

A. D. Puffer,

Soda Water Apparatus,

No 33,796,

Patented Nov. 26, 1861.

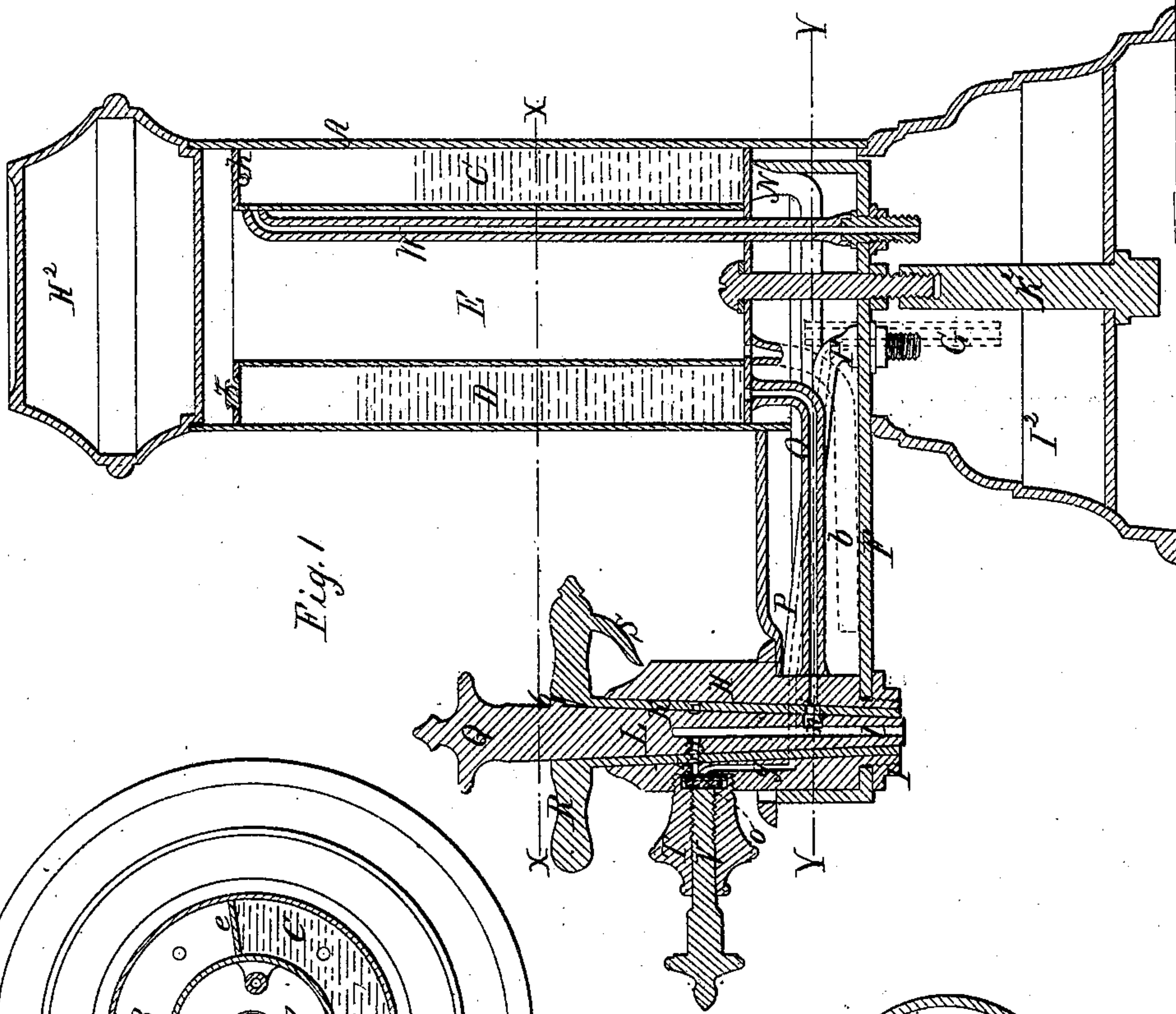


Fig. 1

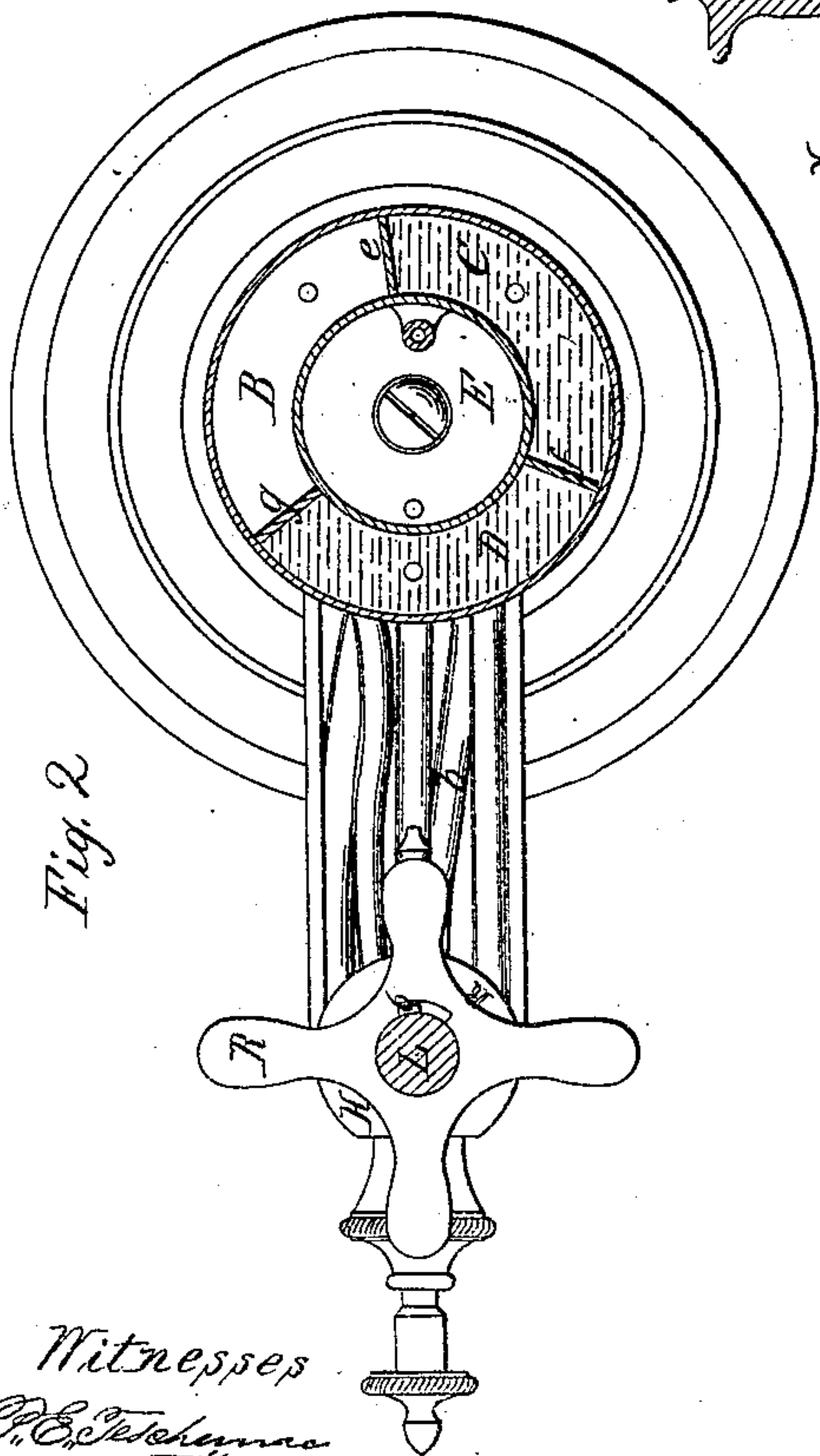


Fig. 2

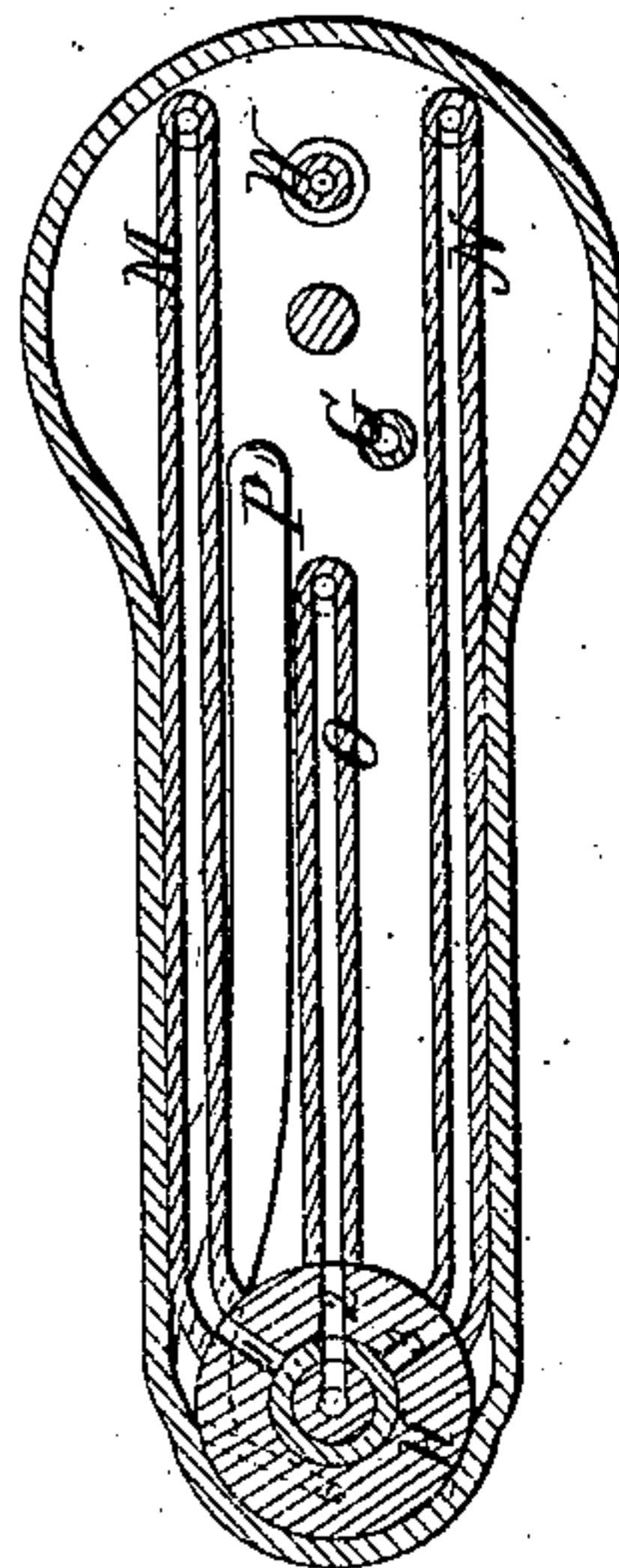


Fig. 3

Witnesses
P. E. Schuyler

UNITED STATES PATENT OFFICE.

A. D. PUFFER, OF SOMERVILLE, MASSACHUSETTS.

IMPROVEMENT IN SODA-FOUNTAINS.

Specification forming part of Letters Patent No. 33,796, dated November 26, 1861.

To all whom it may concern:

Be it known that I, A. D. PUFFER, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Sirup and Soda Draft-Stands, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a longitudinal section through my apparatus; Fig. 2, a horizontal section upon the line X X of Fig. 1; Fig. 3, a horizontal section upon the line Y Y of Fig. 1.

With my improved stand the sirup of different kinds and the soda or mineral water are all drawn from the same orifice in the cock. The sirups are contained in separate compartments of the stand and are all drawn through a single faucet. They are, however, so arranged with reference to the cock which draws the soda that there is no mixing of the different sirups with each other, while both the sirups and the soda are preserved cool until they are drawn from the fountain.

In the accompanying drawings, A is the stand, which is divided into a number of compartments B C D by partitions *e f g*. The top of each of these compartments is furnished with a tight-fitting screw-plug, which is withdrawn for the purpose of replenishing the compartments with sirup, and they are all brought into communication with each other at their extreme top by means of small openings *h*, Fig. 1, for a purpose to be hereinafter explained.

