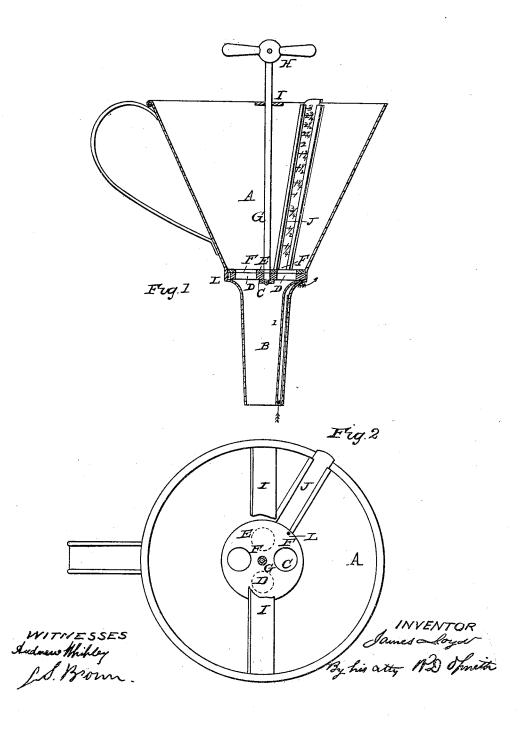
## J. LLOYD.

## Measuring Funnel.

No. 53,841.

Patented April 10, 1866.



## UNITED STATES PATENT

JAMES LLOYD, OF SPRINGFIELD, OHIO.

## IMPROVEMENT IN MEASURING-FUNNELS.

Specification forming part of Letters Patent No. 53,841, dated April 10, 1866.

To all whom it may concern:

Be it known that I, JAMES LLOYD, of the town of Springfield, in the county of Clarke and State of Ohio, have invented a new and useful Improvement in Funnel-Measures; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which-

Figure 1 is a vertical section through the center of my measure. Fig. 2 is a plan view

of the same.

The nature of my invention consists in making the graduated scale of a funnel-measure movable for facility of cleaning, and in the form and construction of the valve, whereby the article may be used with much greater certainty and facility.

That others may understand the construction and operation of my invention, I will more

particularly describe it.

In form my funnel-measure does not differ materially from the ordinary funnel in common use.

A is the measure or cone of the funnel. B is the neck or spout. At the junction of the neck or spout B and measure A, I place the permanent plate C, through which are the two holes D D, and immediately above it is the valve E, also provided with the two holes FF, which correspond with the holes D D, and when brought over them, as in Fig. 1, permit the contents of the measure to pass freely through them. The valve E is provided with a stem, G, with a cross-head, H, at its top, and the brace I, to steady it at the top of the

The two faces of the valve E and its seat C are ground together so that the joint between them may be made impervious to any fluid.

Up and down the side of the measure or funnel, in suitable gains, I place the graduated strip J, the divisions upon which denote the capacity of the measure at different points.

Within the spout D is the air-tube K, which at its upper end communicates with the atmosphere outside of the measure, and thereby permits the air within a vessel to flow out as the contents of the measure flow in.

The stop-pin L, projecting downward from the valve E into a slot in the plate C, limits the movement of the valve, so that the operator may always know when the valve is fully closed and when fully open.

Several graduated strips may be used with the same measure where it may be desirable to use the same implement for different kinds of measure, as ale and wine measure.

The operation of my invention is very simple. By turning the cross-head Hone-quarter revolution, as far as the stop-pin L will permit, the valve E then brings the holes F over the holes D, so that the fluid may flow out. When the measure is empty the valve is moved back again and the orifices are closed.

Practice has demonstrated that a sliding valve is much more perfect in its operation for purposes similar to this than a lifting valve. Thick fluids, like molasses, will flow much more freely, and by using my funnel-measure time is saved and a more perfect drainage is secured.

Having described my invention, what I claim as new, and desire to secure by Letters Patent,

1. The combination, with a funnel, of a measure-index and the turning or sliding valve E and its valve-seat, substantially as set forth.

2. In combination with a funnel-measure, a movable gage or scale, J, as and for the purpose set forth.

3. In combination with the sliding valve E and the funnel-measure A, the movable gage or scale J, substantially as set forth.

4. In combination with the funnel-measure A and the sliding valve E, the air-tube K, located within the spout, so as not to impair the exterior cylindrical form of the said spout.

JAMES LLOYD.

Witnesses:

REUBEN MILLER, JOHN C. MILLER.