H. WAGNER.
Parlor-Fountain.

No. 205,928. Patented July 9, 1878.

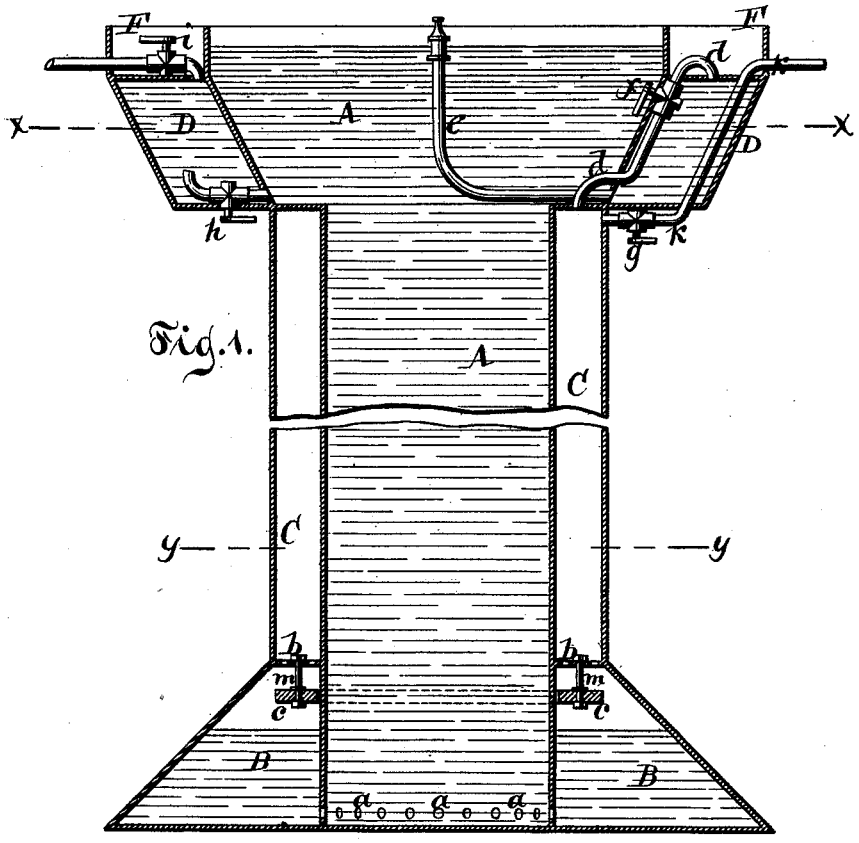


Fig. 1.

Fig. 2.

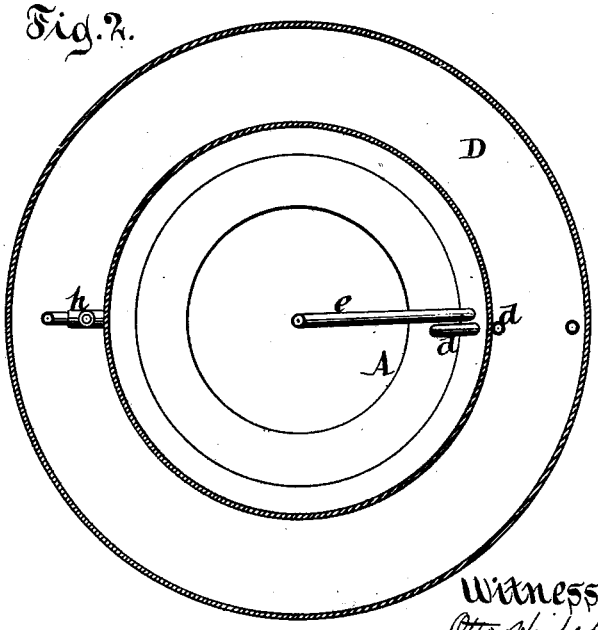
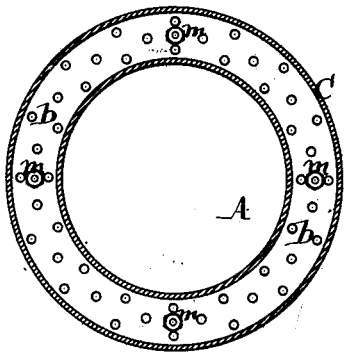


Fig. 3.



Witnesses.
Otto Hupfeld.
Chas. Wahlers.

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his attys

UNITED STATES PATENT OFFICE.

HERMANN WAGNER, OF ELIZABETH, NEW JERSEY.

IMPROVEMENT IN PARLOR-FOUNTAINS.

Specification forming part of Letters Patent No. **205,928**, dated July 9, 1878; application filed January 7, 1878.

To all whom it may concern:

Be it known that I, HERMANN WAGNER, of Elizabeth, Union county, New Jersey, have invented a new and useful Improvement in Parlor-Fountains, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a vertical central section. Fig. 2 is a horizontal section in the line *x x*, Fig. 1. Fig. 3 is a horizontal section in the line *y y*, Fig. 1.

Similar letters indicate corresponding parts.

