

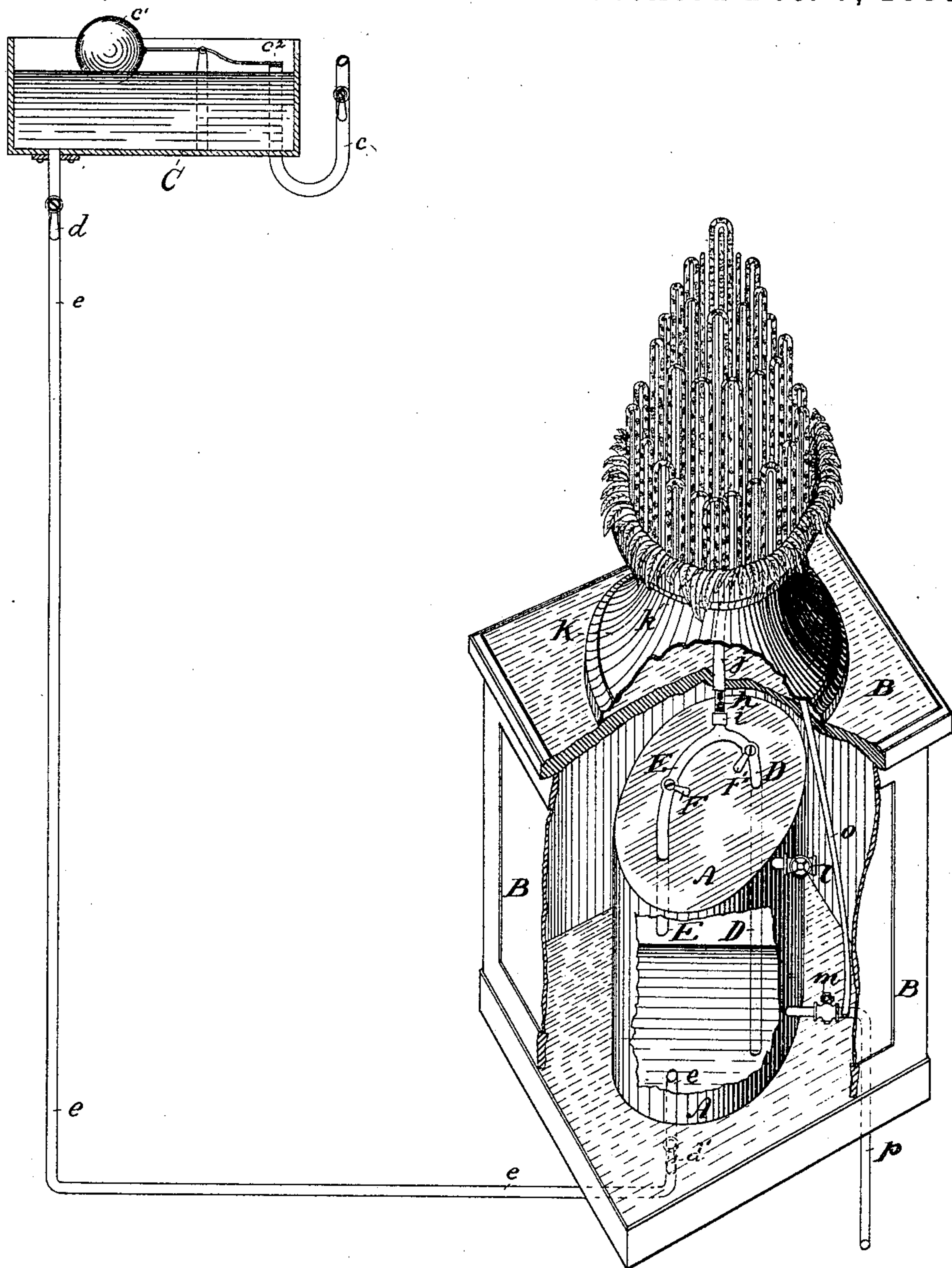
(No Model.)

J. C. JOHNSON.

AERATED WATER FOUNTAIN.

No. 353,862.

Patented Dec. 7, 1886.



WITNESSES:

*Herman Bornmann.*

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INVENTOR.

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# UNITED STATES PATENT OFFICE.

JOHN C. JOHNSON, OF ATLANTIC CITY, NEW JERSEY.

## AERATED-WATER FOUNTAIN.

SPECIFICATION forming part of Letters Patent No. 353,862, dated December 7, 1886.

Application filed September 20, 1886. Serial No. 213,982. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN C. JOHNSON, of Atlantic City, in the State of New Jersey, have invented certain new and useful Improvements in Aerated-Water Fountains, of which improvements the following is a specification.

