

DESCRIPTION

RUBBISH ACCUMULATION DEVICE

[TECHNICAL FIELD]

[0001]

The present invention relates to a rubbish accumulation device for compressing and accumulating rubbish.

[BACKGROUND ART]

[0002]

A rubbish accumulation device recited in Patent Literature 1 includes a rotatable tube (drum) that accumulates rubbish, a front fixing stand, and a rear fixing stand. The front fixing stand is in contact with a front part of the rotatable tube and the rear fixing stand is in contact with a rear part of the rotatable tube. A sealant is provided between the rotatable tube and the front fixing stand, and a sealant is provided between the rotatable tube and the rear fixing stand. Provision of the sealants prevents leakage of waste liquid, such as waste water, from the rotatable tube.

[CITATION LIST]

[Patent Literature]

[0003]

[Patent Literature 1]

[SUMMARY OF INVENTION]

[Technical Problem]

[0004]

An objective of the present invention is to provide a rubbish accumulation device that can effectively prevent leakage of waste liquid from a drum in which rubbish is accumulated.

[Solution to Problem]

[0005]

A rubbish accumulation device according to one aspect of the present invention compresses and accumulates rubbish. The rubbish accumulation device includes a drum, a blocking section, and a sealing section. The rubbish is loaded into the drum. The drum rotates. The blocking section partially blocks an opening at a first end of the drum. The first end is one of two ends of the drum. The sealing section seals between the first end of the drum and the blocking section. The sealing section includes ring-shaped packing, a protruding section, and a pressing section. The packing is located along an outer circumferential surface of the drum at the first end of the drum. The protruding section protrudes from the outer circumferential surface of the drum at the first end in a radial direction of the drum. The pressing section is located outward of the drum in terms of the radial direction of the drum and is located opposite to the protruding section with the packing therebetween. The pressing section applies pressure on the packing in a direction toward the protruding section.

[0006]

In the rubbish accumulation device according to the present invention, the sealing section

preferably further includes a limiting section. The limiting section is preferably located outward of the packing in terms of the radial direction of the drum and preferably limits movement of the packing in the radial direction. The outer circumferential surface of the drum at the first end of the drum preferably applies pressure on the packing in a direction toward the limiting section.

[0007]

In the rubbish accumulation device according to the present invention, the sealing section preferably further includes a flange. The flange is preferably bound to the limiting section and is preferably located opposite to the pressing section. The flange is preferably linked to the pressing section.

[0008]

In the rubbish accumulation device according to the present invention, the pressing section preferably includes a protrusion. The protrusion preferably protrudes toward the packing and extends along the packing.

[0009]

The rubbish accumulation device according to the present invention preferably further includes a wall located opposite to the blocking section. The wall preferably has an insertion opening that receives a second end of the drum. The second end is the other of the two ends of the drum. The rubbish is preferably discharged from an opening at the second end of the drum. The blocking section preferably has a loading inlet for loading of the rubbish into the drum.

[0010]

In the rubbish accumulation device according to the present invention, the sealing section preferably further includes a projection. The projection preferably protrudes from the pressing section and is preferably inserted into the packing.

[Advantageous Effects of Invention]

[0011]

The present invention enables effective prevention of leakage of waste liquid from a drum in which rubbish is accumulated.

[BRIEF DESCRIPTION OF DRAWINGS]

[0012]

[FIG. 1]

FIG. 1 is a perspective view illustrating a rubbish accumulation device according to a first embodiment of the present invention.

[FIG. 2]

FIG. 2 is an exploded perspective view illustrating the rubbish accumulation device according to the first embodiment of the present invention.

[FIG. 3]

FIG. 3 is a perspective view illustrating a rear side of a blocking section in the rubbish accumulation device according to the first embodiment of the present invention.

[FIG. 4]

FIG. 4 is a cross-sectional perspective view illustrating a sealing section in the rubbish accumulation device according to the first embodiment of the present invention.

[FIG. 5]

FIG. 5 is a cross-sectional view illustrating the sealing section in the rubbish accumulation device according to the first embodiment of the present invention.

[FIG. 6]

FIG. 6 is a cross-sectional perspective view illustrating a sealing section in a conventional rubbish accumulation device.

[FIG. 7]

FIG. 7 is a cross-sectional view illustrating the sealing section in the conventional rubbish accumulation device.

[FIG. 8]

FIG. 8 is a perspective view illustrating a pressing section and projections of a sealing section in a rubbish accumulation device according to a second embodiment of the present invention.

