

(No Model.)

F. H. LIPPINCOTT.

DEVICE FOR SUPPLYING SALTS FOR SODA FOUNTAINS.

No. 574,156.

Patented Dec. 29, 1896.

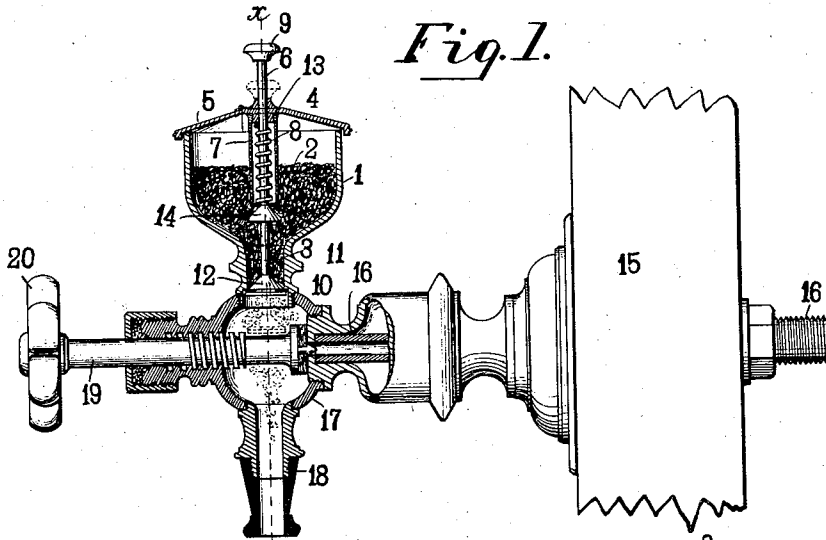


Fig. 1.

Fig. 2. x

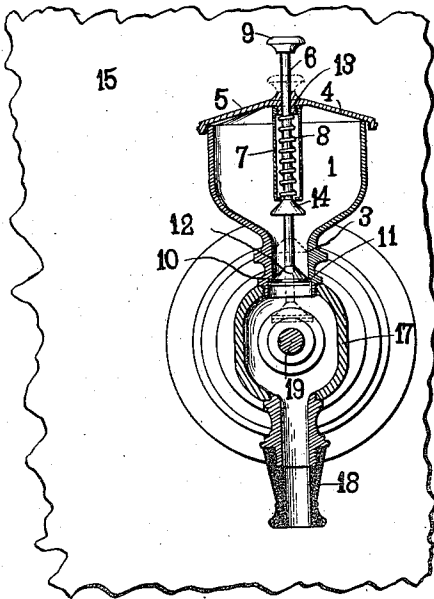
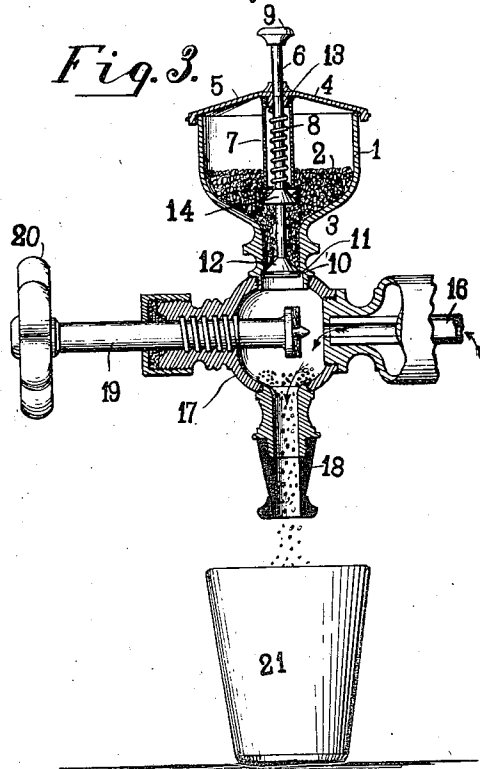


Fig. 3.



Witnesses:

Walter C. Pusey.
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UNITED STATES PATENT OFFICE.

FISHER H. LIPPINCOTT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE AMERICAN SODA FOUNTAIN COMPANY, OF TRENTON, NEW JERSEY.

DEVICE FOR SUPPLYING SALTS FOR SODA-FOUNTAINS.

SPECIFICATION forming part of Letters Patent No. 574,156, dated December 29, 1896.

Application filed March 31, 1896. Serial No. 585,574. (No model.)

To all whom it may concern:

Be it known that I, FISHER H. LIPPINCOTT, a citizen of the United States, residing in the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Supplying Salts for Soda-Fountains and the Like, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 is a longitudinal section, partly in elevation, of the invention as applied to a soda-fountain faucet; Fig. 2, a full section, as on line *xx*, Fig. 1; Fig. 3, a section similar to Fig. 1, but showing the valve that normally closes the pipe communicating with the gas-charged water open.

The nature of this invention is a device adapted to be applied to soda-fountains and the like for the purpose of dispensing a predetermined quantity of any of the usual powdered or granulated salts, such as vichy, seltzer, &c.

The invention consists in the combination with a suitable receptacle for such salts, adapted to be connected to the faucet of a soda-fountain, and having an exit-orifice in the bottom thereof, with movable devices for keeping the said orifice normally closed and for permitting a predetermined quantity of the salts to fall through the orifice into the faucet-nozzle simultaneously with the opening of said orifice.

The invention consists also in the combination, with such receptacle, of a vertically-movable rod or stem having on its lower extremity a stopper-valve adapted when the said rod is at its elevated position to close the said opening in the receptacle, and whereby, when the rod and stopper are depressed, a portion of the salts within said receptacle will be allowed to escape.

