WHAT IS CLAIMED IS:

1. An anti-overflow pipe, characterized by comprising:

a pipe wall and a valve;

on a plane perpendicular to lengthwise direction of the pipe wall, a cross-section of an inner side wall of the pipe wall is oval, a cross-section of an outer side wall of the pipe wall has a closed ring shape; in a plane where major axis of elliptical shape of the inner side wall and lengthwise direction of the pipe wall are located, a cross-section of the valve is in a V-shaped structure and the valve is connected with the inner side wall, the valve is provided with a slit for unidirectionally conducting fluid,

a reinforcing rib is provided on the valve, and the reinforcing rib protrudes from the valve to the lengthwise direction of the pipe wall; the slit is provided in a middle of the reinforcing rib, and lengthwise direction of the slit is the same as that of the reinforcing rib.

2. The anti-overflow pipe according to claim 1, characterized in that,

on a plane perpendicular to lengthwise direction of the pipe wall, a cross-section of outer side wall of the pipe wall is oval, the oval origin of the cross-section of the outer side wall coincides with the oval origin of the cross-section of the inner side wall; along a curve direction of elliptical shape of the inner side wall, a wall thickness of the pipe wall gradually decreases from an end of minor axis of elliptical shape to an end of major axis of elliptical shape;

~~preferably,~~ a ratio range of the wall thickness of the pipe wall at the end of the minor axis of elliptical shape to the wall thickness of the pipe wall at the end of the major axis of elliptical shape ranges from 2 to 0.9-1.2.

3. The anti-overflow pipe according to claim 2, characterized in that,

a length ratio of the major axis to the minor axis of elliptical shape of the cross-section of the inner side wall ranges from 5 to 3.5-4.5.

4. The anti-overflow pipe according to claim 1, characterized in that,

in the plane where the major axis of the elliptical shape of the inner side wall and the lengthwise direction of the pipe wall are located, ~~the top profile of~~ and the pipe wall has a top profile in~~is~~ an arc-shaped curve with the middle part bent upwards.

5. The anti-overflow pipe according to claim 1, characterized in that,

the reinforcing rib~~s~~ ~~are~~is arranged at V-shaped sharp corners of the valve, and the reinforcing rib~~s~~ is~~are~~ collinear with ~~the~~ minor axis of elliptical shape of the inner side wall, and two ends of the reinforcing rib are connected with the pipe wall.

~~6. The anti-overflow pipe according to claim 5, characterized in that,~~
~~On the valve, the slit is provided in a middle of the reinforcing ribs, and lengthwise direction of the slit is the same as that of the reinforcing ribs.~~

6~~7~~. The anti-overflow pipe according to claim 1, characterized in that,

~~the top surface of~~ the pipe wall has a top surface being~~is~~ an arc surface, and the arc surface is in smooth transition with the inner side wall and the outer side wall of the pipe wall.

7~~8~~. The anti-overflow pipe according to claim 1, characterized in that,

a length of the valve from ~~the~~ top surface of the pipe wall ranges from 5 mm to 20 mm.

8~~9~~. The anti-overflow pipe according to claim 1, characterized in that,

the pipe wall and the valve are integrated and made of thermoplastic elastomer material.

9~~10~~. The anti-overflow pipe according to any one of claims 1-8~~9~~, characterized in that,

V-shaped two side walls of the valve are flat.

10~~11~~. The anti-overflow pipe according to any one of claims 1-8~~9~~, characterized in that,

~~the~~ V-shaped two side walls of the valve are arc-shaped curved surfaces with the center bent downwards.