[FIG. 9]

FIG. 9 is a cross-sectional perspective view illustrating the sealing section in the rubbish accumulation device according to the second embodiment of the present invention.

[FIG. 10]

FIG. 10 is a cross-sectional view illustrating the sealing section in the rubbish accumulation device according to the second embodiment of the present invention.

[DESCRIPTION OF EMBODIMENTS]

[0013]

The following describes embodiments of the present invention with reference to the drawings. Note that elements that are the same or equivalent are marked by the same reference signs in the drawings and description thereof is not repeated. Also, in the embodiments of the present invention, an X axis, a Y axis, and a Z axis are perpendicular to one another with the X axis and the Y axis being substantially parallel to the horizontal plane and the Z axis being

substantially parallel to a vertical line.

[0014]

FIG. 1 is a perspective view illustrating a rubbish accumulation device 1 according to a first embodiment of the present invention. FIG. 1 illustrates the rubbish accumulation device 1 as viewed from a rubbish discharge side. FIG. 2 is an exploded perspective view illustrating the rubbish accumulation device 1. FIG. 2 illustrates a drum 2, a sealing section 8, and a blocking section 6 of the rubbish accumulation device 1.

[0015]

As illustrated in FIGS. 1 and 2, the rubbish accumulation device 1 compresses and accumulates rubbish. The rubbish accumulation device 1 includes the drum 2, a chain 4, the blocking section 6 having a loading inlet 6a therein, a loading-side cover 7, the sealing section 8, a wall 10 having an insertion opening 10a, a discharge-side cover 11, and a frame F. The frame F is located such as to enclose the drum 2.

[0016]

The drum 2 is supported by the frame F in a rotatable manner. The drum 2 rotates about a rotation axis AX in a rotation direction R. In the first embodiment, the rotation direction R indicates a counterclockwise direction when the rubbish accumulation device 1 is viewed from the rubbish discharge side. A loading-side end 20 (first end), which is one of two ends of the drum 2, has an opening OI. Rubbish is loaded into the drum 2 through the loading inlet 6a and the opening OI. A discharge-side end 22 (second end), which is the other of the two ends of the drum 2, has an opening OE. Rubbish is discharged from the opening OE.

[0017]

The drum 2 has a circular cross-section. The drum 2 has an internal diameter that varies

with position in a direction along the rotation axis AX. Specifically, the drum 2 has a barrel section 2a, a hollow cylinder section 2b, and a tapered section 2c. The barrel section 2a has a substantially hollow cylindrical shape and has an internal diameter that is substantially uniform in the direction along the rotation axis AX. The hollow cylinder section 2b is bound to one of two ends of the barrel section 2a. The hollow cylinder section 2b has a substantially hollow cylindrical shape and has an internal diameter that is substantially uniform in the direction along the rotation axis AX. The internal diameter of the hollow cylinder section 2b is smaller than the internal diameter of the barrel section 2a. The tapered section 2c is bound to the other of the two ends of the barrel section 2a. The tapered section 2c has a substantially hollow truncated cone shape and has an internal diameter that varies with position in the direction along the rotation axis AX.

[0018]

The chain 4 is wound against a large-diameter sprocket located on an outer circumferential surface of the hollow cylinder section 2b and a small-diameter sprocket connected to a rotatable shaft of a motor. Rotation of the motor causes the drum 2 to rotate in the rotation direction R through the small-diameter sprocket, the chain 4, and the large-diameter sprocket. When the drum 2 rotates in the rotation direction R, rubbish loaded into the drum 2 is moved toward the discharge-side cover 11 from the blocking section 6 and is pressed against the discharge-side cover 11 by a plurality of blade members located inside of the drum 2. As a result, the rubbish is compressed and accumulated in the drum 2. Note that in order to simplify the drawings, the large-diameter sprocket, the motor, the small-diameter sprocket, and the blade members are not illustrated therein. The discharge-side cover 11 is indicated by a dashed and double dotted line in order to simplify the drawings.

[0019]

The blocking section 6 is attached to one of two ends of the frame F. The blocking section 6 partially blocks the opening OI located at the loading-side end 20 of the drum 2. The blocking section 6 has the loading inlet 6a for loading of rubbish into the drum 2.

