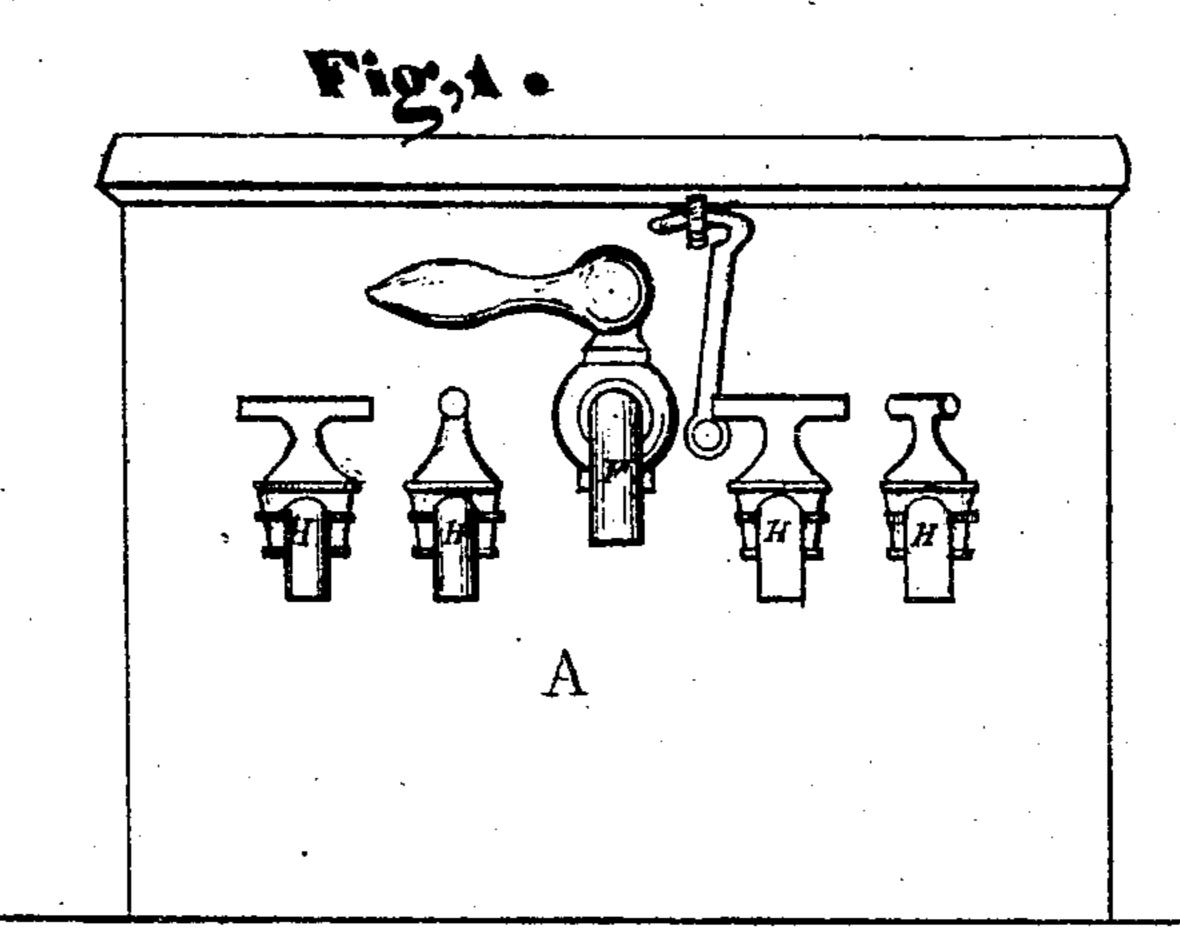
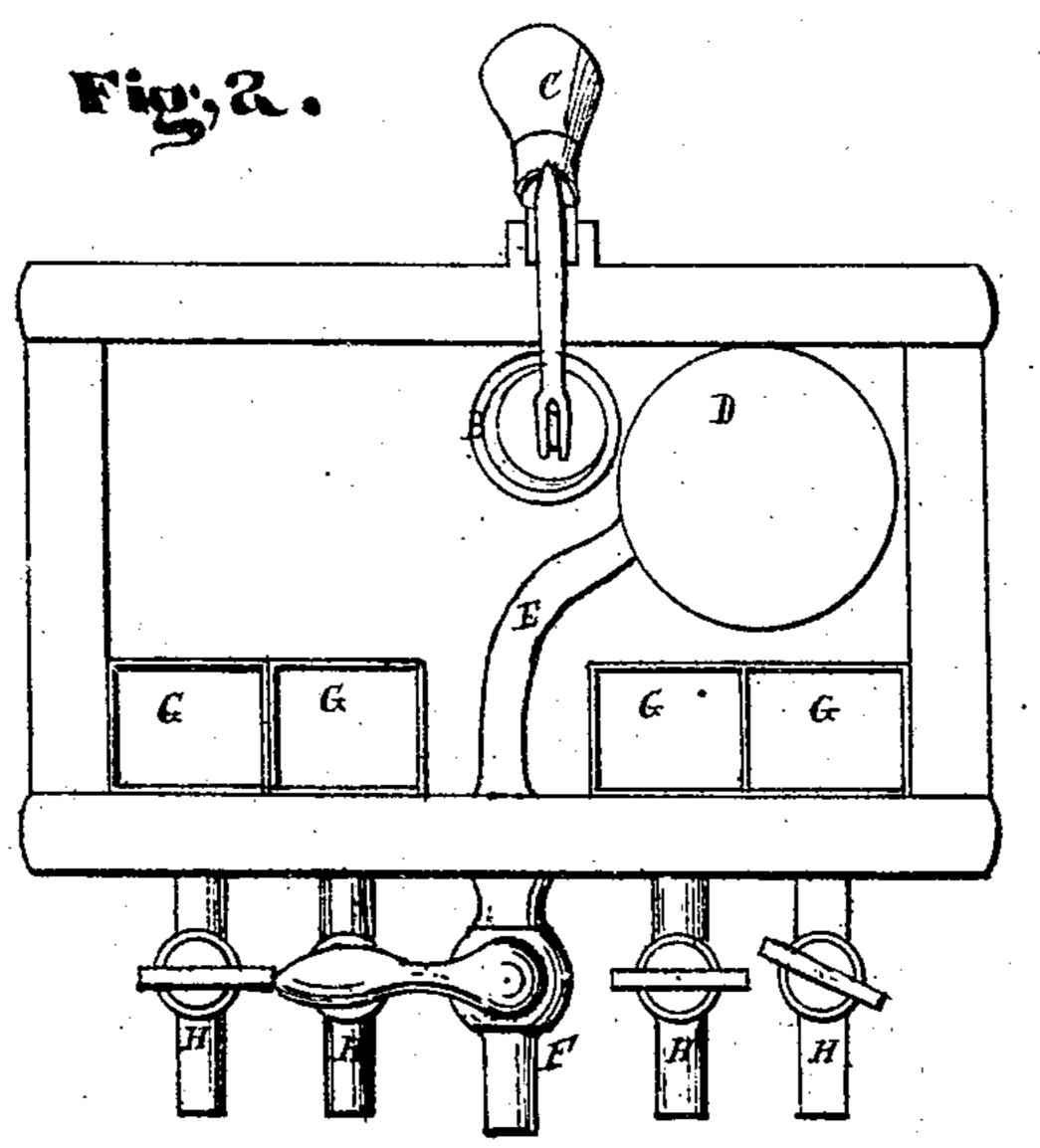
