No. 49,738. PATENTED SEPT. 5, 1865.

J. M. ESTABROOK.

MEASURING FUNNEL.

Fig. 2.

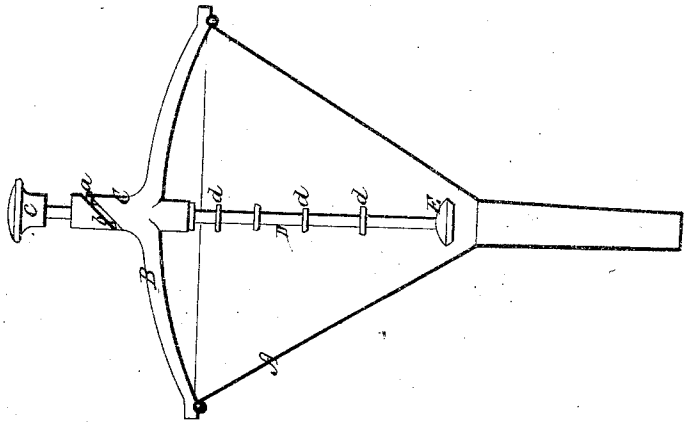
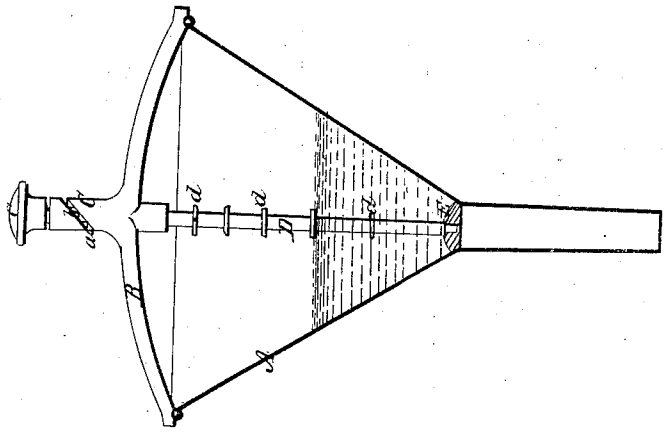


Fig. 1.



Witnesses:
Theo Fusch
Wm Treuri

Inventor:
J M Estabrook
By Munn & Co attys

UNITED STATES PATENT OFFICE.

J. M. ESTABROOK, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN MEASURING-FUNNELS.

Specification forming part of Letters Patent No. **49,738**, dated September 5, 1865.

To all whom it may concern:

Be it known that I, J. M. ESTABROOK, of Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Measuring-Funnels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical central section of this invention when the valve is closed and the funnel partially filled with liquid. Fig. 2 is a similar section of the same when the valve is open and the liquid discharged.

Similar letters of reference indicate like parts.

This invention consists in a measuring-funnel provided with a central stem, which is guided in a socket with a spiral groove, and furnished with a pin projecting through said groove, and with a valve at its bottom end, and with a series of shoulders or marks at certain intervals, in such a manner that by the action of the pin and spiral groove the stem on being turned rises and falls and the valve opens and closes, and when the valve is closed and the funnel filled partially or fully with liquid the exact quantity of liquid contained in the same can be observed by marks on the stem, and after the liquid has thus been measured it can be readily discharged by turning the stem and raising the valve.

A represents a funnel, made of tinned sheet-iron or any other suitable material. This funnel is provided with a bridge, B, extending across its center, and from the center of this bridge rises a socket, C, which forms the guide for the central stem, D. Secured to the bottom end of this stem is the valve E, which, when the stem is depressed, closes the discharge-opening of the funnel, as shown in Fig. 1 of the drawings. A pin, *a*, inserted in the stem projects through a spiral slot, *b*, in the socket C, and a button, *c*, mounted on the top of said stem serves to turn the same in either direction. By turning the stem in one direction the pin *a* travels down in the spiral slot *b* and the valve is depressed, and by turning it in the opposite direction the valve is raised. Said stem is provided with a series of shoulders or marks, *d*, at such distances apart that the same indicate the exact quantity of liquid in the funnel. For instance, the lowest mark may correspond to a pint, the second to a quart, the third to two quarts, and so on, so that when the valve is closed a certain quantity of liquid can be measured off.

The convenience of having the marks in the central stem is obvious. In the first place, the marks can be readily observed by the person holding the funnel, and, furthermore, if the funnel is held in a slightly-inclined position, the mistake in the measure is less than it is if the marks are on the side. After a certain quantity of liquid has been measured off in the funnel it can be readily discharged into a vessel by turning the stem and raising the valve.

I claim as new and desire to secure by Letters Patent—

A measuring-funnel provided with a central stem and valve which rises and falls by the action of a spiral groove, said stem being furnished with a series of marks, substantially in the manner and for the purpose set forth.

The above-described specification of my invention signed by me this 18th day of March, 1865.

J. M. ESTABROOK.

Witnesses:

A. DADNUM,

D. S. JACKSON.