[0020]

The loading-side cover 7 blocks the loading inlet 6a. The loading-side cover 7 moves between a closed position at which the loading-side cover 7 blocks the loading inlet 6a and an open position at which the loading-side cover 7 exposes the loading inlet 6a.

[0021]

The sealing section 8 seals between the loading-side end 20 and the blocking section 6 of the drum 2.

[0022]

The wall 10 is attached to the other of the two ends of the frame F. The wall 10 is located opposite to the blocking section 6. The wall 10 has the insertion opening 10a having a substantially circular shape. The drum 2 is inserted into the insertion opening 10a at the discharge-side end 22. Accordingly, the discharge-side end 22 protrudes from the insertion opening 10a.

[0023]

The discharge-side cover 11 blocks the opening OE. The discharge-side cover 11 moves between a closed position at which the discharge-side cover 11 blocks the opening OE and an open position at which the discharge-side cover 11 exposes the opening OE. When rubbish accumulated in the drum 2 is to be discharged from the drum 2, the discharge-side cover 11 is moved to the open position, thereby exposing the opening OE. When the drum 2 rotates in the

rotation direction R, the blade members located inside of the drum 2 cause the rubbish to be discharged externally to the drum 2 through the opening OE.

[0024]

The following describes an overview of the sealing section 8 with reference to FIGS. 2 and 3. As illustrated in FIG. 2, the sealing section 8 includes a protruding section 12, a pressing section 14, packing 16, and a position determining section 18. The protruding section 12 is a ring-shaped plate member located at the loading-side end 20 of the drum 2. The protruding section 12 forms a flange. The pressing section 14 is a ring-shaped plate member. The packing 16 is ring-shaped and has a substantially rectangular cross-section. In the first embodiment, the packing 16 is gland packing (for example, braided packing) that is formed through braiding of fibers (threads) to which a lubricant is added. The position determining section 18 is ring-shaped and is bound to a rear surface 6b of the blocking section 6. The position determining section 18 positions the packing 16 such that the packing 16 is located along an outer circumferential surface 21 of the drum 2 at the loading-side end 20.

[0025]

FIG. 3 is an enlarged perspective view illustrating the position determining section 18. As illustrated in FIG. 3, the position determining section 18 includes a limiting section 30 and a flange 32. The limiting section 30 is a ring-shaped plate member that protrudes from the rear surface 6b of the blocking section 6. The flange 32 is a ring-shaped plate member that extends along the rear surface 6b of the blocking section 6 from a protruding end of the limiting section 30. The flange 32 and the limiting section 30 are at approximately a right angle to one another.

[0026]

Furthermore, the blocking section 6 has a limiting section 34 and a limiting section 36.

The limiting section 34 is a ring-shaped plate member that protrudes from the rear surface 6b of the blocking section 6. The limiting section 34 has a smaller diameter than the limiting section 30. The limiting section 36 is a ring-shaped plate member that protrudes from the rear surface 6b of the blocking section 6. The limiting section 36 has a smaller diameter than the limiting section 34. The limiting section 34 and the limiting section 36 limit movement of the drum 2 in a radial direction.

[0027]

The following describes the sealing section 8 in detail with reference to FIGS. 4 and 5. FIG. 4 is a cross-sectional perspective view illustrating the sealing section 8. FIG. 5 is a cross-sectional view illustrating the sealing section 8. FIGS. 4 and 5 illustrate a region around a lowest part of the ring-shaped sealing section 8. As illustrated in FIGS. 4 and 5, the packing 16 is sandwiched between the limiting section 30 and the outer circumferential surface 21 of the drum 2 at the loading-side end 20, and is also sandwiched between the pressing section 14 and the protruding section 12 of the drum 2. The following provides a more specific description.

[0028]

The packing 16 is located along the outer circumferential surface 21 of the drum 2 at the loading-side end 20. The limiting section 30 protrudes along the rotation axis AX (FIG. 2) of the drum 2 from the rear surface 6b of the blocking section 6. The limiting section 30 is located outward of the packing 16 in terms of a radial direction A of the drum 2 and limits movement of the packing 16 in the radial direction A. The limiting section 30 is located opposite to the outer circumferential surface 21 of the drum 2 at the loading-side end 20 with the packing 16 therebetween. The outer circumferential surface 21 of the drum 2 at the loading-side end 20 applies pressure on the packing 16 in a direction toward the limiting section 30.