In the draft-stands heretofore constructed the soda being cooled at a distance from the draft-cock is again warmed by passing through a considerable length of pipe which intervenes between the cooler and the draft-cock, as well as through the arm which supports the cock. To remedy this inconvenience I have adopted the following construction: In the center of the stand A is a compartment E, into which the ice is placed which serves to cool the sirups in the surrounding compartments. From the central compartment E the water from the ice as it melts runs through the pipe *b* into the forward end of the hollow arm F, which forms a trough, within which lie the pipes M, N, O, and P, which convey the sirups and the soda

to the draft-cock. From this trough the water is conducted off through the pipe G, (seen in red in Fig. 1,) which rises to such a height within the trough as to keep the water always above the pipes M N O P. These conveying-pipes for the soda and for the sirups are thus kept cool up to the point where they enter the draft-cock.

I will now describe the construction of the cock through which the soda and sirups are drawn.

The stationary part H or shell of the cock is secured to the arm F by a screw-nut I or otherwise, the joint between the trough and the cock being made water-tight. The shell H is pierced with passages 1, 2, and 3, corresponding in number to the number of the receptacles B, C, and D for the sirups. These passages communicate each with one of the pipes M N O from the sirup-cans. The shell H is bored to receive a hollow plug K, within which turns the central plug L, in the center of which is the hole *l*. The hollow plug K is pierced with a hole *i*, which may be made to communicate with either one of the passages 1 2 3 and the central plug L is pierced with a hole *n*, through which communication may be established between the central passage *l* and the hole *i*. The plug L is operated by the head Q and the hollow plug K by the head R, to which is attached an index S, which may be pointed to one or other of a series of characters or letters, (one of which R is seen in Fig. 2,) which serve to indicate the passage (1, 2, or 3) with which the hole *i* is in communication. The soda from the fountain is brought through the pipe P and passage *g* to the draft-cock T, the end of the passage *g* being commanded by a valve *o*, operated by a screw-stem V. When the valve *o* is raised, the inflowing liquid passes through another passage 5, Fig. 1, in the shell H, into a groove formed around the hollow plug K, and through this hollow plug by one or more openings to a similar groove around the central plug L, thence by one or more passages *x* to the central opening *l*.

W is an air-pipe, the upper end of which communicates with the top of one of the compartments B C D, the lower end of this pipe being brought into communication with a force-pump, by means of which air is com-

pressed in the chamber C above the sirup, and as the chambers B C D are all brought into communication with each other by means of the openings *h* the sirup from any one of the compartments B C D is forced out whenever the faucet is opened without depending upon the gravity of the liquid for this purpose.

For greater cleanliness I propose having glass jars of proper form to fit in the compartments B C D, the sirup being carried over through a siphon or through an opening in the bottom of the glass, which is made to communicate with the proper conducting-pipe to the faucet. The draft-stand represented in the drawings is surmounted by a hollow cover H^2 and is secured to the base I^2 by a screw and rod K^2 .

Operation: The various receptacles or compartments B C D being replenished with the proper sirups, a sufficient pressure is made in them by means of a force-pump to force out any one sirup when a way is opened for it. The index S upon the head R is then directed toward the character denoting the sirup required—as, for instance, “R” for “Raspberry”—which brings the hole *i* in the hollow plug K opposite to the passage Q, leading to the compartment containing the raspberry-sirup. The central plug L is then turned till the tooth 6 strikes against the side of the slot in which it plays, which brings the opening *n* opposite to the opening *i* in the hollow plug K, as seen in Figs. 1 and 3, when the sirup immediately passes from the compartment C through the passage *l* and is received in the glass. When

the central plug is turned so that the tooth 6 is brought against the opposite side of its slot, the flow of the sirup is interrupted, and by means of the cock T the soda is drawn, which, passing down through the same passage *l*, washes it out preparatory to drawing any other sirup that may be required through it.

It will be seen that by the arrangement thus described the pipes containing the soda and the sirup are kept constantly submerged in ice-water up to the very point where they are drawn, so that under all circumstances, so long as the cooler is kept supplied with ice the soda is drawn perfectly cool.

I do not claim, broadly, the cooling of the soda and sirups by means of the water from the melting ice; but

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

1. Passing the pipes which convey the soda and sirups to the draft-cock within the trough F, where they are cooled by the water from the melting ice, as set forth.

2. The arrangement within a single draft-stand of the compartments B, C, and D, all in contiguity with the central cooler, communicating with each other by the air-passages *h* and closed by tight-fitting plugs Z, whereby while the sirups are kept separate they are all ejected by the operation of the same force-pump, as set forth.

A. D. PUFFER.

Witnesses:

P. E. TESCHEMACHER,
SAM. COOPER.