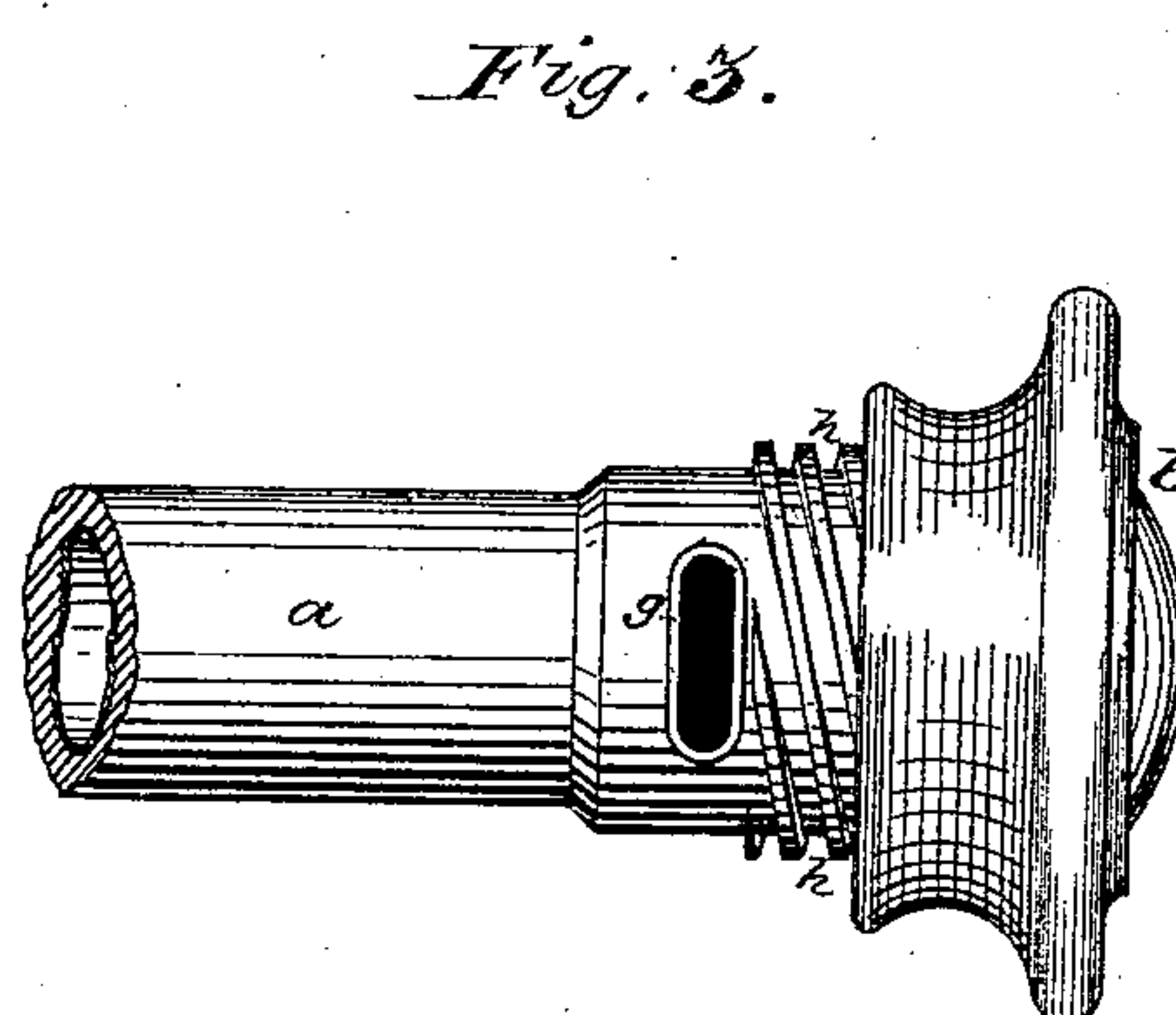
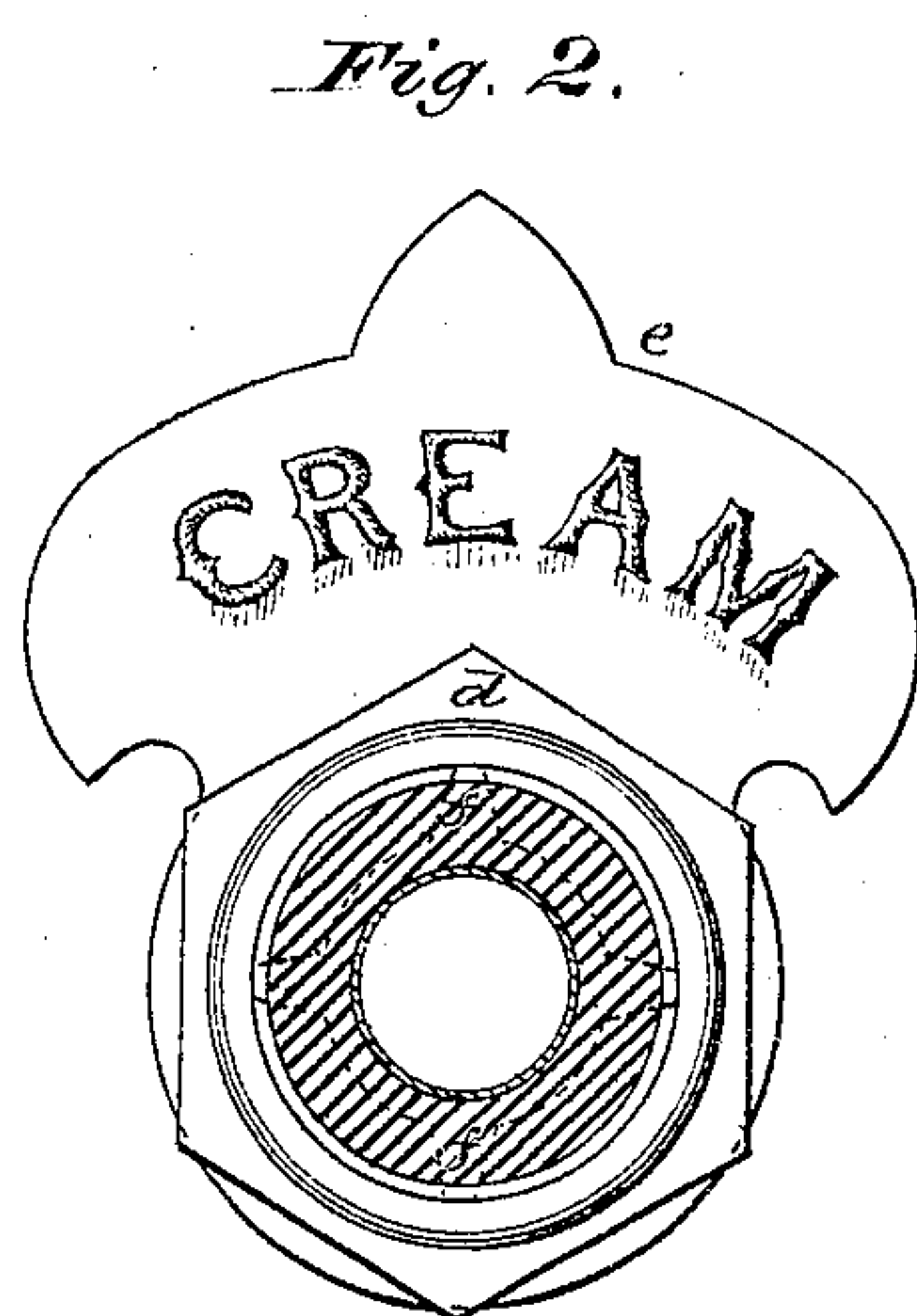