[0029]

The flange 32 is bound to the limiting section 30 and is located opposite to the pressing section 14. More specifically, the flange 32 extends in the radial direction A of the drum 2 from the protruding end of the limiting section 30. In other words, the position determining section 18 has a substantially L-shaped cross-section. Furthermore, the protruding section 12 protrudes in the radial direction A of the drum 2 from the outer circumferential surface 21 of the drum 2 at the loading-side end 20.

[0030]

The pressing section 14 is located outward of the drum 2 in terms of the radial direction A of the drum 2 and is located opposite to the packing 16. The pressing section 14 is located opposite to the protruding section 12 with the packing 16 therebetween. The pressing section 14 is linked to the flange 32. More specifically, the pressing section 14 is tightened by inserting a bolt 25 through the pressing section 14 and the flange 32 and by screwing a nut 27 onto the bolt 25. As a result, the pressing section 14 applies pressure on the packing 16 in a direction toward the protruding section 12 of the drum 2. More specifically, the pressing section 14 includes a plurality of protrusions 14a that each have a substantially circular cross-section. The first embodiment includes two protrusions 14a. Each of the protrusions 14a is a ring-shaped member that protrudes toward the packing 16 and extends along the packing 16. The protrusions 14a apply pressure on the packing 16 in a direction toward the protruding section 12.

[0031]

The following describes the sealing section 8 through comparison to a conventional sealing section 102 with reference to FIGS. 4 to 7. FIG. 6 is a cross-sectional perspective view illustrating the sealing section 102 of a conventional rubbish accumulation device 100. FIG. 7 is

a cross-sectional view illustrating the sealing section 102. As illustrated in FIGS. 6 and 7, the conventional rubbish accumulation device 100 includes the sealing section 102, a drum 104, and a loading-side blocking section 106. The sealing section 102 includes packing 108, a groove section 110, and a pressing section 112.

[0032]

The packing 108 is ring-shaped. The groove section 110 is ring-shaped and is located on a rear surface 106a of the loading-side blocking section 106. The packing 108 is fitted into the groove section 110. The groove section 110 and the packing 108 are located toward a rotation axis of the drum 104 relative to an inner circumferential surface 116a of the drum 104 at a loading-side end 116 of the drum 104.

[0033]

The pressing section 112 is a ring-shaped member having a substantially L-shaped cross-section. The pressing section 112 is located opposite to the packing 108 and toward the rotational axis of the drum 104 relative to the inner circumferential surface 116a of the drum 104 at the loading-side end 116. The drum 104 has a ring-shaped inner wall section 104a located thereon. The inner wall section 104a is a plate-shaped member that protrudes from the inner circumferential surface 116a of the drum 104 toward the groove section 110. The inner wall section 104a is linked to the pressing section 112 by a bolt 114. The pressing section 112 is tightened by the bolt 114. As a result, the pressing section 112 applies pressure on the packing 108 in a direction toward the loading-side blocking section 106.

[0034]

Pressing of the pressing section 112 against the packing 108 prevents leakage of waste liquid, such as waste water, from the drum 104. However, the drum 104 may move slightly away

from the loading-side blocking section 106 in a direction B toward a discharge-side wall during rubbish compression or rubbish discharge. In such a situation, the pressing section 112 also moves slightly in the direction B with the drum 104 as a consequence of the pressing section 112 being linked to the inner wall section 104a of the drum 104. As a result, the pressure that the pressing section 112 applies on the packing 108 is decreased and a situation may arise in which the packing 108 does not function effectively.

[0035]

In contrast, according to the first embodiment, the drum 2 has the protruding section 12 as described with reference to FIGS. 4 and 5. In a situation in which the drum 2 moves away from the blocking section 6 in the direction B toward the wall 10, therefore, the protruding section 12 also moves in the direction B. Accordingly, the protruding section 12 applies pressure on the packing 16 in a direction toward the pressing section 14, increasing pressure on the packing 16. As a result, the packing 16 comes in tighter sealed contact with the protruding section 12 than when the drum 2 has not moved in the direction B. That is, the packing 16 effectively seals the drum 2. As a result, it is possible to effectively prevent leakage of waste liquid, such as waste water, from the drum 2 in which rubbish is accumulated.

[0036]

Furthermore, according to the first embodiment, the outer circumferential surface 21 of the drum 2 applies pressure on the packing 16 in the direction toward the limiting section 30. Therefore, it is possible to inhibit reduction in pressure applied on the packing 16 from the outer circumferential surface 21 of the drum 2 even in a situation in which the drum 2 moves in the direction B. As a result, the packing 16 seals the drum 2 more effectively, thereby more effectively preventing leakage of waste liquid from the drum 2.

