connect the rear end of each motor with another segment of control valve 108. Valve 108 is operable to deliver pressure fluid selectively to either conduit 107 or 111, while providing an exhaust for the remaining conduit and is adjusted, in the ordinary manner, by means of handle 112. Coil springs 113, 114, connected at one of their ends to conduits 107, 111 and at the other of their ends to the truck body (not shown), may be provided to take up slack in these conduits.

It will be seen from the above that packer mechanism 46 is effective to move refuse deposited in the forward end of the dump body rearwardly to rear portions of the body, and openings 31, 32, and 33 in the side walls and top accommodate dumping of refuse into the path the packer mechanism follows as it travels rearwardly. In view of the fact that the dump body of the vehicle is elevated somewhat from the ground, novel step ladder means are included to enable the vehicle operator to climb up and deposit refuse through the openings provided. Referring to Figs. 1, 3, 4, and 5, the step ladder means comprises a pair of spaced step supports 116 and 117, pivoted to brace members 118 affixed to the base of the dump body by means of pivot pins 119. Extending between the step supports are a pair of step members 121 and 122 rigidly secured at their ends to the step supports. An abutment member 123, positioned at the nose of each step support, engages the inner edge of each brace member when the steps are swung outwardly to their lowered positions, as shown in Fig. 3. A second abutment member 124, secured to each step support ad-

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jacent the lower step member, strikes the outer edge of each brace member when the steps are swung to their raised position, as shown in Fig. 4. A kicker arm 126 is secured to the nose of step support 117 so as to swing outwardly when the steps are raised, the arm permitting the steps to be lowered by a kick of the foot. A through member 127, extending between step supports 116 and 117, is provided to offer an auxiliary foot support when the step ladder is in a raised position. As can be seen with reference to Fig. 4, through member 127 is positioned in the step supports so that when the step ladder is pivoted to its raised position, the through member occupies an overcenter position relative to the pivot connections for the step supports. In this manner, in the event that the vehicle operator climbs up on through member 127, the steps are prevented from inadvertently swinging to a lowered position, the weight of the operator tending to rotate the step ladder clockwise, as viewed in Fig. 4, against abutment member 124.

From the foregoing it will be apparent that a novel refuse collection apparatus has been described which has a number of features which contribute to the over-all utility of the apparatus. The construction employed for the plow face in the packer mechanism is particularly valuable when used with the ordinary elongated dump-type vehicle where the size of the dump body makes a long compression stroke impractical. By utilizing the type of curvature herein described, refuse tends to be collected from the floor of the truck body and pushed upwardly as it is moved toward the rear, the upper layers of refuse being compressed at the same time by the upper portions of the plow face. The plow face is sufficiently near the vertical so that rolling of the refuse handled into a wave and leaving an undercut in the refuse after it has been compressed, is prevented. Further, by including the novel arresting mechanism discussed, the evenly distributed mass of refuse created by the packer mechanism is retained in its compressed state at the rear of the vehicle, the refuse tending to expand behind the arresting mechanism so as to lock itself in position. The relatively large pressures generated by the packer mechanism are effectively resisted by the inclusion of the novel strong backs and latch mechanisms discussed herein. The inclusion of the step ladder mechanism further increases the utility of the vehicle by expediting the ease with which the dump body may be loaded with refuse.

The refuse collection vehicle may be manufactured relatively economically, and may be produced from existing multi-purpose dump trucks with a minimum amount of conversion work. The collection vehicle, although equipped to handle refuse, may still be used for most general-purpose work, as the size of the dump body need not be altered materially from those presently now in use for such work. Thus, a truck may be equipped for part time garbage or refuse collection and employed the rest of the time for other purposes.

As used herein, the terms "forward," "forwardly," "rearward" and "rearwardly" allude to relative positions with reference to the front and rear ends of the vehicle. It is claimed and desired to secure by Letters Patent:

1. Refuse collection apparatus for a refuse vehicle comprising a hollow body having side walls, a floor, and forward and rear end openings for the reception and ejection of refuse, respectively; packer means movable longitudinally within said body between a retracted position and a compression position located rearwardly in said body of said retracted position; means for moving said packer means between said positions; said packer means having a curved compression face extending transversely of said body with its bottom edge adjacent the floor of said body and a top edge spaced a substantial distance above said bottom edge and forwardly in said body of said bottom edge; said compression face being formed upon a substantially unbroken curve which is indented

toward the forward end of said body with its maximum indentation spaced vertically from said bottom edge a distance of from between about one-third to one-fourth the distance from said bottom to said top edge, and forwardly in said body of said bottom edge a distance equal to about one-fourth or less the distance of said maximum indentation from said bottom edge; said compression face compacting refuse placed thereagainst in a direction moving upwardly and toward the rear of said body; and arresting means operable to offer a greater resistance to the movement of refuse forwardly in said body than is encountered by the movement of refuse rearwardly in said body, said arresting means comprising a pair of elongated members, one on each side of said body and each presenting forwardly a deflection surface and rearwardly a retention surface.

