(No Model.)

H. McCARTHY.

SUGAR BOWL.

No. 304,214. Patented Aug. 26, 1884.

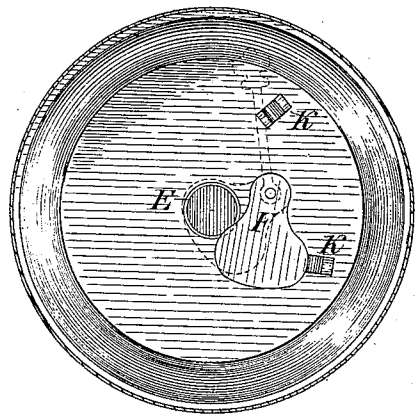


Fig. 2.

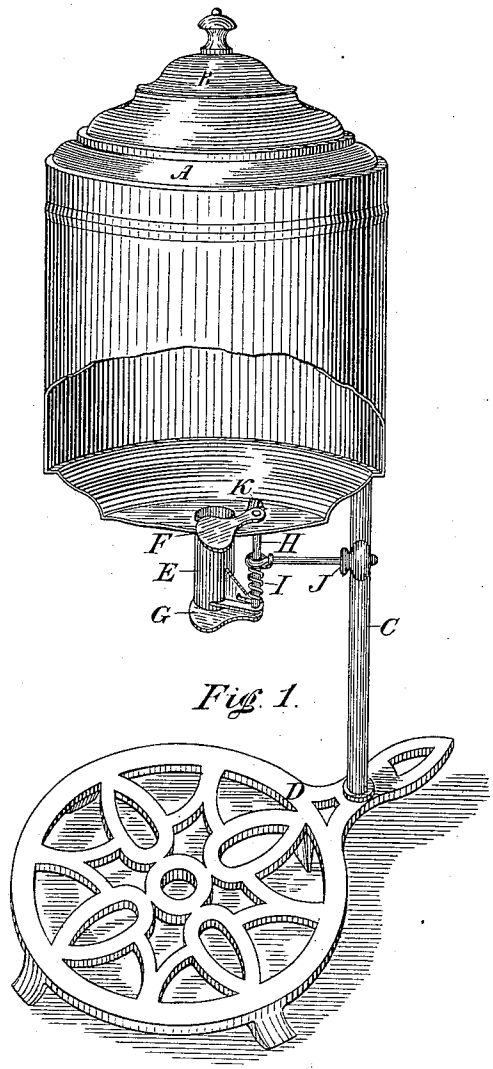


Fig. 1.

Witnesses.

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UNITED STATES PATENT OFFICE.

HIRAM McCARTHY, OF MOUNT FOREST, ONTARIO, CANADA.

SUGAR-BOWL.

SPECIFICATION forming part of Letters Patent No. 304,214, dated August 26, 1884.

Application filed January 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, HIRAM MCCARTHY, of the town of Mount Forest, in the county of Wellington, in the Province of Ontario, Canada, machinist, have invented certain new and useful Improvements in Sugar-Bowls; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of the invention is to devise a sugar-bowl which can always be kept closed, even when the sugar is being withdrawn from it for use; and it consists, essentially, of a sugar-bowl provided with a lid, and having a tube extending from its bottom, the said tube being provided with two valves, one located at or near the top of the tube, while the other is located at or near its bottom, the two valves being operated simultaneously, and so adjusted in the tube that the top valve is completely closed before the bottom valve commences to open, or vice versa.

Figure 1 is a perspective view of my improved sugar-bowl, showing a portion of it broken away to exhibit the interior arrangement. Fig. 2 is a sectional plan showing the position of the valves.

A is the bowl, preferably provided with a hinged cover, B.

C is a standard fixed to the base-plate D, and arranged to support the bowl in the position indicated, so as to leave sufficient space between the base-plate D and the bottom of the tube E for the passage of a tumbler or other utensil into which it is desired to drop a given quantity of sugar.

F is a valve located at the top of the tube E, and G is a similar valve located at the bottom of the tube. These two valves are connected together by the spindle H, and are so set on the said spindle that when the top valve, F, is opened the bottom valve, G, is closed, or vice versa.

I is a spring arranged to act on the spindle H, so that the bottom valve shall always be kept closed.

J is a handle attached to the spindle H to enable the opening of the bottom valve and the closing of the top.

When sugar is within the bowl A and the top valve, F, is open, the space in the tube E between the said valve and the bottom valve, G, will of course be filled with sugar. This space is calculated so as to hold exactly a tea-spoonful or any given quantity, which, when it is to be used, is discharged from the bottom of the tube E by the opening of the bottom valve, G; but owing to the manner in which the top valve and bottom valve are relatively set on the spindle which operates them, the top valve is closed before the bottom valve commences to open. Consequently the supply of sugar from the interior of the bowl is first completely cut off from the tube before the valve G is opened, and in this way only the quantity of sugar held by the tube between the two valves is discharged at any single movement. By thus regulating the discharge of the sugar from the bowl great economy is secured, only the exact quantity required to be used at any one time is withdrawn, and, moreover, as the main body of sugar within the bowl is never exposed, flies and dirt are effectually excluded.

Although my invention is designed specially for a sugar-bowl, it will of course be understood that the same appliances may be adapted for holding and measuring spices or other similar substances.

In speaking of the vessel A as a bowl, I do not wish to confine myself to the particular shape commonly described by that title, as a vessel of any shape provided with my appliances would accomplish the object of my invention. As the action of the spring I might carry the valves F and G entirely clear of the tube E, it is necessary to provide stops by which the stroke or travel of the valves is limited to the required distance. With that view I place on opposite sides of the valve F the stops K, with which the valve comes in contact when it has reached the limit of its travel.

What I claim as my invention is—

1. A bowl having a discharging-tube in its bottom, in combination with two valves, one located at or near the top and the other at or near the bottom of the tube, the said valves being so shaped and arranged that one must be closed before the other commences to open, substantially as and for the purpose specified.

2. In a bowl having a tube extending from its interior, a valve, F, shaped as shown, and located at or near the top of the tube, a valve,

G, similarly shaped and located at or near the bottom of the tube, in combination with a spindle, H, arranged to connect and operate the two valves F and G, substantially as and for the purpose specified.

3. A bowl, A, having a tube, E, extending from its interior, and provided with valves F and G, located as described, and connected together by the spindle H, in combination with the spring I, arranged to act on the spindle H, substantially as and for the purpose specified.

4. A bowl, A, having a tube, E, extending from its interior, and provided with valves F and G, located as described, and connected together by the spindle H, provided with a handle, J, in combination with the spring I, arranged to act on the spindle H, and the stops K, located on the opposite side of the valve F, and arranged to limit its stroke, substantially as and for the purpose specified.

5. A bowl, A, supported by the standards C, fixed to the base-plate D, a tube, E, extending downwardly from the interior of the tube, in combination with the valves F and G, connected together by the spindle H, having a handle, J, and operated by the spring I, arranged substantially as and for the purpose specified.

Toronto, January 12, 1884.

HIRAM McCARTHY.

In presence of—

CHAS. C. BALDWIN,

F. BARNARD FETHERSTONHAUGH.