

The invention relates to a wheeled bin, particularly of plastic, for the collection of waste, in particular household refuse.

The invention relates more particularly to a bin comprising a trough mounted on wheels and a mounted lid pivoting in relation to the trough by means of lateral arms firmly attached to the lid and each articulated at one end to an shaft firmly attached to a lateral wall of the trough, springs being arranged between the lateral arms of the lid and the trough so as to allow the lid to return to the closed position. A bin of this type has been described in DE-A-30 07 507.

Bins of this kind comprise different gripping members or handles for their operation during the different phases of use.

Thus such bins comprise on the trough, generally in the vicinity of the upper part thereof, gripping handles used to wheel the bin over the ground.

It has already been provided that such gripping handles be formed on the front and rear surfaces of the bin.

Furthermore, for certain phases of operation, for example for positioning the bin in refuse-emptying premises or to bring the bins, in order that they may be emptied, onto a container-lifting device arranged at the rear of a household refuse collection dumping truck, the bins have been provided with handles on the lateral surfaces of the trough.

These lateral handles are located in the path of the pivoting movement of the lid between its closed position and its open position or positions. Accidents have been recorded during the operation of the bins as a result of the shearing of the lid onto the hand of the operator holding the bin during the movement of the lid.

In order to open the lid it has also been provided that gripping means be arranged in the form of openings in the lid in the vicinity of the front end edge of the latter.

As a result of the height of the bins, the position of these openings does not allow the user to hold the lid and to control its passage to the open positions of the lid in which the front end of the lid is well removed from the front edge of the trough.

The aim of the present invention is to provide a bin which, by virtue of particularly simple and economical means, avoids the aforementioned disadvantages of currently known bins.

The bin corresponding to the invention is fundamentally characterised in that it comprises, on each of the lateral surfaces of the lid, in the vicinity of the rear end edge of the latter, at least one grip opening formed in the wall of the lid and preferably delimited by two grooves projecting towards the inside of the surface of the lid.

In a particular embodiment the opening or openings are arranged in parallel to the axis of the arms of the lid.

In a variant the opening or openings can be formed to extend perpendicularly to said axis or in another direction, for example horizontally, vertically or obliquely.

To facilitate the gripping, one of the grooves delimiting the opening or each of the openings can be longer than the other and curved at its end.

In accordance with the invention the grip openings can be formed in the course of the moulding of the lid of the trough.

To facilitate the understanding of the invention, different embodiments will now be described in the way of non-limiting examples making reference to the attached drawing in which:

Figure 1 is a lateral elevation view of a bin corresponding to the invention;

Figure 2 is a section along II-II of Figure 1;

Figures 3 to 7 illustrate different design variants of the gripping members of the bin corresponding to the invention.

Making reference to Figure 1 it can be seen that a bin corresponding to the invention which comprises a trough which can be metallic but which is preferably made of plastics material 1 and which is of substantially parallelepiped formation is mounted on wheels 2.

To each of the lateral surfaces of the trough 1 is articulated a lid exhibiting a curved upper surface 3 which extends between a front end edge 4 and a rear end edge 5. The lid 3 is articulated to the trough by means of sloping arms 6 mounted to pivot in the vicinity of their ends 7 on a shaft (not shown) firmly attached to the lateral wall of the trough 1, a spring device which permits the positioning and balancing of the lid on the trough of the bin being mounted between the said arms 6 and the corresponding walls of the trough. A spring device of this kind has been described for example in FR-A-2 392 892 in the name of the applicants.

In accordance with the invention in each of the lateral surfaces 8 of the lid 3 is arranged at least one grip opening 9 which, as can be seen from Figure 2, is delimited by two grooves 10 and 11 projecting towards the inside of the lateral surface 8 of the lid.

As can be seen from Figure 2 the groove 10 is longer than the groove 11 and is curved at 12 at its end. This configuration of the opening 9 facilitates the gripping and manipulation of the bin whilst ensuring a good guidance of the user's fingers and a good hold.

In the embodiment of Figures 1 and 2 one single opening 9 has been arranged in parallel to the longitudinal axis of the arms 6, along and in the vicinity of the sloping end edge of the arms 6.

In the variant illustrated in Figure 3 two identical openings 19a, 19b have been provided, extending horizontally.

In the embodiment illustrated in Figure 4 one single opening 29 has been provided extending in parallel to the sloping end edge 13 of the arms but differing from the opening 9 in Figure 1 by virtue of

the fact that its lower and upper end bearing faces are horizontal and not perpendicular to the axis of the arms as in the embodiment corresponding to Figure 1.

In the embodiment shown in Figure 5 two openings 39a, 39b have been provided extending perpendicularly to the end edge 13.

In the embodiment illustrated in Figure 6 two openings 49a, 49b have been provided, the opening 49a comprising a horizontal part extended by a part which is parallel to the end edge 13, whilst the opening 49b is arranged horizontally.

In the embodiment shown in Figure 7, two identical openings 59a, 59b, arranged vertically, have been provided.

It will be seen that by virtue of the position of the grip openings corresponding to the invention on the lateral surfaces of the lid, these grip openings can be used to grip the bin and to wheel it over the ground and to permit the desired pivoting movements of the lid.

To allow the bin to be manipulated by its main front (14) and rear (15) surfaces, on these surfaces conventional gripping handles 16 have been provided, projecting from corresponding walls of the trough, as well as a gripping handle on each of the lateral surfaces of the trough 1.

CLAIMS

1. A wheeled bin, particularly of plastic, comprising a trough mounted on wheels and a mounted cover pivoting in relation to the trough by means of lateral arms firmly attached to the lid and each articulated at one end on a shaft firmly attached to a side wall of the trough, springs being arranged between the side arms of the lid and the trough so as to allow the lid to return to the closed position, characterised in that it includes on each of the side surfaces (8) of the lid (3) at least one grip opening (9;19a;19b;29;39a;39b;49a;49b;59a;59b) made in the wall (8) of the lid in the region of the rear edge thereof.
2. A wheeled bin according to Claim 1, characterised in that the said opening or openings are defined by two grooves (10,11) projecting towards the inside of the surface of the lid.
3. A wheeled bin according to Claim 1 or 2, characterised in that the openings (9,29) are arranged parallel to the axis of the arms (6) of the lid.
4. A wheeled bin according to Claim 1 or 2, characterised in that the openings (39a,39b) are made perpendicular to the axis of the arms (6) of the lid.
5. A wheeled bin according to Claim 1 or 2, characterised in that the openings (19a,19b) are arranged horizontally.
6. A wheeled bin according to Claim 1 or 2, characterised in that the openings (59a,59b) are arranged vertically.



7. A wheeled bin according to any of Claims 2 to 6,
characterised in that one of the grooves (10) defining the opening or
each of the openings is longer than the other groove (11) and is
curved at the end (12).

8. A wheeled bin according to any of the preceding Claims,
characterised in that the lid is of plastic, the opening or openings
being made during the moulding of said lid.

