

SIMPLE STRUCTURED WATER-SAVING DEVICE OF STOOL WATER BOX

FIELD OF THE INVENTION

The present invention relates to a simple structured water-saving device of stool water box, wherein the plug of the stool water box can be covered on the water outlet quickly so as to save water.

BACKGROUND OF THE INVENTION

A stool is formed by a stool body and a water box. The stool body concentrates a large amount of excrements, then water in the water box is used to flush the stool body so as to discharge the excrements out of the stool for being processed. Thus a clean environment is retained and a high quality of life is provided.

However, each time, as the stool is used, the water in the water box must be drained out completely and then the plug in the water box is used to seal the water outlet by the gravitational force itself so as to avoid the drainage of water to be used by the next user. But this way will induce that large amount of water is wasted and the time for water flowing into the water box is increased. In fact, if the user only urinates, only a small amount of water is sufficient to drain all water out of the stool.

Therefore, it has an eager demand for a novel design which has the function of controlling the water drainage so as to save water.

SUMMARY OF THE INVENTION

Accordingly, the primary object of the present invention is to provide a simple structured water-saving device of stool water box, wherein the water drainage is controllable.

Another object of the present invention is to provide a simple structured water-saving device of stool water box, wherein it can be manufactured easily and has a lower cost.

A further object of the present invention is to provide a simple structured water-saving device of stool water box which can be maintained easily.

To achieve above objects, the present invention provides a simple structured water-saving device of stool water box comprises: a toggle having an inner wall being formed with a plurality of strips; and a press firmly secured to one side of the toggle. The toggle is engaged to a lower end of a water drainage tube of a stool water box; and the press is adhered to a top of a plug of the water box. A chain is used to connect the plug with the flush handle. When the flush handle is pressed downwards, the plug will be pulled by the chain to be opened, so that the press bends through an angle and generates an elastic force. When the flush handle suffers from a force, the plug will seal the water outlet of the water box by an elastic force of the press. Therefore, the object of saving water is achieved.

The various objects and advantages of the present invention will be more readily understood from the following detailed description when read in conjunction with the appended drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a cross sectional view of the simple structured water-saving device of stool water box of the present invention.

Fig. 2 is an upper view of the simple structured water-saving device of stool water box according to the present invention.

Fig. 3 is a schematic perspective view of the simple structured water-saving device of stool water box of the present invention.

Fig. 4 is an assembled schematic view of the simple structured water-saving device of stool water box according to the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to Figs. 1 to 4, the simple structured water-saving device of stool water box of the present invention is illustrated. The simple structured water-saving device of stool water box has a toggle 1. One side of the toggle 1 is extended with a press 2. The press 2 is flat and elastic. The inner wall of the toggle 1 is formed with triangular or semicircle strips 3.

The strips 3 on inner wall of the toggle 1 can be engaged at the lower end of the drain water tube of the stool water box 4, thereby, the press 2 extending to one side of the toggle 1 resists against a top of a plug 6 of the water box 4. The press 2 is connected to a chain 8. Another end of the chain 8 is connected to a flush handle 7 so that the flush handle 7 and plug 6 are operated synchronously. When the user applies a force to the flush handle 7 so that the flush handle 7 is pressed downwards, the chain 8 will act so that the plug 6 is pulled by the chain 8 to be pulled and opened,

thereby, causing water in the water box 4 is exhausted to the stool through an water outlet. Then, the press 2 resisting against the plug 6 bends through an angle due to the effect of the opening of the plug 6 by the chain 8 so as to generate an elastic force. When no force is applied to the flush handle 7, the plug 6 will seal the water outlet of the water box 4 by the elastic force of the press 2 so as to avoid the drainage of water. Thus, the object of controlling the water drainage of the water box 4 is achieved. Therefore, if the user only urinates, it needs only a little amount of water for flushing the urine in the stool. Therefore, the present invention has the effect of saving water in the water box 4.

The simple structured water-saving device of stool water box of the present invention has the following advantages as compared with other prior art designs.

1. A press is installed at the top of the press of the water box so that as the press is opened, the press can bend downwards so as to generate an elastic force so that the plug may seal the outlet. Thus, the object of saving water is achieved and the water drainage is controlled.
2. The present invention has a simple structure, can be the assembled easily, and has a lower cost.

The present invention are thus described, it will be obvious that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the present invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.



CLAIMS

1. A simple structured water-saving device of stool water box comprising:
a toggle having an inner wall being formed with a plurality of strips;
and
a press firmly secured to one side of the toggle;
wherein the toggle is engaged to a lower end of a water drainage tube of a stool water box; and the press is adhered to a top of a plug of the water box, a chain is used to connect the plug with a flush handle; when the flush handle is pressed downwards, the plug will be pulled by the chain to be opened, so that the press bends through an angle and generates an elastic force, when the flush handle suffers from a force, the plug will seal the water outlet of the water box by an elastic force of the press.
2. The simple structured water-saving device of stool water box as claimed in claim 1, wherein the press has a flat shape and is elastic.
3. The simple structured water-saving device of stool water box as claimed in claim 1, wherein one side of the toggle is installed with an elastic post.
4. The simple structured water-saving device of stool water box as claimed in claim 1, wherein the strip at an inner wall of the toggle has a triangular shape.
5. The simple structured water-saving device of stool water box as claimed in claim 1, wherein the strip at an inner wall of the toggle has a semicircle shape.