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2 SHEETS—SHEET 1.



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FOUNTAIN.

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2 SHEETS—SHEET 2.

Fig. 2

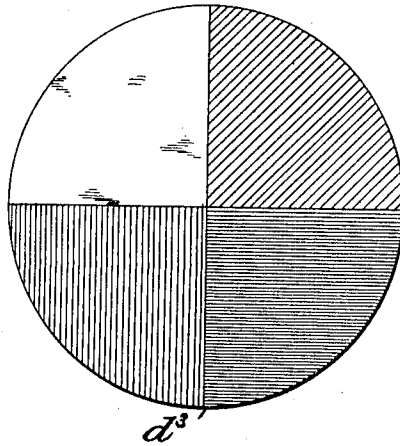


Fig. 3

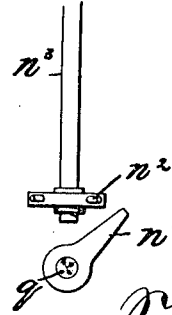
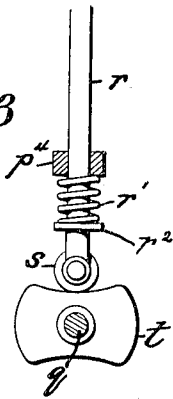


Fig. 4

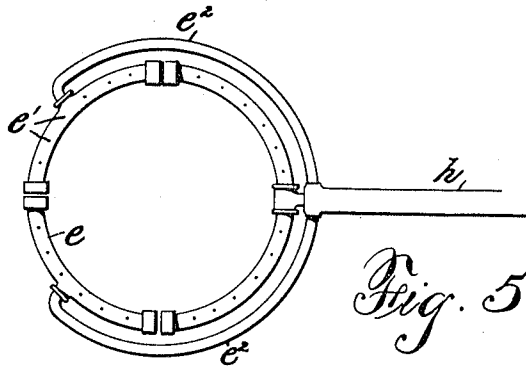


Fig. 5

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FOUNTAIN.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES A. DUNLAP, a citizen of the United States, residing in Vailsburgh, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Fountains; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My present invention relates to improvements in water-fountains and it consists essentially in the novel construction and arrangement of the various parts, which do not require the constant presence of an attendant, and owing to its comparative simplicity, is not liable to become inoperative accidentally, and the primary object of this invention is to produce a self-contained and portable fountain adapted to be set up and connected in any convenient manner.

In the accompanying drawings, similar letters of reference indicate similar parts throughout in which:

Figure 1 represents a vertical central sectional view of the fountain. Fig. 2 a detail plan view of the color shade employed. Figs. 3 and 4 are enlarged views of the water valve and color shade actuating mechanism, and Fig. 5 is an enlarged view of one of the discharge pipes provided with suitable discharge orifices.

a represents the fountain as a whole, *b* the water basin or reservoir and *c* the support or stand of the fountain.

Centrally and suitably mounted in the water reservoir *b* is a transparent or translucent concavo-convex support *d* around and above which is suitably and conveniently arranged the fountain proper, consisting essentially of the tubular ring *e* and the discharge pipes *f* and *g*. The tubular ring *e* (see Fig. 5), is provided with suitable discharge orifices *e'* from which the water is discharged, the water being supplied by the water supply pipe *h*. This tubular ring *e* as heretofore made consisted of a single piece of pipe formed into a ring and provided with suitable discharge orifices and one inlet, but this structure caused the water discharged from the orifices farthest from the inlet to reach a height higher than the

water discharged from the orifices which were located nearest said inlet, thereby producing an uneven effect. In order to obviate this difficulty, I employ a ring of pipe built up of several pieces, preferably four as shown, the ends of which are closed and then connect said several pieces with a supplemental supply pipe as *e²* which is fed from the supply pipe *h*. Centrally mounted on the support *d* is a circular chamber *h'* with discharge orifices from which water is also discharged, the water being supplied by the water supply pipe *f*.

The water supply pipes *f*, *g* and *h* are conveniently connected with and receive their supply of water from the force pump *i* which is fed from the reservoir *b* by means of the water supply pipe *j* said pipe being in direct communication with the said reservoir *b*. This construction enables the water which is originally placed in the reservoir to pass through the fountain, and in lieu of running to waste, may be repeatedly re-used by conducting it in the manner described through the actuated-force pump *i*. Should it be desired for obvious reasons, to drain the basin or reservoir *b*, it will only be necessary to remove the plug *k* from the drain-pipe *l*.

Interposed at any convenient point between the orifices of the water supply pipes *f*, *g* and *h* and the pump *i*, are independent valves *m*, *m'*, and *m²*, so that the supply of water to each of said orifices may be automatically controlled at fixed intervals of time.

An inverted reflector *n* is located below the concavo-convex support *d* and fastened in any suitable manner to the under side of the reservoir *b* and contains an incandescent lamp *d'* arranged to be lighted through the medium of an electric current passing through the wires *d²*.