This invention consists in combining, with a main reservoir, a secondary compartment, into which water from the main reservoir flows, and also above this a compartment for compressed air, this compressed-air compartment and the secondary compartment, which receives the water from the main reservoir, being separated by a perforated diaphragm, against which a float is pressed when the water in the side compartment has risen to a certain height, and which float prevents the water from entering the compressed-air compartment; also, in combining, with the compressed-air compartment and the jet-compartment, containing the water which is to be forced out in a jet, a tube leading from the compressed-air compartment into the jet-compartment, which tube is provided with a stop-cock, so that the fountain can at any moment be made to cease playing; also, in combining, with the compressed-air compartment and the jet-compartment, a tube provided with a stop-cock, through which air can be blown into the compressed-air compartment to force the water in the secondary compartment under it into the main reservoir; and also a tube which allows some of the water in the main reservoir to flow into the jet-compartment, containing the water to be forced out in a jet, and a tube which allows the air in the jet-compartment to escape and make room for the water to enter.

In the drawings, the letter A designates a main reservoir filled with water or any other liquid. At the bottom of this main reservoir are a series of perforations, *a a*, which allow the water to flow into the circular secondary compartment, B B. This secondary compartment is separated from the compressed-air compartment C C by a perforated diaphragm, *b b*. The letters *c c* designate a circular float, of cork or any other suitable material, the object of which is to prevent the water in the secondary compartment B B from flowing into the compressed-air compartment C C. To effect this, the buoyant belt or float *c c* is pushed up, when the water rises in the secondary compartment B B, and when the water in the secondary compartment B B is at a proper height the float is pressed against the perforations in the diaphragm *b b*, thus effectually closing these perforations and excluding the water.

The top of the float may be covered with rubber or any flexible material, to more perfectly close the openings in the diaphragm *b b* when the float *c c* is pressed up. This float *c c*, being in the form of a belt or ring, is guided by the partition formed between the main reservoir A and secondary compartment B, and is thus not liable to be deranged. This float *c c* is also prevented from falling down a greater distance than necessary by wires *m m*, which slide in the perforated diaphragm *b b*.

The compressed-air compartment C C is filled with air, which is compressed by the head of the fluid in the main reservoir A. A tube, *d d*, leads from the top of the compressed-air compartment C into the top of the jet-compartment D D, which also is in the form of a circular box placed around the main reservoir A. By means of this tube the compressed air in the compartment C presses on the surface of the fluid in the jet-compartment D, and thus the water in the jet-compartment D is forced out through the tube *e* attached at the bottom of the jet-compartment D. This tube *e* has a nozzle, and the fluid is thus forced up some distance, forming a jet, as clearly shown in Fig. 1.

The water from the jet falls into the main reservoir A, and at the same time part of the air in the compressed-air compartment C enters into the jet-compartment D. This causes the water in the secondary compartment B to rise and gradually press the float *c c* against the perforated diaphragm, as already described. When this takes place the fountain stops playing.

To set the fountain playing once more, the stop-cock *f* in the tube *d d* is closed, cutting

off the communication between the jet-compartment D and compressed-air compartment C; also, the stop-cocks *g*, *h*, and *i*, which were closed while the fountain was playing, are now opened. Through the tube *k k*, whose stop-cock *g* is now open, air is vigorously blown. This air presses on the surface of the water in the secondary compartment B, and forces it through the openings *a a* outward into the main reservoir A. This action forces the water, through the tube and stop-cock *h*, into the jet-compartment D. The tube and stop-cock *i* allow the air in the jet-compartment D to escape and make room for the water to enter. As soon as this jet-compartment D is again full of water, the stop-cocks *g*, *h*, and *i* are closed, and on opening the stop-cock *f* the fountain begins playing once more.

By this arrangement I am enabled to avoid the operation of drawing the fluid out of the secondary compartment and pouring the same back into the jet-compartment, which is necessary in the ordinary parlor-fountains, and the fountain can also be put in working order much more rapidly than the old parlor-fountains.

The compartment F F is for the reception of plants, flowers, or other articles of ornament, which can be arranged in a circular form around the jet from the tube *e*.

The whole fountain may be made of tin or other suitable materials, and ornamented to suit the taste.

The jet from the tube *e* is also kept at a uniform height, or nearly so, while the fountain is playing, as the float *c c* closes the openings in the diaphragm when the head of fluid in the main reservoir A begins to diminish to any great extent.

I claim as new and desire to secure by Letters Patent—

1. The combination, in a parlor-fountain, of a main reservoir for water or other liquid, a secondary compartment, which communicates with the main reservoir near its bottom, a compartment for compressed air, a perforated diaphragm between the secondary compartment and the compressed-air compartment, and a float-valve which serves to close the perforations of the diaphragm and prevents the water from rising into the compressed-air compartment, all arranged and operating substantially as and for the purpose described.

2. The combination, in a parlor-fountain, of a tube, *d*, forming a connection between the compressed-air compartment and jet-compartment, a tube, *k*, serving to blow air into the compressed-air compartment, a tube and stop-cock, *h*, for letting the water flow into the jet-compartment, and air-escape pipe *i*, all combined and operating substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 2d day of January, 1878.

HERMANN WAGNER. [L. S.]

Witnesses:
W. HAUFF,
E. F. KASTENHUBER.