2. Refuse collection apparatus for a refuse vehicle comprising a hollow body having side walls, a floor, and forward and rear end openings for the reception and ejection of refuse, respectively; packer means having a compression face extending transversely of said body and movable longitudinally within said body between a retracted position and a compression position located rearwardly of said retracted position; means for moving said packer means between said retracted and compression positions; and arresting means operable to offer a greater resistance to movement of refuse forwardly in said body than is encountered by movement of refuse rearwardly; said arresting means comprising a pair of upright members positioned opposite one another within said body, one along each side of said body; each of said upright members presenting forwardly a deflection plane and rearwardly a retention plane; said deflection plane being inclined at an oblique angle relative to the sides of said body which is greater than the angle of inclination of said retention plane.

3. Refuse collection apparatus for a refuse vehicle comprising a hollow body having side walls, a floor, and a wall at the rear end of said body offering a compacting surface; packer means having a compression face extending transversely of said body and movable longitudinally within said body between a retracted position and a compression position located rearwardly of said retracted position; and arresting means for holding refuse compacted by said packer means, said arresting means comprising a pair of upright members positioned opposite one another within said body, one along each side of said body; each of said upright members presenting forwardly a deflection plane inclined at an oblique angle relative to the sides of said body, and rearwardly a retention plane inclined relative to said sides at an angle which is less than the angle of inclination of said deflection plane.

4. Refuse collection apparatus for a refuse vehicle comprising a hollow body having side walls, a floor, and forward and rear end openings for the reception and ejection of refuse, respectively; packer means having a compression face extending transversely of said body and movable longitudinally within said body between a retracted position and a compression position located rearwardly of said retracted position; said packer means having a pair of arms, one at each end of said compression face, extending rearwardly of said face adjacent the sides and floor of said body; a pair of hollow guide track elements affixed to said body adjacent the sides of said body adapted to telescopically receive each of said arms, respectively; and an expansible hydraulic motor interposed between the forward end of said body and the rear end of each of said arms; expansion of said motors moving said packer means to said compression position.

5. The refuse collection apparatus of claim 4 wherein said hollow guide track elements and said arms have upper deflection surfaces which slope downwardly and inwardly from the sides of said body so as to deflect refuse toward the interior of said body.

6. The refuse collection apparatus of claim 5 wherein

the rear ends of said arms are provided with roller mounts which support said ends from deflection upwardly from the floor of said body; and wherein the packer means also includes roller mounts spaced forwardly of said compression face supporting forward portions of said packer means from deflection downwardly toward the floor of said body.

7. Refuse collection apparatus for a refuse vehicle comprising a hollow body having side walls, a floor, and forward and rear end openings for the reception and ejection of refuse, respectively; packer means movable longitudinally within said body between a retracted position and a compression position located rearwardly of said retracted position; said packer means having a curved compression face extending transversely of said body and a pair of arms, one at each end of said compression face, extending rearwardly of said face adjacent the sides and floor of said body; the bottom edge of said face lying adjacent the floor of said body and the top edge of said face being spaced a substantial distance above said bottom edge and forwardly of said bottom edge; said compression face being formed upon a substantially unbroken curve which is indented toward the forward end of said body with its maximum indentation spaced vertically from said bottom edge a distance of from between about one-third to one-fourth the distance from said bottom to said top edge, and forwardly of said bottom edge a distance equal to about one-fourth or less the distance of said maximum indentation from said bottom edge; a pair of hollow guide track elements affixed to said body adjacent the sides of said body and adapted to telescopically receive each of said arms, respectively; and an expansible hydraulic motor interposed between the forward end of said body and the rear end of each of said arms; expansion of said

motor moving said packer means to said compression position.

8. A refuse vehicle comprising a vehicle frame; an elongated dump body having side walls and floor pivotally supported at its rearward end to said frame; openings along the side walls of said body at the forward end of said body for the reception of refuse; an opening at the rear end of said body for the ejection of refuse by pivoting said body about its pivot support; packer means having a compression face extending transversely of said body and movable longitudinally within said body between a retracted position located forwardly of said side wall openings and a compression position located rearwardly of said side wall openings; and arresting means operable to offer a greater resistance to movement of refuse forwardly in said body than is encountered by movement of refuse rearwardly; said arresting means comprising a pair of upright members positioned opposite one another within said body to the rear of said side wall openings, one along each side wall of said body; each of said upright members presenting forwardly a deflection plane and rearwardly a retention plane; said deflection plane being inclined at an oblique angle relative to said side walls which is greater than the angle of inclination of said retention plane.

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