

preferably between 280 mm and 300 mm). (Note that in FIG. 9, the tires of the vehicle are not shown.) This is obtained by a geometrical arrangement wherein the axis of rotation A15 is located above the axes A12 and A14. In addition, when it is in stored position (the bottommost position), the depth of the container lifter according to the invention is less than 600 mm, and more preferably less than 580 mm; typically it is between 550 mm to 600 mm. This makes it possible to house the container lifter 3 behind the vehicle or on the flank of the vehicle without exceeding the dimensions of the vehicle.

[0071] Used in a rear loading vehicle, the container lifter 3 according to the invention allows for the manual loading via the swing gate 52 at a height of about 1400 mm to 1500 mm from the ground 190, minimizing the rear overhand of the vehicle and facilitating the emptying by gravity of the caisson 2 without interference with the container lifter 3.

[0072] LIST OF REFERENCE NUMERALS

|          |   |
|----------|---|
| 1        | Rubbish collection vehicle                        |
| 2        | Caisson   |
| 3        | Container lift                                    |
| 4        | Chassis   |
| 5        | Cab   |
| 20, 21   | Carrier cylinder                                  |
| 22       | Sliding carrier                                   |
| 23       | Pallet connecting rod                             |
| 25       | Lower scoop                                       |
| 26       | Lower scoop cylinder                              |
| 30       | Roof  |
| 31       | Sliding member                                    |
| 33       | Front slider                                      |
| 38       | Upper scoop                                       |
| 40       | Caisson bottom (front portion)                    |
| 42, 43   | Lateral wall                                      |
| 45       | Swing gate  |
| 46       | Caisson bottom (rear portion)                     |
| 47       | Swing gate cylinder                               |
| 50, 51   | Lateral portion of the swing gate                 |
| 52       | Central portion of the swing gate                 |
| 53       | Manual means of locking                           |
| 57       | Handhold  |
| 60       | Seat  |
| 61, 62   | Riser   |
| 63, 64   | Main arm  |
| 65, 66   | Auxiliary arm                                     |
| 67       | Clamp   |
| 68       | Comb  |
| 69       | Traverse  |
| 70       | Cylinder to actuate the clamp                     |
| 71, 72   | Rotation cylinder                                 |
| 73, 74   | Attachment point for the lift cylinder            |
| 75, 76   | Attachment point for the rotation of the main arm |
| 77, 78   | Attachment point for the rotation of the seat     |
| 79       | Lower abutment of the seat                        |
| 80       | Peripheral profile                                |
| 96       | Cap weld zone                                     |
| 170, 171 | Protective strips                                 |
| 180      | Tray  |
| 181      | Rear edge of the tray                             |
| 190      | Ground  |

[0073] The letters A1, A2, A3, A4, A5, A6, A11, A12, A13, A14, A15 and A16 designate axes. The letters D12, D13, D24 and D34 designate distances between axes.

1-18. (canceled)

19. A container lifter for rear loading rubbish collection vehicle, comprising:

at least one main arm pivotably mounted about a first pivot axis so as to take a bottom position and a top position relative to a low-high direction;

a reinforcement pivotably mounted to the at least one main arm about a second pivot axis;

a seat mounted to the reinforcement and which is to receive a container so as to raise same; and

at least one auxiliary arm pivotably mounted about a third pivot axis, and also pivotably on the reinforcement about a fourth pivot axis;

wherein:

a spatial distance between the second pivot axis and the fourth pivot axis is greater than a spatial distance between the first pivot axis and the third pivot axis;

the seat is pivotably mounted to the reinforcement about a fifth pivot axis so as to selectively take a position against the reinforcement between the bottom position and the top position of the at least one main arm, and an unloading position when the at least one main arm is in the top position; and

the seat is pivoted about the fifth pivot axis in such a way that the container received on the seat is also pivoted about the fifth pivot axis in order to be emptied of its contents.

20. The container lifter of claim 19, wherein:

the spatial distance between the second pivot axis and the fourth pivot axis is greater, by at least 30%, than the spatial distance between the first pivot axis and the third pivot axis; and or

a spatial distance between the third pivot axis and the fourth pivot axis is greater, by at least 10%, than a spatial distance between the first pivot axis and the second pivot axis; and/or

the first pivot axis is spatially located above the third pivot axis and the second pivot axis is spatially located above the first pivot axis.

21. The container lifter of claim 20, wherein the fifth pivot axis is spatially located above the second pivot axis.

22. The container lifter of claim 20, wherein the spatial distance between the first pivot axis and the second pivot axis is at least 70 cm.

23. The container lifter of claim 19, wherein:

when the at least one main arm is in the bottom position, the first pivot axis is spatially above the second pivot axis, and a plane lying perpendicular to the first pivot axis and the second pivot axis forms an angle in a range between  $-50^\circ$  and  $-75^\circ$ ; and

when the at least one main arm is in the top position, the second pivot axis is spatially above the first pivot axis, and the plane lying perpendicular to the first pivot axis and the second pivot axis forms an angle in a range between  $50^\circ$  and  $75^\circ$ .

24. The container lifter of claim 23, wherein:

when the at least one main arm is in the bottom position, an angle between the plane lying perpendicular to the first pivot axis and the second pivot axis, and a plane lying perpendicular to the third pivot axis and the fourth pivot axis, is in a range between  $0$  and  $-5^\circ$ ; and

when the at least one main arm is in the top position, an angle between the plane lying perpendicular to the first pivot axis and the second pivot axis, and a plane lying perpendicular to the third pivot axis and the fourth pivot axis, is in a range between  $12^\circ$  and  $18^\circ$ .

25. The container lifter of claim 19, wherein the at least one auxiliary arm is to adjust an inclination of the reinforcement about the second pivot axis in such a way that: