CLAIMS

1. A product discharging device comprising:

a lower pedal swingably disposed to move forward to and backward from a product storage passage storing input products in a vertical direction;

an upper pedal swingably disposed to move forward to and backward from the product storage passage in an area above the lower pedal;

a pedal stopper pin coupled to a pedal link linking the lower pedal and the upper pedal, the pedal stopper being is movable with movement of the pedal link in the vertical direction;

a rotation stopper of which a tip linked to the lower pedal and swingably disposed to move forward to and backward from the product storage passage along with the lower pedal; and

a drive unit configured to move the pedal link downward into transition from an activated state to the standby state and to move the pedal link upward to transition from the standby state to the activated state,

wherein when the pedal link moves downward,

the upper pedal moves backward from the product storage passage, and

the lower pedal moves forward to the product storage passage and is held at the product storage passage to regulate downward movement of the product by regulating backward movement of the rotation stopper due to the pedal stopper pin,

when the pedal link moves upward,

the upper pedal moves forward to the product storage passage to come in contact with a second lowest product, and

the lower pedal moves backward from the product

storage passage to discharge a lowest product downward by releasing the regulation of the backward movement of the rotation stopper due to the pedal stopper pin,

the rotation stopper includes a blindfold portion that covers the pedal stopper pin opposite to the product storage passage, and

the blindfold portion is a panel portion fixed to the rotation stopper and structured to move toward the pedal stopper pin when the pedal link is moved downward, and to move away from the pedal stopper pin when the pedal link is moved upward.

2. The product discharging device according to claim 1, wherein a protrusion protruding to the product storage passage is formed in the vicinity of an opening formed in an area above the upper pedal.

3. The product discharging device according to claim 1 or 2, wherein in the standby state, the lower pedal has a first standby posture to regulate downward movement of the lowest product when the lowest product is placed on a top surface thereof and a second standby posture in which a tip portion of the lower pedal is located higher than in the first standby posture when no product is placed on the top surface, and

the product discharging device further comprises a sold-out detection switch that is switched to an ON state or an OFF state when the lower pedal takes the first standby posture and is switched to the OFF state or the ON state when the lower pedal takes the second standby posture so as to detect presence or absence of a product of the product storage passage.

4. The product discharging device according to claim 2,

wherein in the standby state, the lower pedal has a first standby posture to regulate downward movement of the lowest product when the lowest product is placed on a top surface thereof and a second standby phase in which a tip portion of the lower pedal is located higher than tin the first standby posture when no product is placed the top surface, and

the product discharging device further comprises a sold-out detection switch that is switched to an ON state or an OFF state when the lower pedal takes the first standby posture and is switched to the OFF state or the ON state when the lower pedal takes the second standby posture so as to detect presence or absence of a product of the product storage passage.