A water tank includes a sealing ring, a container, and a claw. A submersible pump with a cable is mounted in the container. A joint extends from an outer side of a side plate of the container. The joint includes a neck extending from the side plate and a head formed on an end of the neck away from the neck. The container defines a first through hole. The first through hole includes a mounting hole for receiving the sealing ring. The claw includes a base plate, a pole extending from the base plate, and a number of hooks extending from the base plate to engage with the head. The claw defines a second through hole extending through the base plate and the pole. The pole presses the sealing ring, to bias the sealing ring to be compacted on the cable and a bounding wall of the mounting hole.
WATER TANK FOR WATER-C OOLING HEAT DISSIPATION SYSTEM

BACKGROUND

[0001] 1. Technical Field
The present disclosure relates to water tanks, and especially to a water tank of a water-cooling heat dissipation system.

[0002] 2. Description of Related Art
A submersible pump has a wide use in a water tank of a water-cooling heat dissipation system. The submersible pump is mounted in the water tank. The power line of the submersible pump extends through the water tank to be connected to the power supply of the water tank, so a sealing structure is in need to be designed to prevent the liquid of the water tank from leaking out of the water tank along the power line. However, the sealing structure is generally complex, it is inconvenient to mount.

BRIEF DESCRIPTION OF THE DRAWINGS

[0003] Many aspects of the present embodiments can be better understood with reference to the following drawings. The components in the drawings are not necessarily drawn to scale, the emphasis instead being placed upon clearly illustrating the principles of the present embodiments. Moreover, in the drawings, all the views are schematic, and like reference numerals designate corresponding parts throughout the several views.

[0004] FIG. 1 is an exploded, isometric view of an exemplary embodiment of a water tank, wherein the water tank includes a container.

[0005] FIG. 2 is an assembled, isometric view of FIG. 1.

[0006] FIG. 3 is a partially sectional view of the container of FIG. 1.

[0007] FIG. 4 is a sectional view taken along the line IV-IV of FIG. 2.

DETAILED DESCRIPTION

[0008] The disclosure, including the accompanying drawings, is illustrated by way of example and not by way of limitation. It should be noted that references to “an” or “one” embodiment in this disclosure are not necessarily to the same embodiment, and such references mean at least one.

[0009] FIGS. 1 and 3 show an exemplary embodiment of a water tank including a container 10, a sealing ring 30, and a claw 40.

[0010] A submersible pump 12 with a cable 122 is mounted in the container 10. A joint 13 perpendicularly extends from an outer side of a side plate 11 of the container 10. The joint 13 includes a columnar neck 131, and a tapered head 132 formed on an end of the neck 131 away from the side plate 11. The diameter of the head 132 adjoining the neck 131 is larger than the diameter of the neck 131. The container 10 defines a first through hole 134 extending through the joint 13 and the side plate 11. The first through hole 134 includes a receiving hole 135 defined in the head 132, a tapered mounting hole 136 defined in the neck 131, and an outlet 137 defined in the side plate 11. The diameter of the mounting hole 136 adjoining the receiving hole 135 is larger than the diameter of the mounting hole 136 adjoining the outlet 137. The diameter of the outlet 137 is the same as the diameter of the claw 40.

[0011] FIGS. 1, 2, and 4 show the claw 40 including a circular base plate 42, at pole 43 perpendicularly extending in from a middle of the base plate 42, and a plurality of hooks 45 extending in from a circumference of the base plate 42. The claw 40 defines a second through hole 44 extending through the base plate 42 and the pole 43. Each hook 45 includes a L-shaped hook body 451 perpendicularly extending from the base plate 42 and then extending inward, and a tip 452 extending from a distal end of the hook body 451 toward the base plate 42.

[0012] The cable 122 extends through the outlet 137 and extends out of the first through hole 134.

[0013] In assembly, the sealing ring 30 is placed around the cable 122, and received in the mounting hole 136 to abut against a bounding wall 139 of the mounting hole 136 adjoining the receiving hole 135. The cable 122 extends through the second through hole 44. The claw 40 is pushed toward the joint 13, to allow the tips 452 to abut against a side of the head 132 facing the side plate 11. The pole 43 presses the sealing ring 30, to bias the sealing ring 30 to be compacted on the cable 122 and the bounding wall 139. The pole 43 is received in the receiving hole 135.

[0014] Because of the sealing ring 30 compacted on the cable 122 and the bounding wall 139, the liquid of the container leaking out of the outlet 137 is unable to leak out of the mounting hole 136.

[0015] Only the claw 40 is manipulated to engage with the joint 13 and press the sealing ring 30, to complete the assembly of a sealing structure of the water tank.

[0016] Even though numerous characteristics and advantages of the embodiments have been set forth in the foregoing description, together with details of the structure and the functions of the embodiments, the disclosure is illustrative only, and changes may be made in details, especially in the matters of shape, size, and arrangement of parts within the principles of the embodiments to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

What is claimed is:
1. A water tank, comprising:
   - a sealing ring;
   - a submersible pump with a cable;
   - a container receiving the submersible pump, a joint extending from an outer side of a side plate of the container, the joint comprising a neck extending from the side plate and a head formed on an end of the neck away from the neck, the container defining a first through hole extending through the joint and the side plate, the first through hole comprising a mounting hole for receiving the sealing ring; and
   - a claw comprising a base plate, a pole extending in from the base plate, and a plurality of hooks extending in from a circumference of the base plate to engage with the head, the claw defining a second through hole extending through the base plate and the pole;

2. The water tank of claim 1, wherein the neck is columnar, the head is tapered.

3. The water tank of claim 1, wherein each hook comprises an L-shaped hook body perpendicularly extending from the base plate and then extending inward, and a tip extending
from a distal end of the hook body toward the base plate to abut against a side of the head facing the side plate.

4. The water tank of claim 1, wherein the first through hole further comprises a receiving hole communicating with an end of the mounting hole opposite to the side plate for receiving the pole, and an outlet communicating with the other end of the mounting hole in the side plate for the cables extending through.

5. The water tank of claim 4, wherein the diameter of the mounting hole adjoining the receiving hole is larger than the diameter of the mounting hole adjoining the outlet, the diameter of the outlet is substantially the same as the diameter of the cable.