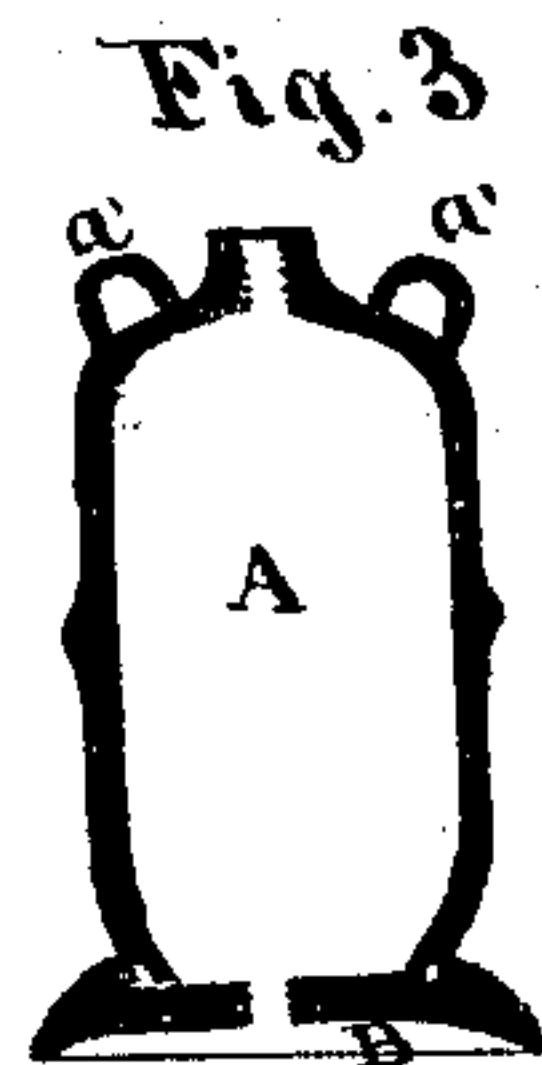
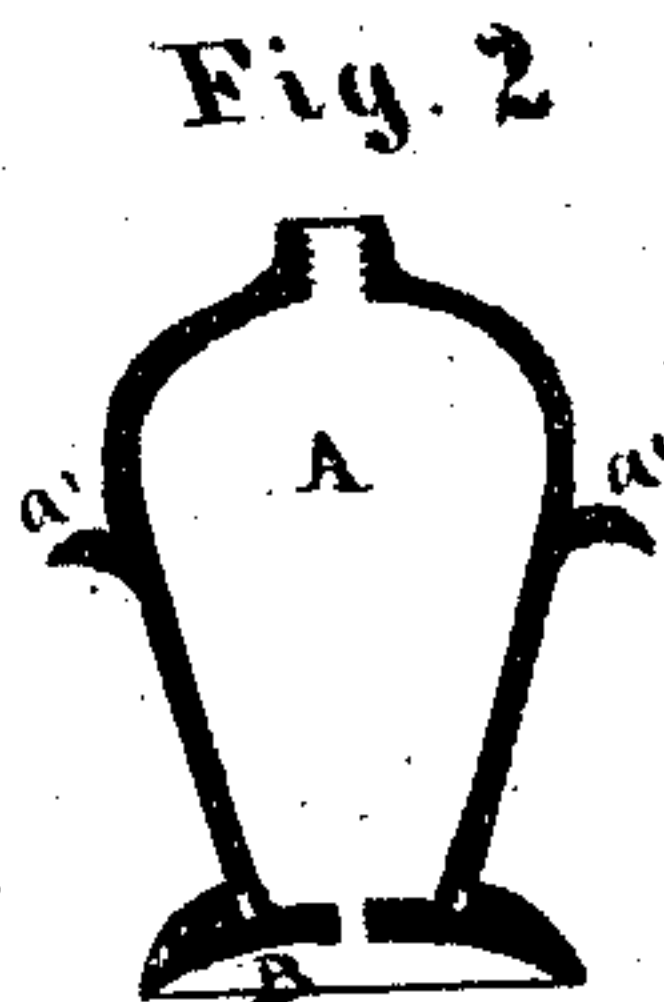
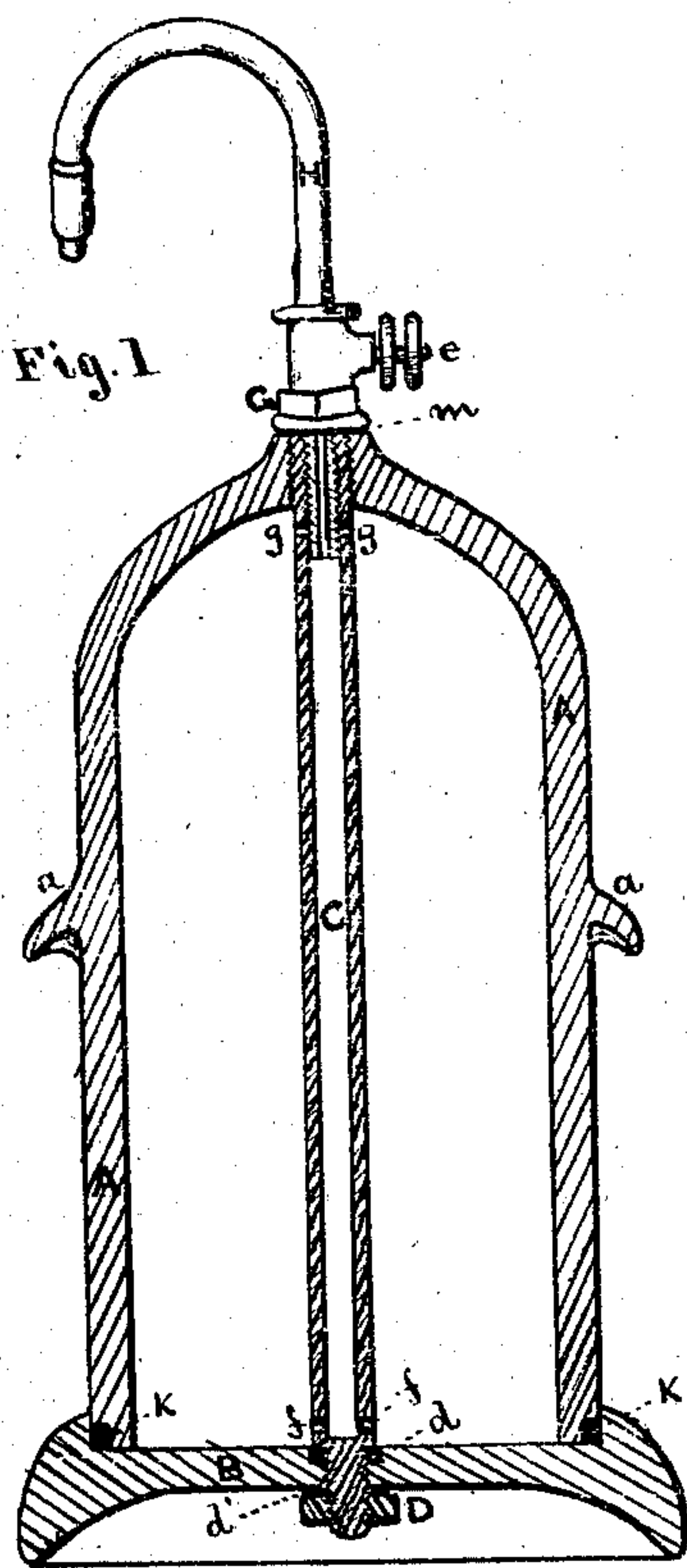