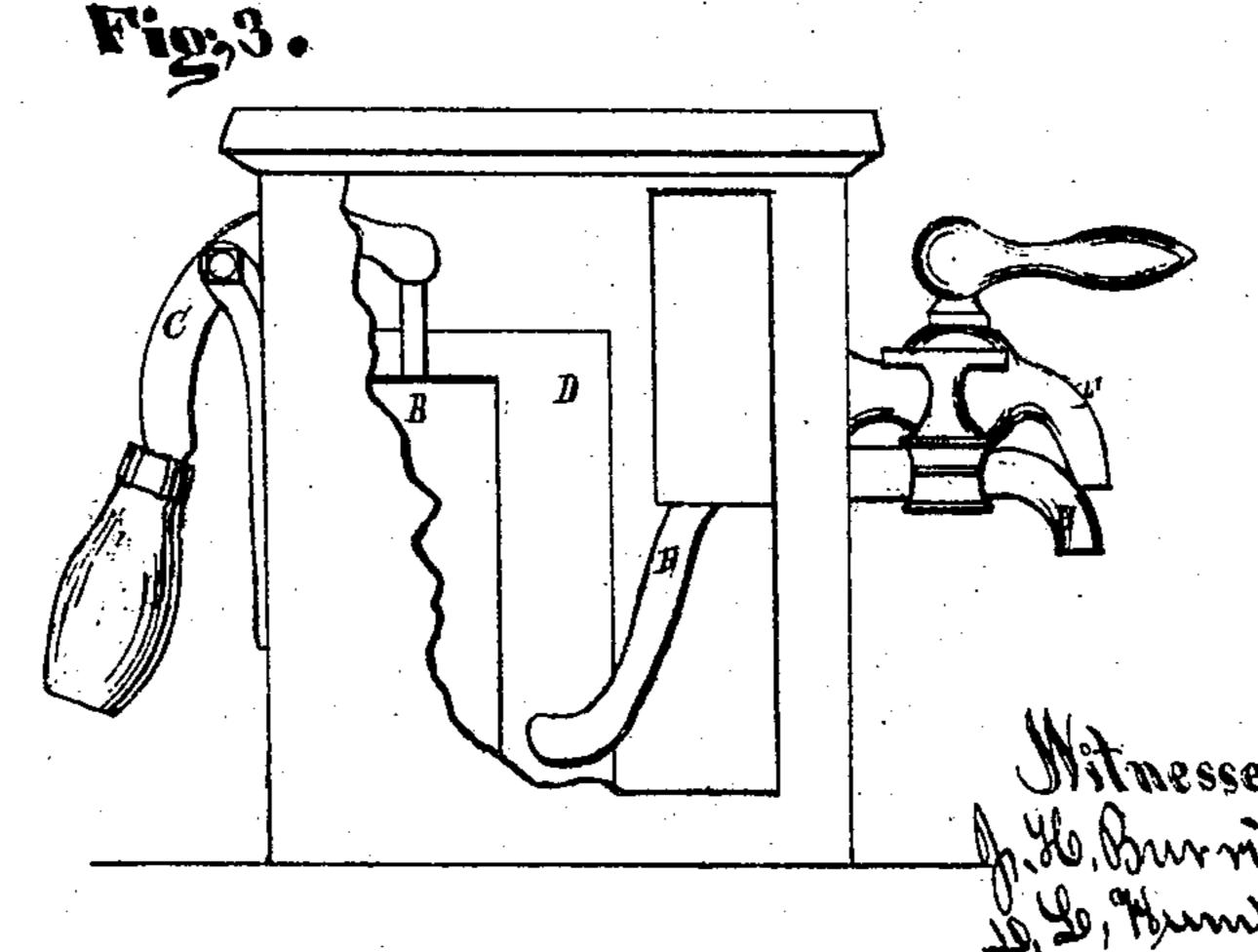
S. D. String, Socia Fountain.