Interposed between the reflector *n* and the support *d* is a rotary color shield or shade *d³* rotated by means of the finger *n'*, which is secured to the shaft *q* of the driving means, and which engages with suitable pins *n²* secured to the end of the shaft *n³* which supports and rotates said color shield. The rotary color shield or shade *d³* is divided into four equal parts which are unlike in color (see Fig. 2) and is so arranged that each part will be swung into and maintained in position over the lamp. By the use of the rotary color shield or shade *d³*

which is composed of plates of different colors and rotated between the concavo-convex support d and the light d' below a variety of coloring may be produced which coming
5 from below and illuminating only the play of the fountain, will result in the production of novel, striking and beautiful effects.

When in combination with the transparent concavo-convex support, a fountain composed as above described, the pipes of which are provided with separate inlets and independent controlling valves as hereinbefore described, is employed a great variety of changes is rendered possible, resulting in
15 the production of a series of striking and constantly changing effects, the whole forming a novel and beautiful spectacle.

The mechanism for automatically operating the pump i and the controlling valves
20 m , m' and m^2 , is mounted on the support or stand c in any suitable manner and consists of the motor o provided with the conducting wires o' connected with any suitable source or generator of electricity. The horizontal shaft p of the motor is provided with
25 a worm p' , said worm meshing with the worm-wheel p^2 , which is secured to and rotates the pump shaft p^3 , said shaft p^3 being mounted in the brackets p^4 . Suitably mounted in the brackets p^4 is another shaft q which is driven by the gears q' , q^2 , q^3 and q^4 , all of which are operated from the pump-shaft p^3 and said shaft q carries the valve and color shade or shield actuating mechanism.

The valve actuating mechanism (see Fig. 3), consists essentially of the operating lever r which at its top end is pivotally connected with an extension formed in the valve stem of the independent valves and provided at
40 its lower extremity with a roller s designed to engage with and be operated upon by the rotation of the cam t which is secured to and rotates with the shaft q . While the cam t serves to raise the valve operating lever r after the roller has reached the highest point on said cam, thereby opening the valve in the water supply pipe and permitting the water to be discharged, the spring r' surrounding the lever r and interposed between
45 the collar r^2 on said operating lever r and the under side of the bracket through which said lever passes, serves to pull down the lever r thereby causing the valve to which it is connected to be quickly closed.

55 I claim:

1. In a portable fountain, the combination of a fountain basin, a main water supply pipe directly communicating with said fountain basin and receiving its water supply from the fountain basin, a series of independent supply pipes provided with discharge orifices constituting the fountain proper, a corresponding series of independent valves for controlling the admission of
60 water into said pipes, a pump communicating

with the several supply pipes and a pump motor for operating said pump and having means for operating said independent valves in succession.

2. In a portable fountain, the combination of a fountain basin, a main water supply pipe directly communicating with said fountain basin and receiving its water supply from the fountain basin, a series of independent supply pipes provided with discharge orifices constituting the fountain proper, a corresponding series of independent valves for controlling the admission of water into said pipes, a suitably located light for illuminating the water issuing
75 from said discharge orifices, a pump communicating with the several supply pipes and a pump motor for operating said pump and having means for operating said independent valves in succession.

3. In a portable fountain, the combination of a fountain basin, a main water supply pipe directly communicating with said fountain basin and receiving its water supply from the fountain basin, a series of independent supply pipes provided with discharge orifices constituting the fountain proper, a corresponding series of independent valves for controlling the admission of water into said pipes, a suitably located
90 light for illuminating the water issuing from said discharge orifices, a color shade interposed between the said orifices and the said light, a pump communicating with the several supply pipes and a pump motor for
95 operating said pump and having means for operating the color shade and independent valves in succession.

4. In a portable fountain, the combination of a fountain basin, a main water supply pipe directly communicating with said fountain basin and receiving its water supply from the fountain basin, a series of independent supply pipes provided with discharge orifices constituting the fountain proper, a corresponding series of independent valves for controlling the admission of water into said pipes, a suitably located light for illuminating the water issuing
105 from said discharge orifices, a color shade interposed between the discharge orifices and the said light, automatically actuated mechanism arranged to interpose said shade between the light and the discharge orifices at predetermined intervals, a pump communicating with the several supply pipes and a pump motor for operating said pump and having means for operating said independent valves in succession.

5. In a portable fountain, the combination of a fountain basin, a main water supply pipe directly communicating with said fountain basin and receiving its water supply from the fountain basin, a series of independent supply pipes provided with dis-
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charge orifices constituting the fountain proper, a corresponding series of independent valves for controlling the admission of water into said pipes, a suitably located
5 light for illuminating the water issuing from said discharge orifices, a divided color shade of unlike colors interposed between the discharge orifices and the said light, a pump communicating with the main supply
10 pipe and the several supply pipes, and a

pump motor for operating said pump and having means for operating said independent valves in succession.

This specification signed and witnessed this 19th day of May 1906.

CHARLES A. DUNLAP.

Witnesses:

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