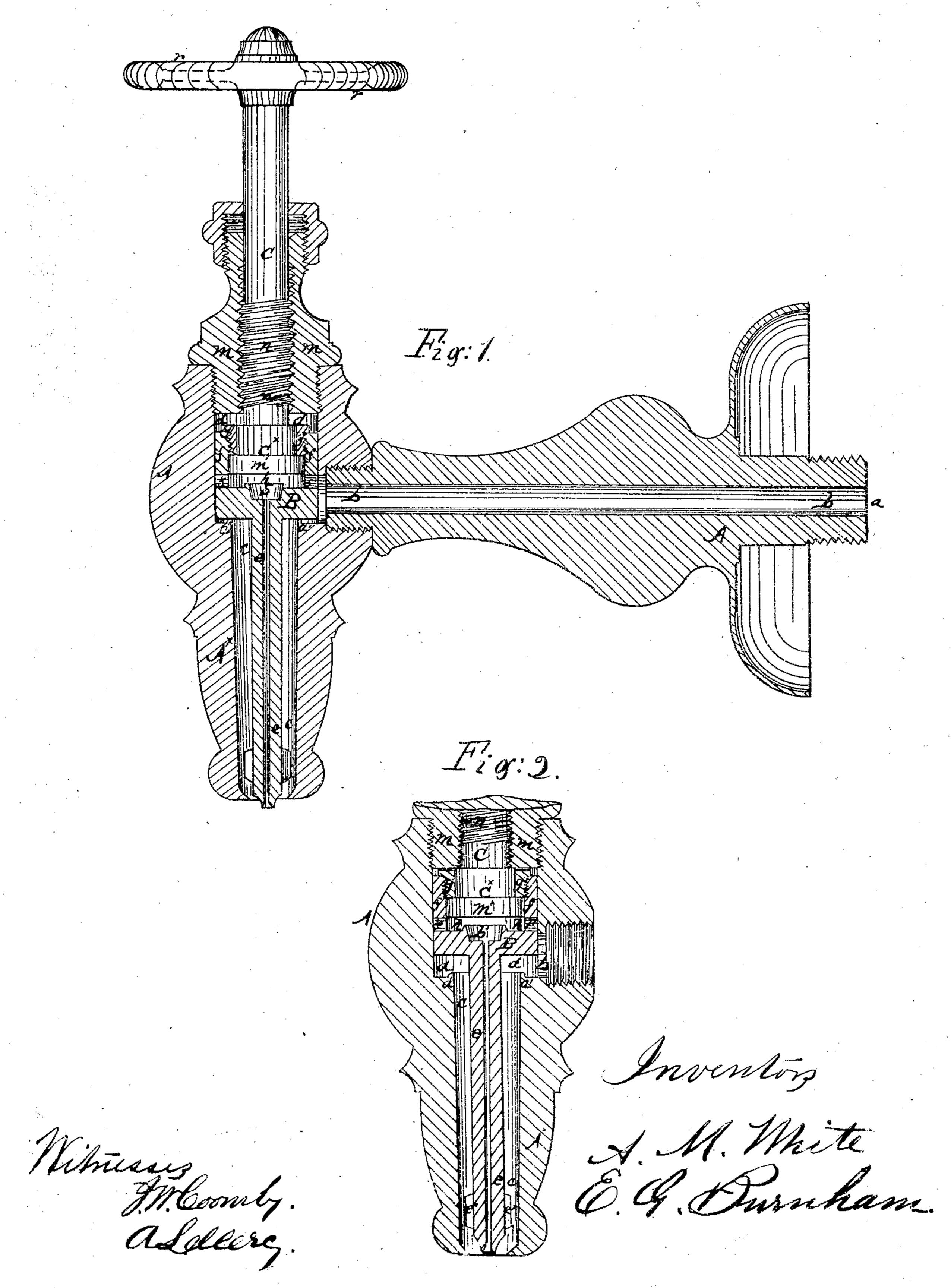
# Mitte & Burnham.

Faucet son Soda-Mater Fountain. Nº 76017 Patented Mar. 24, 1868



### Anited States Patent Pffice

## ALBERT M. WHITE, OF THOMPSONVILLE, AND EDWARD G. BURNHAM, OF. BRIDGEPORT, CONNECTICUT.

Letters Patent No. 76,017, dated March 24, 1868.

#### IMPROVEMENT IN FAUCETS FOR SODA-WATER FOUNTAINS.

The Schedule referred to in these Petters Patent and making part of the same.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that we, Albert M. White, of Thompsonville, in the county of Hartford, and State of Connecticut; and Edward G. Burnham, of Bridgeport, in the county of Fairfield, and State of Connecticut, have invented certain new and useful Improvements in Draught-Apparatus for Soda and Mineral-Waters; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a vertical longitudinal section of an apparatus made according to our invention. Figure 2 is a vertical section of one portion of the same, taken at right angles to fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to that class of faucets or draught-apparatus designed for drawing soda and mineral-waters, in which a small stream is first ejected, to properly mix the sirup with the liquid, and afterward a much larger stream, to complete the filling of the glass or vessel containing the same, and its object is to enable the apparatus to be operated, to produce the two streams in succession, by a continuous rotary movement of the vertical-operating valve-stem of the device.