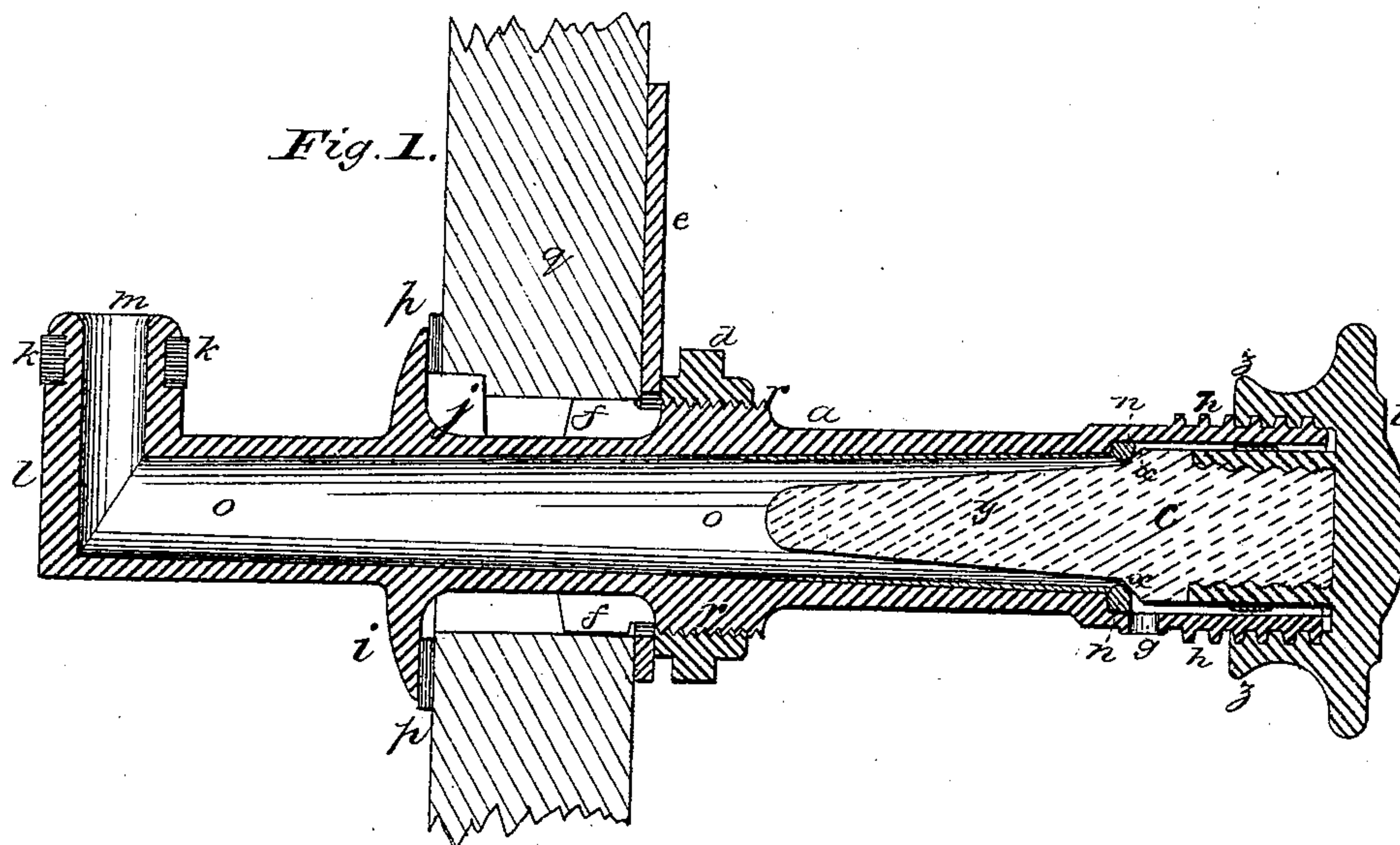


