

W. H. Mumler,

Funnel.

No. 113786.

Patented Apr. 18. 1891.

Fig. 1.

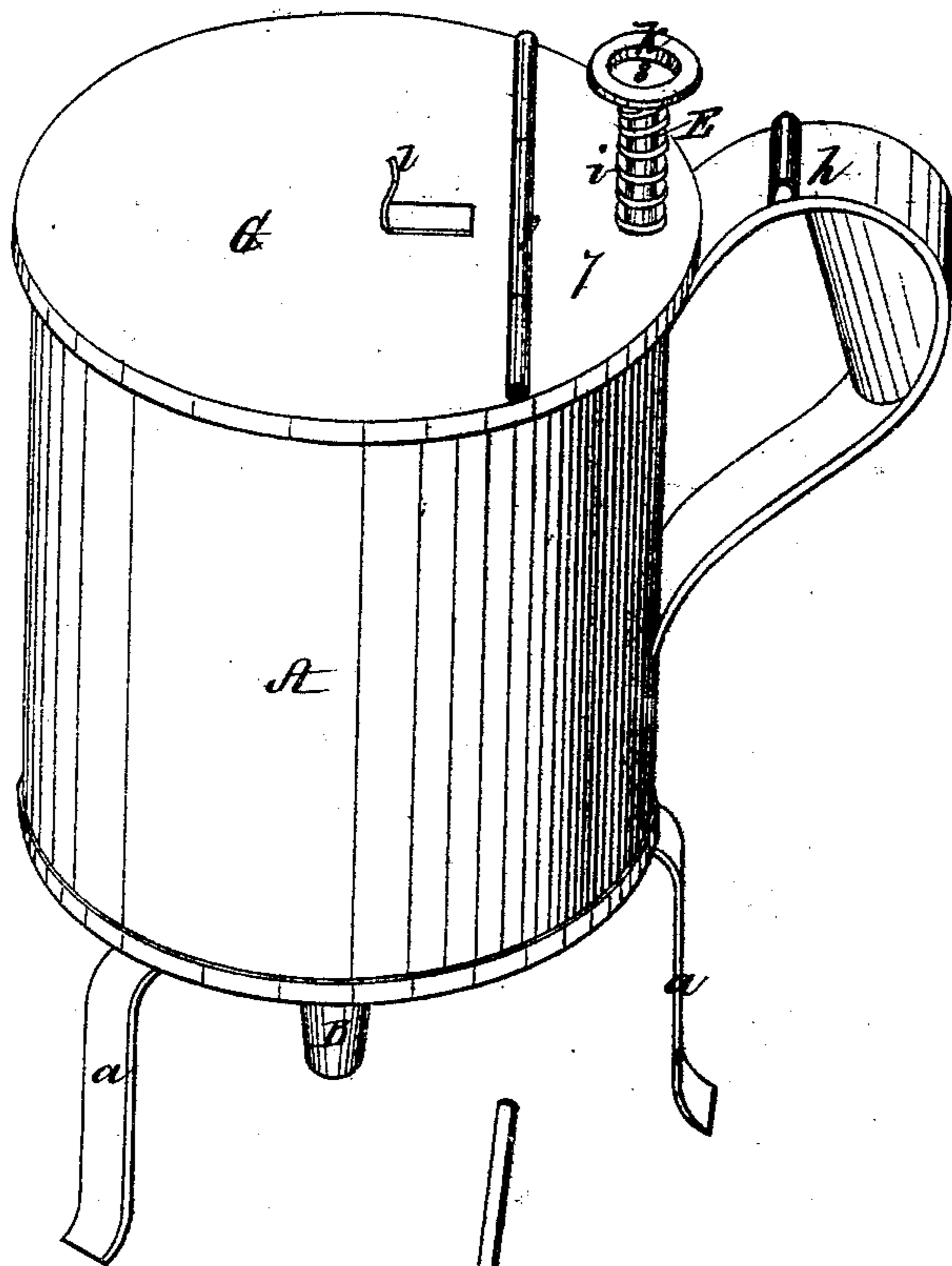
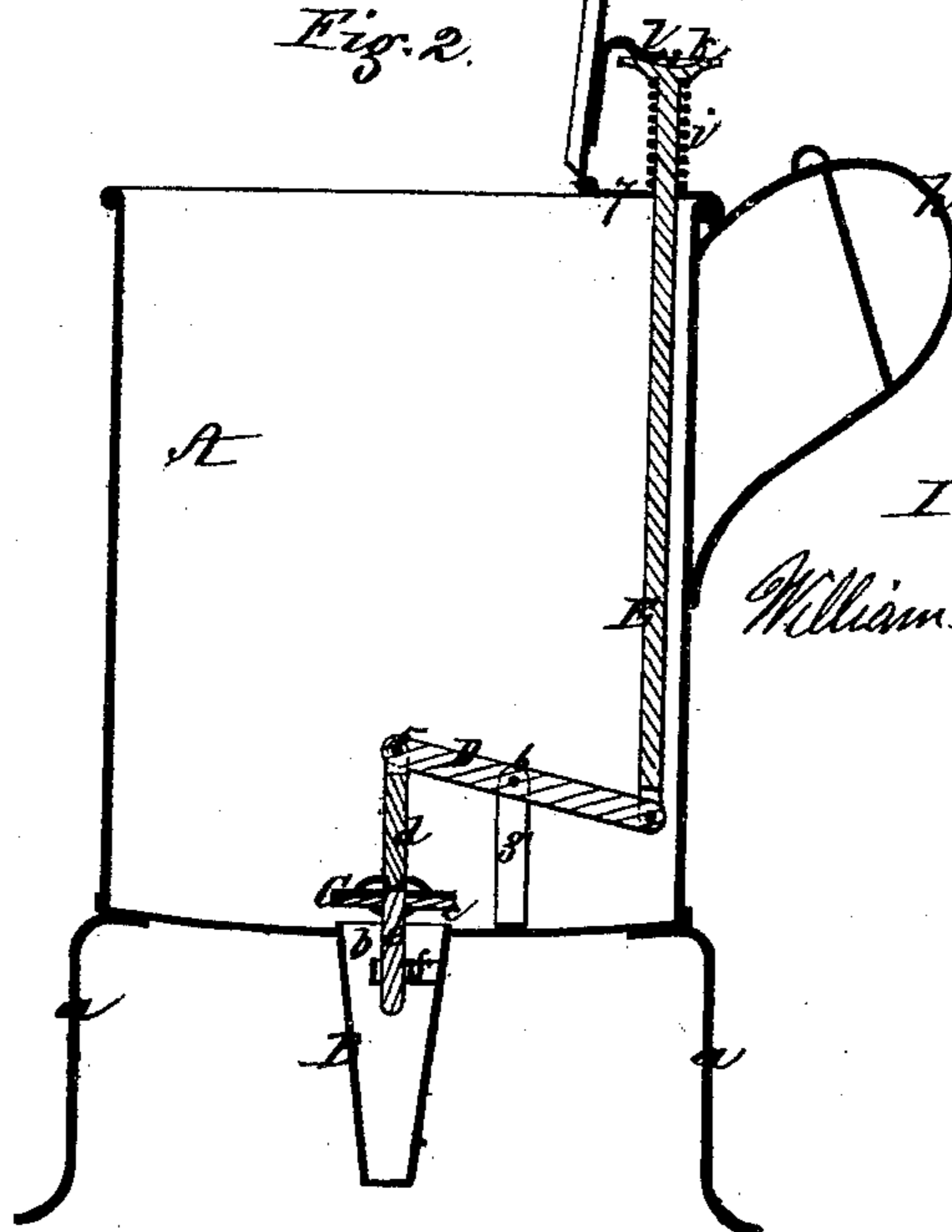