The invention also consists in the combination, with a receptacle for the purpose mentioned provided with a narrow neck at its lower end, of a vertically-movable preferably spring-controlled rod or stem having at its lower extremity a valve or stopper adapted to normally close the open end of said neck, and having at a suitable distance above said stopper and also the neck a head or projection

whereby only a determined quantity of salts or the like is permitted to escape from the said receptacle, as hereinafter fully described.

The invention further consists of the combination, with the usual faucet of a soda-water fountain or similar apparatus for holding and dispensing aerated or gas-charged water, of a receptacle for salts or the like attached to or communicating with said faucet, with means for causing the discharge of a quantity of the salts from the receptacle into the faucet, substantially in the manner and for the purpose hereinafter described.

The invention consists, finally, in certain combinations and details of construction hereinafter pointed out.

Referring to the accompanying drawings, 1 designates a receptacle for containing powdered or granulated salts 2. Its lower part is contracted to form a neck 3, which is open at the bottom. In order to protect the salts from the air, the top of the receptacle is provided with a cover 4, in which is hinged a lid 5 for introducing the salts.

6 is a rod or stem that passes through an opening in the top of the receptacle and through a tube 7, in which is contained a spiral spring 8. The upper end of the rod projects above the top of the receptacle and has a knob 9 for conveniently operating it (the rod) by hand. On the lower end of this rod is a circular valve disk or washer 10, of india-rubber or the like, that normally bears against the lower side of a circumferential offset 11 on the interior of the lower end of the neck of the receptacle.

A head 12 is on the rod, with whose under side the disk 10 is in contact, so that the latter is maintained in place when under stress of spring 8, as hereinafter described. The upper end of this spring bears against an enlargement 13 on the rod and its lower end against an inset in the bottom of the tube 7, the arrangement being such that the spring tends to raise the rod and adjuncts and to cause the valve-disk 10 to bear firmly against the offset 11, so as to secure a tight closure of the neck.

At a predetermined distance above the top of the neck is a plunger-head 14, secured adjustably or otherwise to the rod. Its diam-

eter is a trifle less than the internal diameter of the neck.

I usually provide the neck with terminal screw-threads, so that the receptacle may be secured to the top of a soda-fountain faucet in the manner shown in the drawings.

The *modus operandi* of the device will be described as used in connection with a soda-fountain and its faucet, as shown in the drawings.

15 15 is the front wall of the fountain, through which passes the usual supply-pipe 16 of soda-water to the faucet 17, which escapes through the nozzle 18 when the mouth of the supply-pipe is opened by suitably turning and so retracting the valve-stem 19 by means of the wheel 20 on the outer extremity of the latter, as shown in Fig. 3. When it is desired to take with a glass of soda-water a dose or quantum of the salts from the receptacle 1, rod 6 is forced down by pressure of the hand upon knob 9, which frees the opening at the lower extremity of the neck, whereupon the portion of salts contained in the neck will fall down through the faucet and nozzle into the glass 21, Fig. 3, placed to receive it. The upper head 14 of the rod entering the neck shuts off the entry into the latter of the salts, and thus the quantum of the salts for the occasion is measured. On releasing the pressure upon the knob the rod is retracted by stress of spring 8, and the device is ready for a repetition of the described operation. The mouth of the supply-pipe 16 may now be opened by retracting the valve-stem 19, whereupon the soda-water will pass out by the nozzle into the glass containing the salts. The force of the gas-charged water washes out any of the salts that may have lodged in the faucet-chamber or the nozzle, while the tight joint made by disk 10 prevents any of the water from passing up into the receptacle 1.

The heads 12 and 14 are made preferably conical, as shown, so that the salts will not lodge thereon.

I do not limit myself to the precise construction or arrangement shown, and certain non-essential parts may be dispensed with, as, for example, spring 8, in which case the rod and adjuncts may be maintained in the elevated or normal position by frictional or other means.

Where it is not deemed necessary to measure with approximate accuracy each quantum of salt allowed to escape from the receptacle 1, the upper head 14 may be dispensed with.

I also remark that it is not essential that the upper head 14 on the rod 6 shall be of such diameter as to enter the neck of the receptacle, as it will be obvious that if it were larger in diameter it would nevertheless cut off the outflow of the salts when the rod 6 is depressed. It is, however, of course essential that there shall always be sufficient space below the head to allow the salts to descend into the neck 3 when the rod is returned to the elevated or normal position.

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

1. The combination with a soda-fountain faucet or the like, of the salts-receptacle having an aperture therein communicating with the interior of said faucet, means for opening and closing said aperture, substantially as shown, and for limiting the salts that may escape from said aperture when the same is opened, to a predetermined quantity, substantially as and for the purpose described.

2. The combination with the soda-fountain faucet or the like, of the salts-receptacle secured thereto, and having an opening at its lower extremity registering with an opening into the faucet-chamber, the nozzle communicating with said chamber, and depending vertically in line with said opening in the receptacle, a movable valve or stopper in the said opening of the receptacle, and means for causing said valve or stopper to normally close said opening, substantially as and for the purpose set forth.

3. The combination with the soda-fountain faucet or the like, of the salts-receptacle, secured thereto, having an opening at its lower extremity registering with an opening into the faucet-chamber, the nozzle communicating with said chamber and depending vertically in line with said opening in the receptacle, a vertically-movable rod having at its lower end a valve or stopper adapted to close and open said opening in the receptacle, a head or enlargement on said rod above said valve or stopper, together with means for causing the latter to normally close said opening, substantially as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

FISHER H. LIPPINCOTT.

Witnesses:

WALTER C. PUSEY,
JOSHUA PUSEY.