[0037]

Furthermore, according to the first embodiment, in addition to the packing 16 being pressed in the direction toward the limiting section 30 by the outer circumferential surface 21 of the drum 2, the packing 16 is also pressed in the direction toward the protruding section 12 by the pressing section 14. As a result, the packing 16 seals the drum 2 more effectively, thereby more effectively preventing leakage of waste liquid from the drum 2.

[0038]

Furthermore, according to the first embodiment, the pressing section 14 is linked to the flange 32 and is not linked to the drum 2. Therefore, it is possible to inhibit reduction in pressure applied on the packing 16 from the pressing section 14 even in a situation in which the drum 2 moves in the direction B. As a result, the packing 16 seals the drum 2 more effectively, thereby more effectively preventing leakage of waste liquid from the drum 2.

[0039]

Furthermore, according to the first embodiment, the pressing section 14 applies pressure on the packing 16 via the protrusions 14a. Therefore, pressure on the packing 16 per unit surface area can be increased. As a result, the packing 16 seals the drum 2 more effectively, thereby more effectively preventing leakage of waste liquid from the drum 2.

[0040]

Furthermore, according to the first embodiment, the drum 2 has a ring-shaped inner wall section 23 located thereon. The inner wall section 23 is a plate-shaped member protruding from an inner circumferential surface 29 of the drum 2 at the loading-side end 20. Provision of the inner wall section 23 further prevents leakage of rubbish from the drum 2.

[0041]

Furthermore, according to the first embodiment, the rubbish accumulation device 1 further includes an inclined gutter 40 under the sealing section 8 as illustrated in FIGS. 1 to 3. Therefore, even theoretically supposing a situation in which waste liquid does leak from the loading-side end 20 of the drum 2, the waste liquid can be guided to a waste liquid collector by the gutter 40. As a result, contamination of the rubbish accumulation device 1 and the surrounding environment by the waste liquid can be inhibited.

[0042]

(Second Embodiment)

The following describes a rubbish accumulation device 1 according to a second embodiment of the present invention with reference to FIGS. 8 to 10. The rubbish accumulation device 1 according to the second embodiment has the same configuration as the rubbish accumulation device 1 according to the first embodiment. However, in addition to the configuration of the rubbish accumulation device 1 according to the first embodiment, the rubbish accumulation device 1 according to the second embodiment further includes projections 15 as illustrated in FIG. 8. The following description of the second embodiment focuses on differences compared to the first embodiment.

[0043]

FIG. 8 is a perspective view illustrating a pressing section 14 and the projections 15 of a sealing section 8 in the rubbish accumulation device 1 according to the second embodiment. As illustrated in FIG. 8, the sealing section 8 further includes a plurality of the projections 15. In the second embodiment, each of the projections 15 is a headless nail. The projections 15 are for example welded to the pressing section 14. The projections 15 are arranged at equal intervals along a circumferential direction of the pressing section 14. The projections 15 protrude from a

side of the pressing section 14 at which protrusions 14a are located. More specifically, the projections 15 protrude between one of the protrusions 14a and the other of the protrusions 14a. Therefore, a base end portion of each of the projections 15 is supported by the two protrusions 14a, thereby enabling reinforcement of the projections 15.

[0044]

FIG. 9 is a cross-sectional perspective view illustrating the sealing section 8. FIG. 10 is a cross-sectional view illustrating the sealing section 8. As illustrated in FIGS. 9 and 10, each of the projections 15 is located closer than the bolt 25 to the drum 2 and is substantially parallel to the bolt 25. Furthermore, the projection 15 is located opposite to the bolt 25 with the protrusion 14a therebetween.

[0045]

Furthermore, the projections 15 protrude from the pressing section 14 toward the packing 16. The projections 15 are inserted into the packing 16. For example, the projections 15 may pierce into the packing 16. Therefore, according to the second embodiment, shifting and unevenness of the packing 16 relative to the position determining section 18 and detachment of the packing 16 away from the position determining section 18 can be inhibited. In addition, the second embodiment also has the same effects as the first embodiment.

