2 Sheets—Sheet 1.

S. M. CAWKER.

Combined Pump and Measuring Faucet.

No. 198,969. **Patented Jan. 8, 1878.**

Fig. 1.

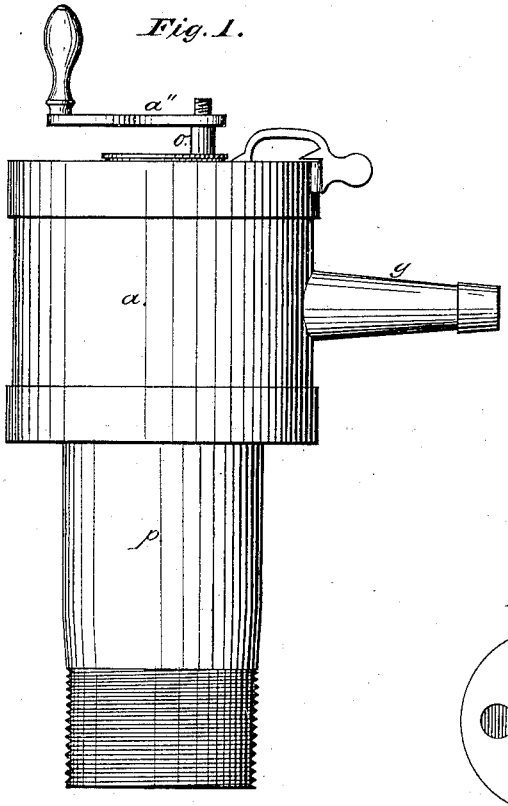


Fig. 2.

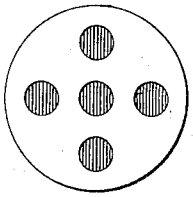


Fig. 3.

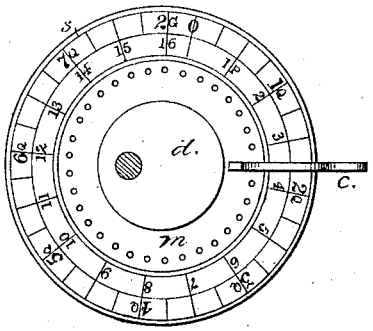
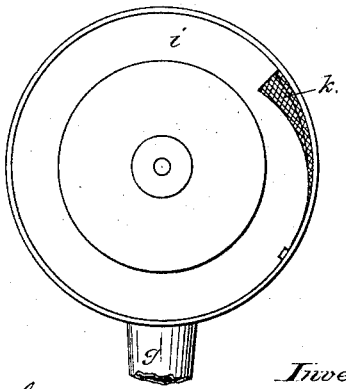


Fig. 6.



Witnesses:

A. Scott,
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Inventor:

Samuel M. Cawker
by James H. Mandeville,
his attorney.

2 Sheets—Sheet 2.

S. M. CAWKER.

Combined Pump and Measuring Faucet.

No. 198,969. Patented Jan. 8, 1878.

Fig. 7.

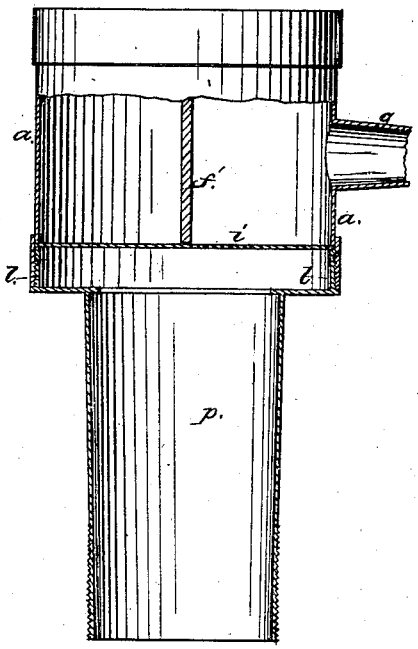


Fig. 8.

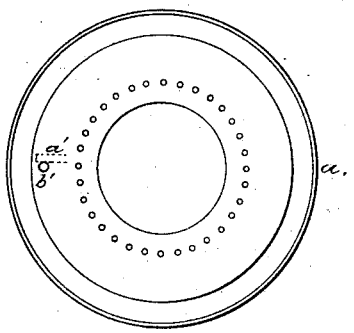


Fig. 4.

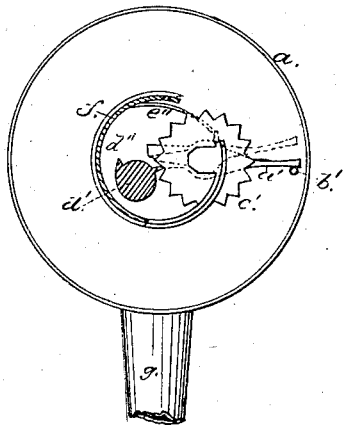
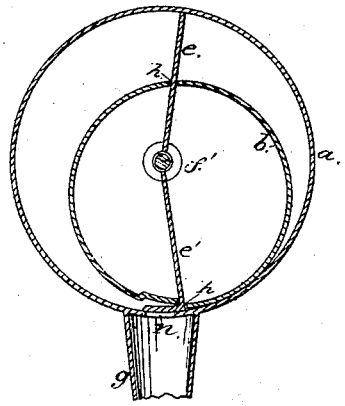


Fig. 5.