J. MATTHEWS.
Devices for Dispensing Syrups in Soda-Water
Apparatus.
 No. 141,229. Patented July 29, 1873.



Witnesses:

Philip H. Huxley

Frederick Steele

Inventor,

John Matthews

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JOHN MATTHEWS, OF NEW YORK, N. Y.

IMPROVEMENT IN DEVICES FOR DISPENSING SIRUP IN SODA-WATER APPARATUS.

Specification forming part of Letters Patent No. **141,229**, dated July 29, 1873; application filed June 24, 1873.

To all whom it may concern:

Be it known that I, JOHN MATTHEWS, of the city, county, and State of New York, have invented certain new and useful Improvements in Devices for Dispensing Sirup in Soda-Water Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a longitudinal vertical section; Fig. 2, a cross-section; and Fig. 3, a perspective view of the outer portion.

The same letters refer to like parts in all the figures.

In the better class of soda-water apparatus as now constructed the sirup-holders are placed within the ice-chambers or coolers, so as to cool the sirup; but to draw the sirup as required the faucet-stem must project beyond the case, and as only a small quantity of sirup sufficient for one glass of soda-water is drawn at a time only about the portion standing in the outer stem of the faucet is used, and that from its exposure without the case becomes soon warm, so that warm and not cool sirup is dispensed.

My invention relates to certain improvements in the sirup-draft apparatus and the method of attaching it to the case; and consists in means for keeping the sirup cool till it is discharged into the glass; in devices for attaching the draft apparatus to the walls of the sirup-tanks; in devices for attaching the label to each sirup-faucet; in a construction of the draft-tube and valve whereby the necessity of a stuffing-box is avoided, and by which great simplicity of construction is secured; in means by which the usual wear on the valve is avoided; in a non-metallic plug-valve and a lining of the draft-tube, so as to avoid corrosion and contamination of the sirup; in an arrangement of ports so that if any leakage occur the drip or leakage will be conveyed to near the discharging-port and not to the handle or knob; in a form of discharge-port by which the sirup is more rapidly dispensed; and, lastly, in means by which the plug-valve is attached to the knob or handle by which it is operated.

