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 PTL 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]

[PTL 1]

Japanese Patent Application Laid-Open Publication No. 2005-200209

[Summary of Invention]

[Technical Problem]

[0004]

Embodiments of the present invention seek 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 first blocking section, and a first sealing section. Rubbish is loaded into the drum which rotates. The first blocking section partially blocks an opening at a first end of the drum that is one of two ends of the drum. The first sealing section seals between the first end of the drum and the first blocking section. The first sealing section includes ring-shaped packing and a limiting section. The packing is located along an outer circumferential surface of the drum at the first end of the drum. The limiting section is located outward of the packing in terms of a radial direction of the drum and limits movement of the packing in the radial direction. The outer circumferential surface of the drum at the first end of the drum applies pressure on the packing in a direction toward the limiting section.

[0006]

In the rubbish accumulation device according to embodiments of the present invention, the first sealing section preferably further includes a pressing section. The pressing section is preferably located outward of the drum in terms of the radial direction and preferably applies pressure on the packing in a direction toward the first blocking section.

[0007]

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

[0008]

In the rubbish accumulation device according to embodiments of the present invention, the first 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.

[0009]

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

[0010]

In the rubbish accumulation device according to embodiments of the present invention, the first sealing section preferably further includes a foundation section. The foundation section is preferably bound to the first blocking section. The limiting section preferably protrudes from the foundation section. The pressing section preferably applies pressure on the packing in a direction toward the foundation section.

[0011]

In the rubbish accumulation device according to embodiments of the present invention, the first blocking section is preferably plate-shaped and the foundation section is preferably plate-shaped. The foundation section preferably has a thickness that is greater than a thickness of the first blocking section.

[0012]

In the rubbish accumulation device according to embodiments of the present invention, the first sealing section preferably further includes a belt-shaped section. The belt-shaped section is preferably bound to the outer circumferential surface of the drum at the first end of the drum. The belt-shaped section preferably applies pressure on the packing in a direction toward the limiting section.

[0013]

In the rubbish accumulation device according to embodiments of the present invention, the belt-shaped section preferably has a thickness that is greater than a thickness of the drum at the first end of the drum.

[0014]

In the rubbish accumulation device according to embodiments of the present invention, the drum preferably has a hollow cylindrical shape. The rubbish accumulation device preferably further includes a second blocking section and a second sealing section.

The second blocking section preferably partially blocks an opening at a second end of the drum that is the other of the two ends of the drum. The second sealing section preferably seals between the second end of the drum and the second blocking section. The second sealing section preferably includes ring-shaped packing and a limiting section. The packing is preferably located along the outer circumferential surface of the drum at the second end of the drum. 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 second end of the drum preferably applies pressure on the packing of the second sealing section in a direction toward the limiting section of the second sealing section.

[Advantageous Effects of Invention]

[0015]

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

[Brief Description of Drawings]

[0016]

[FIG. 1]

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

[FIG. 2]

FIG. 2 is a perspective view illustrating a front side of the rubbish accumulation device according to the first embodiment of the present invention.

[FIG. 3]

FIG. 3 is an exploded perspective view illustrating a main body of the rubbish accumulation device according to the first embodiment of the present invention.

[FIG. 4]