J. Ross,

Fountain,

No. 63,099. Patented Mar. 19, 1867.

Fig. 1.

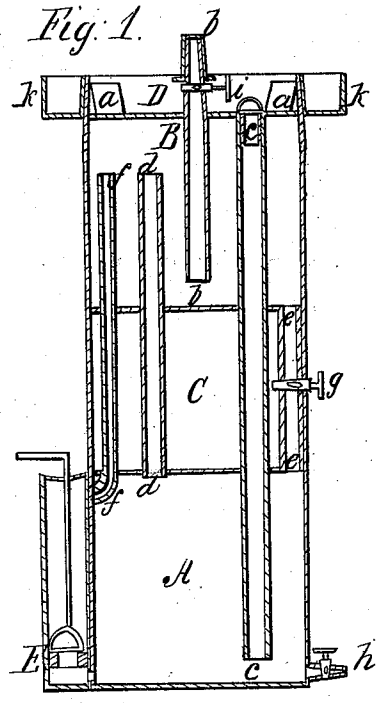
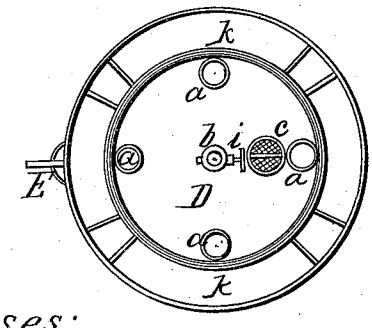


Fig. 2.



Witnesses;

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JOHN ROSS, OF GREENVILLE, MICHIGAN.

Letters Patent No. 63,099, *dated March* 19, 1866.

IMPROVEMENT IN FOUNTAINS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN ROSS, of Greenville, in the county of Montcalm, and State of Michigan, have invented a new and useful Improvement in Atmospheric Fountains; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a central longitudinal section of the apparatus.

Figure 2 is a plan.

Similar letters of reference indicate like parts.

This invention consists in improvements in a parlor atmospheric fountain, rendering it more convenient, cleanly, and ornamental by the application of a pump for elevating the water to the upper chamber, and a novel arrangement of pipes conveying air and water to the different chambers. Fountains of this kind are not new in the principle of their operation through the pressure of the air produced by a column of water descending from a receiver at the top to a lower chamber, and forcing the air contained in it into an upper chamber partially filled with water, and thence through a jet pipe to issue above; but the apparatus, as hitherto constructed, has been quite imperfect, requiring frequent attention to refill the receiver by drawing the water off from the lower chamber and pouring it by hand into the upper one, as well as the receiver. By my improvement of adding a pump and other modifications, the same water once introduced is easily worked over and over with trifling attention.

A is an air-tight chamber in the lower part, and B a similar chamber in the upper part of the vessel, separated by a space, C, of indefinite size, according to the desired height of the jet of the fountain. On the top of the chamber B is an open basin or receiver, D, within which is placed a number of small vases or other receptacles, *a a*, for holding cut flowers. *b b* is a jet pipe soldered in the centre of the basin D, with a rose spout, if desired, on the upper end, and running down to the lowest part of the chamber B. *c c* is a pipe, also soldered in the bottom of the basin D, with a wire gauze on the upper end to prevent leaves, &c., clogging the pipe, and running down to the lower part of the chamber A. *d d* is an air pipe communicating between the chamber A and the chamber B. *e e* is a pipe connecting the chambers A and B. E is a force-pump, attached to the side of the chamber A, from the lower part of which it draws water, elevating it through the pipe *f f* into the upper chamber B. In the pipe *e e* is a stop-cock, *g*. At the bottom of the chamber A is a faucet, *h*, and in the jet pipe *b b* is a stop-cock, *i*. On the top of the chamber B, and surrounding the basin D, is set a rim, *k k*, divided into compartments for receiving earth or placing ornamental vases or flower-pots for living plants.

The operation is as follows: The faucet *h* and stop-cocks *g i* being closed, water is poured into the basin D, which runs through the pipe *c c* into the lower chamber A, by which the air is compressed and forced up through the pipe *d d* into the chamber B. The pump E then forces the water from A into B. By opening the stop-cock *i* the water will then be forced by the compressed air through the jet pipe *b b* and fall in spray in the basin D, from which it will run through the pipe *c c* back into the chamber A. The fountain will continue to play and the operation be continued for some time, according to the size of the apparatus and the volume of the jet until equilibrium is restored. By pumping the water again the operation will be easily renewed. When it is desired to change the water the stop-cock *g* is opened and the water drawn off through the faucet *h*.

Having described the construction and operation of my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination and arrangement of the receiver D, chambers A and B, jet pipe *b*, pipe *c*, air pipe *d*, pipe *e*, pump E, pipe *f*, stop-cocks *g h* and *i*, substantially as described for the purpose specified.

JOHN ROSS.

Witnesses:

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D. W. DAY.