The following description will enable those skilled in the art to make and use my invention.

In the drawing, *a* is the body of the faucet having within it the annular valve-seat *n* composed of leather or other suitable soft packing material. *h* is a screw-thread on the end of the faucet on the outside. *b* is a cap or knob having within it a screw-thread fitting over the screw-thread *h*. *c* is a plug or valve composed of glass, ceramic ware, or other suitable material, the plug being provided with a shoulder, *x x*, to fit upon the valve-seat *n n*. This plug *c* has a portion, *y*, which projects up along the body of the faucet, so that when it is pushed so as to close its shoulder upon the valve-seat *n*, the portion *y* will nearly fill the body of the faucet, and prevent any sirup from coming forward so as to leave the cooling medium and become warm by standing outside the cooling-chamber. *z* is a projecting collar or ring on the knob of the faucet near the discharge-port. *g* is the discharge-port of the faucet. *i* is a collar on the faucet which is drawn against the apparatus by the nut *d* on screw-thread *r*. *j* is a feather or key on the body of the faucet to keep it from turning round in the apparatus. *f f* are ribs or projections to fit the hole into which the faucet is screwed. *p p* is a washer to pack the joint. *q*, a section of the side of the apparatus into which the faucet is secured. *e* is a washer serving as a seat for the nut *d*, and as a label for the name of the sirup to be dispensed. *o o*, passage-way for the sirup through the body of the faucet with an elbow at *l*, upturned to receive the sirup-tank. *k k* is a rubber or other elastic collar to pack the joint at the junction with the sirup-tank. I make the inlet-passage *m* to the faucet of smaller capacity than the discharge-port *g*, so that all the sirup entering the cock can be discharged through the discharge-port without being forced beyond it into the cap.

The following is the mode of operation: The faucet, after withdrawing the knob *b* and nut *d*, is inserted into a hole in the apparatus of the diameter of the screw-thread *h h*, so that the rubber washer is pressed by the collar *i*. The washer-plate *e* is passed over the screw-threads *h* and *r*, so as to rest against the sides of the apparatus. The nut *d* is then screwed

on so as to draw the collar *i* against the washer *p p*, making a tight joint. The sirup-tank may then be attached to the inlet of the faucet *m*, and the valve-plug inserted and screwed up by the cap *b*, so that the shoulder of the plug presses against the seat *n*. The sirup may then be poured into the tank.

To dispense the sirup the cap *b* should be unscrewed about half a turn when the sirup will flow through the port *g*. If any sirup should escape past the valve-seat so as to run into the cap, it will drop from the collar *z* of the cap near the discharge-port, and will thus not soil the hand of the operator.

This construction dispenses with a stuffing-box, and is of great simplicity and durability. The valve-plug being of porcelain or other non-corrodible material prevents all wear of the apparatus and contamination of the sirup. The extension *y* of the plug displaces a large portion of the sirup which would otherwise stand outside of the apparatus and become warm by being removed too far from the cooling medium. This valve-plug is secured to the knob by having the metal of which it is composed cast around the plug, which is made with collars or indentations to cause it to be securely held in the metal.

The discharge-port *g* is in the form of transverse slit, as plainly shown in Fig. 3, so as to require only a slight movement of the valve-plug to completely expose the opening.

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

1. The valve-plug *c* provided with an extension, *y*, in combination with the faucet, so as to drive the sirup out of the forward portion, as and for the purpose set forth.

2. The cap *b* provided with an internal screw and external collar, *z*, in combination with the faucet, as set forth.

3. The cap *b* provided with screw-threads, in combination with the valve-plug *c* and faucet *a*, arranged and operated as set forth.

4. The plate *e* with opening, so as to slip over the stem and form a washer with an upward-projecting portion for a label, in combination with the faucet, provided with collar *i* and nut *d*, as set forth.

5. The faucet provided with the discharge-port *g* of an elongated form, transverse to the length of the faucet, so as to be entirely opened by a slight movement of the valve-plug, in combination with said plug.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of May, 1873.

JOHN MATTHEWS.

Witnesses:

B. F. HALL,

JAS. A. BELL.