

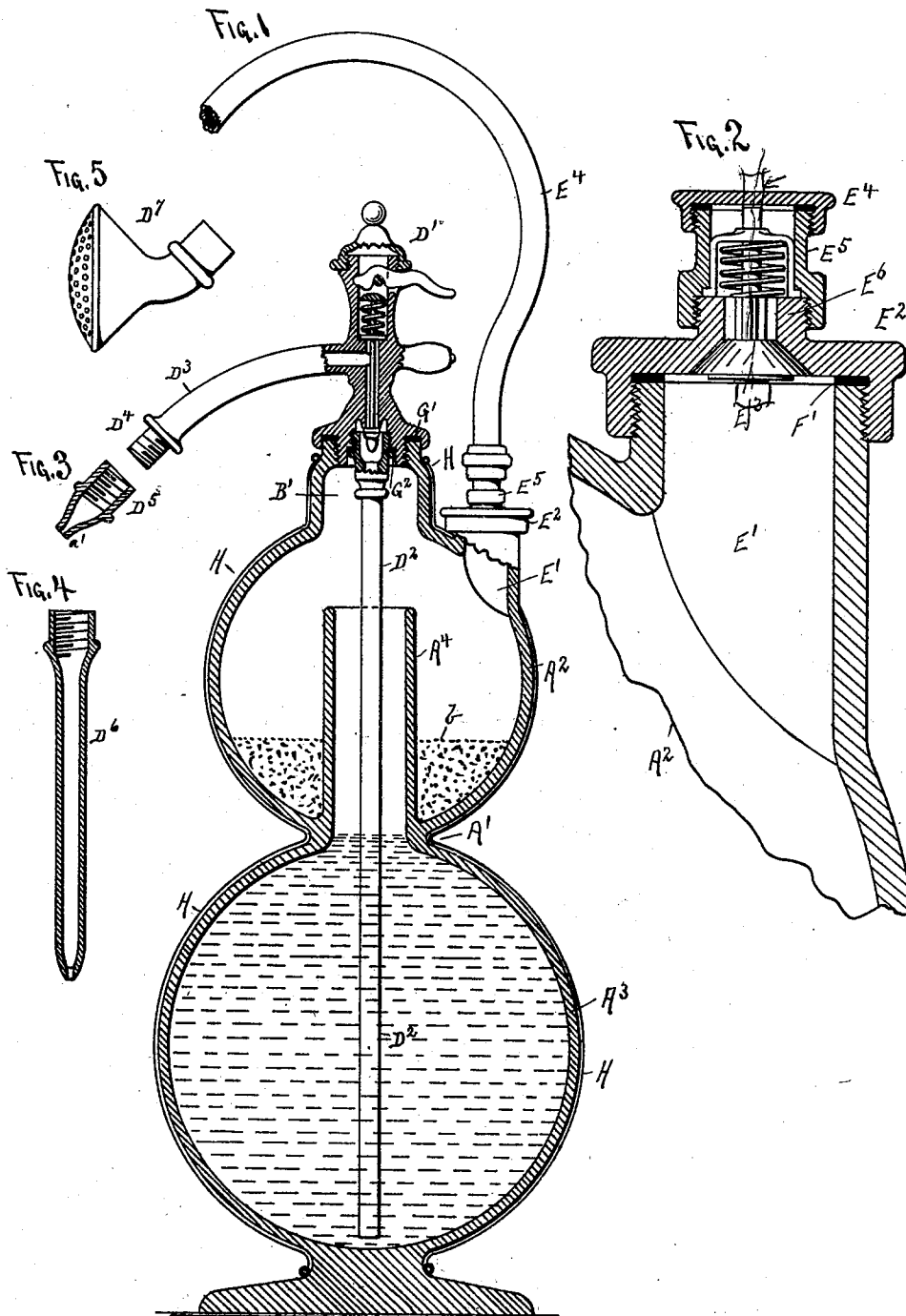
No. 636,226.

Patented Oct. 31, 1899.

E. O. HALVORSON.
AERATED WATER FOUNTAIN.

(Application filed July 13, 1897. Renewed May 12, 1899.)

(No Model.)



WITNESSES,
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UNITED STATES PATENT OFFICE.

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AERATED-WATER FOUNTAIN.

SPECIFICATION forming part of Letters Patent No. 636,226, dated October 31, 1899.

Application filed July 13, 1897. Renewed May 12, 1899. Serial No. 716,510. (No model.)

To all whom it may concern:

Be it known that I, ERICK O. HALVORSON, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Aerated-Water Fountains, of which the following is a specification.

This invention relates to an apparatus for containing water and other liquids, and where in a gas may be generated to create a pressure to cause the water to flow therefrom; and the invention consists in the construction, combination, and arrangement of parts as hereinafter shown and described, and specifically pointed out in the claim.