My invention relates to certain improvements in the construction and operation of that class of fountains designated as "aerated-water fountains," for which Letters Patent were granted to me under date of May 28, 1872; and the object of my present invention is to dispense entirely with an air-pump for the purpose of compressing the air in the main cylinder, and to store up a sufficient quantity of air therein through the introduction of the water into the cylinder from an elevated tank to supply the necessary motive power for causing the mingled water and air to pass alternately up and down through a cluster or pyramid of bent glass tubes and discharging the water therefrom through a pipe into any suitable receptacle connected therewith, whereby certain scenic effects are produced and objectionable features heretofore encountered in the use of such fountains obviated.

My invention consists of a tank located at any suitable elevation, and from which a pipe provided with stop-cocks extends to and into a hollow cylinder within a case made of wood or other suitable material. To this hollow cylinder for containing the water and air are inserted two tubes, one longer than the other; and through which pipes provided with suitable regulating stop-cocks the air and water respectively pass to and through a cluster or pyramid of bent glass tubes, secured to an ornamental stand of any suitable construction resting upon the cabinet or case, and the waste water discharged, after having passed through the bent glass tubes, through a pipe into any suitable receptacle connected directly therewith. On the cylindrical surface of the hollow cylinder, near the top, is provided an automatically-operating air-valve for the admission of the air to this cylinder, and near the bottom of the cylinder is a stop-cock and pipe for discharging the water therefrom into any suitable receptacle.

The construction, arrangement, and operation of my improvements will be more fully

understood by reference to the accompanying drawing, showing in perspective my improved fountain, the elevated tank for supplying the water to the main cylinder and for furnishing the power for causing the mingled air and water to pass through the series of bent glass tubes of the fountain, and the pipes for discharging the water from the tubes and cylinder into a suitable waste-receptacle.

Referring to the drawing, A is a hollow cylinder, secured within a cabinet, B, made of wood or other suitable material. This hollow cylinder A is represented as partially filled with water, which is supplied thereto from a pipe, *e*, provided with stop-cocks *d d'*, and which pipe extends from the elevated tank C downward through the floor of the cabinet or case B and into the cylinder A. The elevated tank C may be connected, by means of a pipe, *e*, with a water-main, and the flow of water into the tank is automatically regulated by a weighted ball-cock, *c'*, and valve *c''*, so that when the water falls below a certain level in the tank the valve will open automatically and supply the tank again with the proper quantity of water, and hence, it will be observed, by such an arrangement a supply can be kept up continuously therein.

D is the water-pipe, extending from near the bottom of the cylinder through the top or sides of the cylinder and uniting with the air-pipe E, extending downward into the cylinder a short distance. These pipes D and E are provided with regulating-cocks F F', for permitting of a regulated flow of water and air through the gage *h*, secured at one end to the U-shaped pipes D and E by means of hose *i*, and at the other end to rubber tubing *j*, connected with the main glass tube *k*, which is united to the series of bent glass tubes secured within the base of the stand K by means of short lengths of rubber tubing, thereby conducting the mingled water and air around through the series of tubes, and discharging the water through a suitable pipe, *o*, connected with the waste-pipe *p*, into any suitable receptacle.

On the cylindrical surface of the hollow cylinder A is preferably placed an automatic check-valve, *l*, for regulating the supply of air to this cylinder, and near the bottom is se-



cured a stop-cock, *m*, having connected thereto a pipe for discharging the water from the cylinder into a suitable waste-receptacle.

When it is so desired to discharge the water from the main cylinder A for charging the same with air, the air and water pipe stop-cocks F F' are closed, as is also the supply stop-cock *d* or *d'*, and the discharge stop-cock *m*, leading from the cylinder, opened, permitting of the free discharge of the water from the main cylinder A through the pipe *p* into any suitable receptacle connected therewith, and operating the automatic check-valve *l* during this regulated discharge, which charges the cylinder with a sufficient quantity of air, so that when the stop-cock *m* has again been closed and the supply stop-cock *d* or *d'* opened, permitting of the flow of water again into the tank, the air will be sufficiently condensed in the cylinder to cause a regulated flow of mingled water and air into and through the pyramid of bent glass tubes of the fountain, after the stop-cocks F F' have been opened, in the form of globules, of varying size and shape, in rapid succession, and producing thereby a scenic effect of much beauty.

Having thus described the nature and ob-

jects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an aerated-water fountain, the combination, with the elevated tank B, pipe *e*, and stop-cocks *d d'*, of the hollow-cylinder A, air and water pipes D and E, and regulating-cocks F F', gage *h*, tubes *j k*, and stand K, all arranged substantially as and for the purposes set forth.

2. In an aerated-water fountain, the combination, with the elevated tank having an automatic valve for the admission of the water and a discharge-pipe provided with stop-cocks, of the hollow cylinder, air and water pipes provided with regulating-cocks, the stand, and the glass tubes secured therein, the automatic air-valve, and the water-discharge cocks secured to the cylinder, substantially as described, for the purposes set forth.

In witness whereof I have hereunto set my signature in the presence of two subscribing witnesses.

JOHN C. JOHNSON.

Witnesses:

A. B. ENDICOTT,  
J. F. HALL.