10. 101,534

Falented Apr. 5. 1870.







# Anited States Patent Affice.

# S. B. SPRING, OF GENEVA, OHIO.

Letters Patent No. 101,534, dated April 5, 1870.

## IMPROVEMENT IN SODA-FOUNTAINS

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

I, S. B. Spring, of Geneva, in the county of Ashtabula and State of Ohio, have invented certain Improvements in Soda-Fountains, of which the following is a specification.

# Objective.

This invention relates to a soda-fountain, the same being so constructed and arranged that a continuous stream of soda-water is produced when required, and at a low degree of temperature, without the use of a generator and cooler ordinarily employed for that purpose.

#### Drawings.

Figure 1 is a front view of the fountain.

Figure 2, a top view of the inside.

Figure 3, an end view of the inside.

Like letters of reference refer to like parts in the several views.

# Description.

In fig. 1—

A represents a box or the body of the fountain, which may be constructed of wood, stone, or of other material of a suitable nature, and of any capacity that may be required.

Arranged within said box is a pump, B, fig. 3, operated from the outside by the handle C. Said pump stands upon the floor of the box, but not close or tight thereto, there being a space left between the bottom of the pump and the floor of the box, for a purpose hereinafter shown.

D is a receiver or air-vessel, put in direct communication with the pump by means of a pipe located at or or near the bottom.

E is an eduction-pipe, leading from the air-vessel or receiver to the outside, where it terminates in the draught-cock F.

Arranged along the front side of the box are a number of sirup-cups, G, which may be more or less in number, as the varieties of the sirup used for savoring the soda-water may demand.

H are the draught-cocks for drawing the sirup.

#### Operation.

Soda-fountains, as usually constructed, consist of a peculiar-shaped vessel, termed a generator, which is charged under pressure with mineral or with soda-

water to be drank. Said generator is placed in the cellar, or in some other convenient place, and is put in communication with the fountain for draught by means of a pipe, a large portion of which is coiled within a cylinder filled with ice. This construction and arrangement of the apparatus is not only very expensive at the first cost, but it is also attended with large expense to keep clean and in good working order, as the pipe, by its great length, is liable to injury. Also, the generator requires to be detached from the apparatus and removed for being charged with the necessary fluid as often as it may have become exhausted, which is a matter of much care, labor, and expense. To avoid this expense and trouble is the purpose of my invention, the practical operation of which being as follows, viz:

Into the box A is put the solution of soda or other fluid, which is then kept cool by the presence of ice, thereby dispensing with the ordinary generator and the range of cooling-pipes constituting a part of the ordinary fountain. From the box the solution is pumped into the receiver or air-vessel D, which, on being charged therewith, the compressed air therein will force it out from the draught-cocks in a continuous unbroken stream into the drinking-cup containing a portion of sirup previously drawn from the vessels G, which, being prepared with a small percentage of acid, causes a lively effervescence to take place, and thus afford a pleasant cooling drink, equal to that obtained by the ordinary soda-fountain, and at greatly less expense, in view of my comparatively inexpensive apparatus. The simplicity of the construction and arrangement of this apparatus is such that it is easily kept clean and in good working condition.

#### Claim.

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

The pump B, air-vessel or receiver D, sirup-cups G, draught-coeks H F, and case or box A, and pipe E, when combined and arranged in relation to each other, and operated in the manner substantially as described, and for the purpose set forth.

S. B. SPRING.

### Witnesses:

J. H. Burridge, D. L. Humphrey.