In the drawings, Figure 1 is a sectional elevation of the apparatus complete. Fig. 2 is an enlarged sectional detail of the charging-inlet. Fig. 3 is a sectional detail of the "tip" employed on the discharge-faucet when a fine-stream discharge is required. Fig. 4 is a sectional detail of the tip employed on the discharge-faucet when the water is to be discharged into a glass. Fig. 5 is a side view of a spray-nozzle adapted to be attached to the discharge-faucet.

This apparatus consists of a receptacle, preferably of glass, divided by a contracted portion A' into an upper compartment A² and lower compartment A³ and with a tube A⁴ projecting from the lower compartment upward into the upper compartment, as shown, these parts all being preferably in one piece of glass. The upper compartment A² has an inlet B' with a screw-thread on the inside, upon which a pressure-faucet D' is attached, and with tube D² extending downward close to the bottom of the lower compartment A³. This tube D² and the interior parts of the faucet D' will be of non-corrosive material and so far as practicable will preferably be of glass.

E' is an inlet into the side of the upper compartment A² and provided with a screw cap or cover E², the cap having a rubber or other suitable washer F'. The faucet D' is also provided with suitable washers G' G², so that the contents of the receptacle may be retained under pressure. The cap E² is provided with an inwardly-working check-valve E³, ar-

ranged to be opened by the attachment of a tube E⁴, as in Fig. 1, so that a pressure of air or other gas may be forced into the receptacle.

The discharge D³ of the faucet D' is provided with a screw-nozzle D⁴, so that a tip D⁵, as in Fig. 3, with a reduced outlet a' may be attached when a jet-discharge is required.

In Fig. 4 is shown the form of tip D⁶ which will be employed when the contents of the receptacle are to be discharged into a drinking-glass.

In Fig. 5 is shown a spray-nozzle D⁷, which may be employed if required.

In charging the apparatus the faucet is removed and the lower compartment filled with water, preferably by a funnel with a discharge long enough to reach into the tube A⁴, so that no water will enter the upper compartment, which must be kept perfectly dry when charging the apparatus. The faucet is then secured in position and the powder b, which is to form the gas when combined with the water, is then inserted into the upper compartment through the inlet E', care being taken that none of the powder falls into the water in the lower compartment. The function of the tube A⁴ is to prevent the powder from entering the lower compartment, as will be readily understood. The cap E² is then screwed on and the apparatus tilted until some of the water overflows through the tube A⁴ into the compartment A' and mingles with the powder therein, when a powerful gas will be formed, which by its pressure upon the water will cause it to flow with considerable force through the faucet D'. It will only be necessary to allow a small quantity of the water to flow into the upper compartment to generate just sufficient gas to form a pressure sufficient to cause the water to flow from the faucet, and then when that supply of gas is exhausted the apparatus will be again tilted and another small quantity of water allowed to run into the upper compartment and another supply of gas generated. By this means one charging of powder may be made to serve for several chargings of the water into the lower compartment.

The receptacles may be made of any de-

sired size and shape and of any suitable material, but, as before stated, will preferably be of glass.

5 The powder employed may be of any of the usual kinds, which when combined with water will produce a gas, such as tartaric acid and bicarbonate of soda; but any other suitable compound may be employed.

10 A wire or other netting will encompass the receptacle to strengthen it, this netting being indicated at H.

The apparatus may be employed to distribute perfumed water by means of the spray-nozzle shown in Fig. 5. Under some circumstances disinfectants may also be distributed in the same manner or by means of any other form of discharge-tip.

20 The screw-cover E⁴ on the valve-casing E⁵, which will be employed to protect the valve E³ when not in use, is made to fit the nozzle E⁶ of the cap E², so that if the valve is not required it may be removed, and the cover E⁴ screwed upon the nozzle E⁶ to close the opening formerly occupied by the valve.

25 The compound employed in the upper part of the receptacle may be compressed into small cakes or globules and placed in the vessel in that condition. When the compound is thus employed, the small quantity of wa-

30 ter necessary to cause the generation of the gas may be poured in through the inlet E' instead of tilting the whole vessel, as before described, when the compound is in the form of a loose powder, as the compound when compressed will effervesce slowly enough to 35 allow time for the cap to be screwed into place.

The apparatus may be employed to contain cider, Vichy water, or any other substance containing acids or chemical compounds.

40 Having thus described my invention, what I claim as new is—

In an "aerated-water fountain," a receptacle divided into two compartments, and with a tubular projection from the lower into the 45 upper compartment, a pressure-discharge faucet connected to be fed from said lower compartment, an inlet into said upper compartment, a screw-cap upon said inlet having an inwardly-opening valve therein, whereby 50 air or liquid under pressure may be forced into said receptacle, substantially as set forth.

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

ERICK O. HALVORSON.

In presence of—

C. N. WOODWARD,
LEON G. LAMBERT.