Claims

Claim 1. A rotary tea bottle, comprising a tea bottle (1) having a lid (11) at an upper end, the tea bottle (1) comprises a bottle body, wherein the tea bottle (1) further comprises a rotary assembly (16) and a second filtration mesh (15),the bottle body comprises an upper container (12) and a lower container (13); the second filtration mesh (15) is fixed to the rotary assembly (16), the rotary assembly (16) comprises a rotary upper assembly and a rotary lower assembly; the rotary upper assembly is fixedly connected to the upper container (12), the rotary upper assembly is rotationally fixed to the rotary lower assembly, the rotary lower assembly is fixedly connected to the lower container (13), a lower surface of the rotary upper assembly abuts on an upper surface of the rotary lower assembly, and a certain roughness is maintained between the rotary upper assembly and the rotary lower assembly, the rotary upper assembly and the rotary lower assembly are each provided with at least one through hole, the through hole of the rotary upper assembly and the through hole of the rotary lower assembly are correspondingly connected; when the rotary upper assembly is rotated by an angle, the through hole of the rotary upper assembly is misalignment closed with the through hole of the rotary lower assembly,

wherein the rotary upper assembly comprises a rotary upper casing (161) and a first rotary valve (164), the rotary lower rotary assembly comprises a second rotary valve (165) and a rotary lower casing (166), the second filtration mesh (15) is fixed to an upper surface of the rotary upper casing (161), the upper container (12) is fixedly connected to the rotary upper casing (161), the first rotary valve (164) is fixed to the rotary upper casing (161), the rotary lower casing (166) is fixedly connected to the lower container (13), the second rotary valve (165) is fixed to the rotary lower casing (166), a lower surface of the first rotary valve (164) abuts on an upper surface of the second rotary valve (165), and the certain roughness is maintained between the first rotary valve (164) and the second rotary valves (165), the rotary upper casing (161) and the rotary lower casing (166) are each provided with a through hole, the first rotary valve (164) and the second rotary valve (165) are each provided with at least one water-passing hole (168), and the through hole and the water-passing hole (168)

communicate with each other to form a channel; an upper surface of the rotary lower casing (166) is provided with at least one convex block (170), a lower surface of the rotary upper casing (161) is provided with at least one sliding groove, and the convex block (170) cooperates with the sliding groove (171); when the rotary upper casing (161) is rotated by an angle, the convex block (170) abuts on the sliding groove (171), the water-passing hole (168) of the first rotary valve (164) is misalignment closed with the second rotary valve (165),

wherein the rotary assembly (16) further comprises a rotary shaft (162), the rotary upper casing (161) is fixedly sleeved on the rotary shaft (162), the rotary shaft (162) is provided with through holes, and an upper surface of the first rotary valve (164) is fixed to one end of the rotary shaft (162).

Claim 2. The rotary bottle according to claim 1, wherein the number of the water-passing holes (168) in the first rotary valve (164) and the second rotary valve (165) is two, a shape of the water-passing hole (168) is a sector or a triangle.

Claim 3. The rotary bottle according to claim 1, wherein a water guiding portion (169) is arranged beside the water-passing hole (168), between the water guiding portion (169) and the horizontal plane forms an angle.

Claim 4. The rotary tea bottle according to claim 1, wherein the rotary assembly (16) further comprises a sealing member (163) and a valve fixing seat (167), a lower surface of the second rotary valve (165) is fixed to an upper surface of the valve fixing seat (167), the rotary lower casing (166) is fixed to the valve fixing seat (167), the first rotary valve (164) and the second rotary valve (165) are both located in the through hole of the rotary lower casing (166); the sealing member (163) is provided at a joint of the upper container (12) and the rotary upper casing (161); the sealing member (163) is disposed between the rotary shaft (162) and the rotary upper casing (161); the sealing member (163) is disposed between the rotary shaft (162) and the rotary lower casing (166); the sealing member (163) is disposed between the rotary shaft (162) and the first rotary valve (164); the sealing member (163) is disposed between the rotary upper casing (161) and the rotary lower casing (166); the sealing member

(163) is disposed between the valve fixing seat (167) and the second rotary valve (165).

Claim 5. The rotary tea bottle according to claim 1, wherein a surface roughness of the lower surface of the rotary upper assembly and the upper surface of the rotary lower assembly ranges from 0.01 μm to 0.06 μm.

Claim 6. The rotary tea bottle according to claim 1, wherein the distance between an inner surface of the second filtration mesh (15) and an upper surface of the rotary shaft (162) is 5 mm to 10 mm.

Claim 7. The rotary tea bottle according to claim 2, wherein an angle of the sector is 70 to 90 degrees, and the sliding groove (171) is a circular arc sliding groove, an angle corresponding to a central angle of the circular arc sliding groove is 70 to 90 degrees.

Claim 8. The rotary tea bottle according to claim 1, wherein a bottle wall of the upper container (12) is a solid structure, and a bottle wall of the lower container (13) is provided with a heat retaining cavity.

Claim 9. The rotary tea bottle according to claim 1, wherein the tea bottle further comprises a first filtration mesh (14), the first filtration mesh(14) is fixed to an upper part of the upper container (12).