The invention consists in a tubular stem, attached to the valve, which closes the main passage of the bib of the apparatus, and arranged in the said passage in such manner that the liquid may be caused to pass through the tubular stem just mentioned, in a small stream, previous to the opening of the aforesaid passage to permit the flow of the larger stream.

The invention further consists in so combining a supplemental valve, which serves to close the just-mentioned tubular stem, with the valve to which the said stem is attached, that the upward movement of the supplemental valve, after having opened the stem to permit the ejectment of the smaller stream, will raise the valve having such stem attached thereto, in such manner as to allow the larger stream to pass through and from the passage in the bib of the apparatus; the object mentioned being by these means effectually secured.

The invention further consists in a novel means whereby is obtained a simple and efficient connection of the two valves hereinbefore named.

To enable others to understand the construction and operation of our invention, we will proceed to describe it with reference to the drawings.

The T-shaped body of the faucet or apparatus is marked A in the drawings, the bib thereof being indicated at A\*. The horizontal passage b of the body A connects at its end, a, with the draught-pipe to which the apparatus is attached, and c represents the vertical passage of the bib A\*, the two passages b c, just mentioned, communicating at their inner ends with an internal cylindrical or other suitably-shaped chamber, d. B represents a valve, the seat a' of which is situated at the bottom of the chamber d, or, in other words, at the upper end of the passage c. This valve B is furnished with a downwardly-extending tubular stem, e, the lower end of which may be steadied within the passage c by radial spurs  $e^{\times}$ , the outer extremities of which rest against the surrounding internal surface of the bib. The valve B has formed upon its upper side an annular rim,  $f_{s}$ into the upper end of which is screwed an annular nut, g, a chamber, h, being by this means provided in the upper part of the valve B, above a valve-seat, b', formed at the upper end of the internal passage-way of the tubular stem f, the aforesaid annular rim f being formed with openings or perforations f', by which the chamber h of the valve B communicates with the horizontal passage b, as hereinafter further explained. Provided at the outer end of the body  $\Lambda$ , above the chamber d thereof, is a fixed nut, m, through which is passed a vertical valve-stem, C, which is formed with a threaded portion, n, screwed into the aforesaid nut, as shown more fully in fig. 1, and is furnished at its upper end with a suitable hand-wheel, r. Upon the lower end of this valve-stem C is a valve, C\*, which acts as supplemental to the valve B, and which, when resting upon the valveseat b' of the valve B, serves to close the tubular stem e, as herein presently further set forth. This valve C\* has formed upon it an annular flanch, m', which, when the said valve is raised, strikes the shoulder formed by the under side of the annular nut g, to raise the said valve.

When the valve B rests upon its seat a', it shuts off communication between the passage 5 and the passage

e; and when the valve-stem C is screwed or moved downward to bring the valve C\* upon the seat b', all communication between the hereinbefore-mentioned passage b and the tubular stem e is shut off, thus wholly closing the apparatus. In using the latter, the valve-stem C is turned, by means of its hand-wheel r, in such manner that its screwed or threaded portion, n, working in the fixed nut m, raises the said valve-stem, and brings the valve C\* away from its seat, b', on the valve B, whereupon the liquid from the passage b passes through the openings f' into the chamber h of the valve B, and thence, in a small stream, through the tubular stem e. When such small stream has been continued for the desired length of time, the valve-stem C, with its valve, C\*, is raised still farther, by turning the same, as just hereinbefore set forth, whereupon the annular flanch m' of the valve C\* strikes the shoulder formed by the lower side of the annular nut g, and lifts the valve B from its seat, a', and permits the liquid to flow from the passage b to the passage c of the bib, whence it issues in a large stream, as required, to complete the filling of the glass or vessel employed to receive the soda-water or other like liquid. In order to stop the flow, the valve-stem C is simply turned in an opposite direction, to move the same downward, and thus bring the two valves, C\* B, into position, to close the tubular stem e and the passage c of the bib, as hereinbefore explained.

What we claim as our invention, and desire to secure by Letters Patent, is-

1. The tubular stem e of the valve B, arranged within the passage  $\dot{e}$  of the bib A\*, substantially as and for the purpose specified.

2. The supplemental valve C\*, arranged, in combination with the valve B, on the tubular stem e, and so constructed that, after opening the said tubular stem, the continued movement of such supplemental valve shall lift the valve B to open the passage c of the bib, substantially as and for the purpose specified.

A. M. WHITE, E. G. BURNHAM.

Witnesses:

J. W. Coombs, A. Le Clerc.