Fig. 2.



Witnesses,
W. A. Cambridge
J. S. Eschmader

Inventor,
William H. Mumler.

United States Patent Office.

WILLIAM H. MUMLER, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 113,786, dated April 18, 1871.

IMPROVEMENT IN LIQUID RECEPTACLES AND FUNNELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, WILLIAM H. MUMLER, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Liquid Receptacle and Funnel combined, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of a liquid receptacle and funnel combined, constructed in accordance with my invention.

Figure 2 is a vertical section through the center of the same, the position of the parts being changed.

My invention relates to certain improvements in receptacles for liquids provided with a funnel, and consists, chiefly, in a lid or cover so constructed that, when thrown up, it will engage with the valve-rod so as to hold the valve up off its seat and open the passage from the bottom of the receptacle to its funnel, thus allowing the liquid contents thereof to be discharged into a vessel placed thereunder.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing—

A is a receptacle for holding liquids, of the form shown, and supported by legs *a*.

The bottom of the receptacle is of concave form, its lowest point being its center, which is provided with a circular opening, *b*, into which is snugly fitted the top *b* of a tapering funnel, B, the length of which is somewhat less than that of one of the legs *a*.

The top of the funnel projects up a trifling distance beyond the center of the bottom, so as to afford a proper seat for the elastic packing *c* of a valve, C, to rest on without possibility of leakage.

This valve is loosely fitted to the lower end of a short upright spindle, *d*, in order that it may turn in a horizontal plane and adapt itself readily to a position which will enable its being closed tightly immediately on its being brought down upon the top of the funnel.

The center of the bottom of the valve is provided with a short rod, *e*, which passes into a guide, *f*, of corresponding form, secured near the top of the funnel and concentric therewith, whereby the axis of the valve, whether up or down, is always kept in the same line as the center of the funnel.

The upper end of the valve-spindle *d* is pivoted at 5 to the end of a short horizontal or nearly horizontal lever D, whose fulcrum 6 is at the top of an upright standard, *g*, secured at its bottom by solder or otherwise to the bottom of the receptacle.

The end of the lever D, opposite to that to which is pivoted the spindle *d*, is pivoted to the foot of a

long upright rod, E, which passes up through a small closed portion, 7, of the top of the receptacle adjacent to the handle *h*.

The portion of this rod E projecting above the top of the receptacle is surrounded by a spiral spring, *i*, the lower end of the spring resting on the receptacle, and its upper end bearing against the under side of a circular cap or knob, *k*, on the top of the said rod.

The upper surface of this projection is provided with a depression, 8, of concave form, for the reception of a hook, *l*, formed on the upper side of the lid or cover G, pivoted at 9 to the portion 7 of the top of the receptacle permanently closed, and through which the upright rod E passes.

When the receptacle is ready to be filled the valve is closed upon its seat, and the hook on the cover G is not caught over the edge of the circular knob *k*, the spring *i* raising the rod E and, through the connections previously described, bringing the yielding packing *c* of the valve tightly down upon the projecting rim at the top of the funnel, thereby closing the opening *b* thereto and preventing the discharge of the liquid as desired.

When, however, the liquid contents of the receptacle are to be discharged the knob *k* is pressed down by the thumb against the resistance of the spring *i*, and the lid or cover G is swung back so as to enable its hook *l* to engage with and lock over the edge of the knob *k*, thereby keeping the rod E down and raising the yielding packing of the valve from the projecting rim at the top of the funnel, thereby opening the passage *b* therein and allowing the discharge of the liquid as desired.

It is evident that my improved method of opening and closing the valve may be applied to measures for liquids, and also to receptacles or urns for simply holding water, tea, coffee, and other beverages for use in hotels, &c.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, as an improvement in liquid receptacles and funnels combined, is—

The valve C, with its lever D, rod E, and spiral spring *i*, in combination with the cover G provided with a hook, *l*, arranged and operating substantially in the manner and for the purpose described.

Witness my hand this 1st day of March, A. D. 1871.

WILLIAM H. MUMLER.

Witnesses :

P. E. TESCHEMACHER,
W. J. CAMBRIDGE.