[0046]

Through the above, embodiments of the present invention have been described with reference to the drawings. However, the present invention is not limited to the embodiments and the present invention can be implemented in various different forms within the intended scope thereof (for example, as described below in sections (1) to (5)). Also, a plurality of elements of configuration disclosed in the above embodiments can be combined as appropriate to form

various inventions. For example, some of the elements of configuration included in the embodiments may be omitted. Also, elements of configuration included in different embodiments may be combined as appropriate. The drawings are schematic illustrations of elements of configuration shown therein for facilitating understanding and properties of the elements of configuration in the drawings such as thickness, length, number, and spacing may differ from actual properties thereof in order to facilitate preparation of the drawings. Also, properties of the elements of configuration indicated in the above embodiments such as materials, shapes, and dimensions are non-limiting examples thereof and various alterations thereof are possible so long as such alterations do not substantially deviate from the effects of the present invention.

[0047]

(1) No particular limitations are placed on the shape of the drum 2. The drum 2 may for example alternatively be a hollow cylinder having a uniform internal diameter or a drum formed by joining a truncated cone-shaped hollow member to each of two ends of a hollow cylinder having a uniform internal diameter.

[0048]

(2) Each of the protruding section 12, the pressing section 14, the limiting section 30, and the flange 32 may be a single member that is ring-shaped or may be a plurality of members that form a ring in combination.

[0049]

(3) The number of protrusions 14a may be one or may be three or more. No particular limitations are placed on the shape of the protrusions 14a. Furthermore, the protrusions 14a may alternatively be omitted.

[0050]

(4) The sealing section 8 is provided at the rubbish loading side of the rubbish accumulation device 1, but may alternatively be provided at the rubbish discharge side of the rubbish accumulation device 1 or may be provided at both the loading side and the discharge side.

[0051]

(5) The projections 15 are arranged at equal intervals in the second embodiment, but may be arranged at any appropriate intervals. Furthermore, although there are a plurality of the projections 15, alternatively only one projection 15 may be provided. Furthermore, although the projections 15 are described as being headless nails, the projections 15 are not limited to being headless nails. For example, the projections 15 may be headed nails or screws. In a configuration in which the projections 15 are screws, the projections 15 are inserted into the packing 16 by screwing the projections 15 into the packing 16.

[INDUSTRIAL APPLICABILITY]

[0052]

The present invention relates to rubbish accumulation devices and is industrially applicable thereto.

[REFERENCE SIGNS LIST]

[0053]

1 Rubbish accumulation device

2 Drum

6	Blocking section
6a	Loading inlet
8	Sealing section
10	Wall
10a	Insertion opening
12	Protruding section
14	Pressing section
14a	Protrusion
15	Projection
16	Packing
18	Position determining section
30	Limiting section
32	Flange

CLAIMS

1. A rubbish accumulation device that compresses and accumulates rubbish, comprising:
a drum that is configured to rotate and into which rubbish is loaded;
a blocking section partially blocking an opening at a first end of the drum, the first end being one of two ends of the drum; and
a sealing section sealing between the first end of the drum and the blocking section, wherein
the sealing section includes:
packing that is ring-shaped and that is located along an outer circumferential surface of the drum at the first end;
a protruding section that protrudes from the outer circumferential surface of the drum at the first end in a radial direction of the drum; and
a pressing section that is located outward of the drum in terms of the radial direction of the drum and is located opposite to the protruding section with the packing therebetween, and
the pressing section applies pressure on the packing in a direction toward the protruding section.

2. The rubbish accumulation device according to claim 1, wherein
the sealing section further includes a limiting section that is located outward of the packing in terms of the radial direction of the drum and that limits movement of the packing in the radial direction, and
the outer circumferential surface of the drum at the first end applies pressure on the

packing in a direction toward the limiting section.

3. The rubbish accumulation device according to claim 2, wherein
the sealing section further includes a flange that is bound to the limiting section and that
is located opposite to the pressing section, and
the flange is linked to the pressing section.

4. The rubbish accumulation device according to any one of claims 1 to 3, wherein
the pressing section includes a protrusion protruding toward the packing and extending
along the packing.

5. The rubbish accumulation device according to any one of claims 1 to 4, further
comprising
a wall located opposite to the blocking section, wherein
the wall has an insertion opening that receives a second end of the drum, the second end
being the other of the two ends of the drum,
the rubbish is discharged from an opening at the second end of the drum, and
the blocking section has a loading inlet for loading of the rubbish into the drum.

6. The rubbish accumulation device according to any one of claims 1 to 5, wherein
the sealing section further includes a projection that protrudes from the pressing section
and is inserted into the packing.