Witnesses:
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D. L. Reinohl

Inventor:
Samuel M. Cawker
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UNITED STATES PATENT OFFICE.

SAMUEL M. CAWKER, OF DENVER, COLORADO.

IMPROVEMENT IN COMBINED PUMP AND MEASURING-FAUCET.

Specification forming part of Letters Patent No. **198,969**, dated January 8, 1878; application filed August 22, 1877.

To all whom it may concern:

Be it known that I, SAMUEL M. CAWKER, of the city of Denver, in the State of Colorado, have invented a new and useful Combined Pump and Measuring-Faucet, which is fully shown and described in this specification and the drawings hereunto annexed.

The object of this invention is to furnish a faucet by which liquids can be pumped and measured in the same operation.

The invention consists in applying an indicator to a pump of known capacity used as a faucet, by which every operation of the pump turns the indicator, and also operates the valves, so that when the indicator has been set for the faucet to discharge a given quantity, which amount has been discharged, no further operation of the pump can be made, as the valves are closed and the gearing locked when the indicator stands at the zero-point.

In the drawings, Figure I shows a side elevation of the invention complete; Fig. II, the bottom of the tube that goes into the barrel; Fig. III, the indicator; Fig. IV, mechanism for operating the indicator; Fig. V, the cylinder and rotary piston; Fig. VI, the inner end of the cylinder; Fig. VII, a longitudinal internal view of the pump; and Fig. VIII, a part of the mechanism by which the indicator is operated.

In Fig. I, *a* represents the barrel or cylinder for holding the liquid measured. It is secured to a tube, *p*, an end view of which is shown in Fig. II, and the tube is inserted into a barrel. The tube is provided with a discharge, *g*. The inside cylinder *b*, Fig. V, is operated by the handle *a''*, secured upon the post *o*, and it is provided with openings *h h*, through which work the wings *e* and *e'*, the latter having on its outer end a valve, *n*, which fully covers the discharge. The wings are supported upon a shaft, *f'*, attached to the outer end of the cylinder. The indicator *c* on the dial-plate *s* is attached to a concentric rim, *m*, having a series of pins arranged in circular form, projecting inwardly, and they are operated upon by a wheel, *c'*, to which motion is communicated by a single tooth, *d'*, on the shaft *o*. The lever *a'* is a locking device. (Shown open in Fig. IV and shown closed by dotted lines.) It is held open by the spring *e''*. This lever is open or unlocked at all times, except when the indicator stands at zero. As the spring serves to keep it open, it is closed whenever the pin *b'* is brought in contact with the lever by a return action of the pointer. After the indicator is set at the figure that denotes the quantity of liquid to be measured, it is caused to turn backward by an opposite or forward movement of the pump-handle. When it returns to the zero-point, the lever *a'* is tipped, as shown by the dotted lines, and the end of the lever opposite the pin locks with the stop *d''* on the shaft *o*.

The mode of operation is as follows: To pump and measure one gallon of liquid, turn the indicator to the place on the dial marking one gallon on the outer rim; then revolve the crank to the right until the indicator returns to zero and comes to point of rest. The desired quantity has been then obtained. When the indicator is in this position the valve *n*, Fig. V, is closed, and the opening *k*, Fig. VI, is also closed. At the same time the lever *a'* is elevated to the position shown by the dotted lines, and one end of the lever is locked into the stop *d''* on the shaft, to which the handle is attached. This ungears the machinery and closes the inlet and outlet valves, so that the faucet is inoperative until the indicator is moved from the zero-point. The inner cylinder is mounted on its shaft eccentrically. Upon each revolution the end of the inner cylinder is swung out, so as completely to cover the inlet-opening *k*, Fig. VI.

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

1. The combination of the lever *a'*, operated by the pin *b'*, with the stop *d''* on the shaft *o*, for locking the pump-handle, constructed and arranged substantially as described.

2. The combination of the lever *a'*, pin *b'*, spring *e''*, wheel *c'*, shaft *o*, having tooth *d'* and stop *d''*, constructed and arranged substantially as described.

3. The combination of the lever, pin, spring,

wheel, shaft, having tooth and stop, with the rim *m*, having downwardly-projecting pins, the indicator *c*, and the dial-plate *s*, substantially as described.

4. The combination of the locking devices *a' b' e'' d''* and the indicating mechanism *o d' c' m c s* with the barrel *a*, having cylinder *b*, wings *e e'*, and valves *n k*, and the tube *p*, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of July, 1877.

SAMUEL M. CAWKER.

Witnesses:
H. Y. ANDERSON,
GEORGE MANNING.