E. M. Fowler,

Soda Fountain.

No. 105,933.

Patented Aug. 2. 1870.



Witnesses

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ELISHA M. FOWLER, OF WASHINGTON, DISTRICT OF COLUMBIA, AS
SIGNOR TO HIMSELF AND ANDREW McCALLUM.

Letters Patent No. 105,933, dated August 2, 1870.

IMPROVEMENT IN SODA-FOUNTAIN.

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

I, ELISHA M. FOWLER, of Washington city, in the District of Columbia, have invented certain Improvements in Portable Soda-Water Fountains, of which the following is a specification.

The nature of my invention relates to improvements in that class of portable cast-iron soda-water fountains, which require to be constructed in such a way as to permit of their being conveniently lined with porcelain or otherwise coated with enamel on the inside, so as to protect the metal from the corrosive effect of the soda-water.

My improvements consist in a simple and economical method for uniting the various parts, so as to produce perfectly air-tight fountains, strong enough to resist the pressure of the gas with which they are charged, the advantages claimed being greater economy in the construction of parts, simplicity in the methods of putting them together, or in separating them for repair, or cleaning, whereby all existing objections to the general use of these portable fountains are in a great measure, obviated.

In the accompanying drawing—

Figure 1 is a vertical sectional view of a fountain, showing my improved methods of construction.

Figures 2 and 3 are examples of different-shaped fountains, adapted to the use of my improvement.

A represents the upper portion or cylindrical body of a fountain, cast in one piece, of any convenient size or shape, terminating in a neck-shaped projection on the top, and open at the bottom. A shoulder or annular recess, suitable to receive packing, is cast around the bottom of A, and handles or lugs *a a'*, or other suitable lifting device, may be cast or otherwise secured to the sides.

B is a flanged movable bottom, into which the body of the fountain is fitted, rubber or other suitable packing, K, being inserted between them.

The pieces A and B, are lined on the inside, with porcelain or other enamel.

In the fountain represented by fig. 1, a hole is cast or drilled through the neck of piece A, and a corresponding hole through the center of bottom piece B. Around this latter hole an annular recess may be cast or drilled, to receive packing *d*.

These holes are cut with a screw-thread, to receive the tube or hollow rod C, which is left open at its upper end, where it is cut with an external and internal screw-thread. At its lower end it is made solid, and cut with a screw-thread on the outside. This tube C is made of galvanized iron or other anti-corrosive metal.

By this method of construction, the upper end of tube C is screwed into the neck of the fountain, and the bottom piece B is screwed onto its lower end. A

nut D is then screwed onto the part projecting below the bottom, a washer, *d'*, or other suitable packing being placed between them.

Small holes, *f*, are drilled through pipe or tube C, on a level with the inside of bottom piece B and vent holes or slots *g* are also cut in tube C, near its upper end, below the neck of the fountain.

Instead of the tube C being made solid at its lower end and secured to the bottom as aforesaid, a set-screw may be inserted through the bottom B, and screwed onto the lower end of tube C, thereby accomplishing the same result without requiring the end of tube C to be so made solid.

H is a small tube or goose-neck screwed into tube C, through the neck of the fountain, far enough to close the holes or slots *g*.

This tube is also firmly secured to the neck by nut G and packing *m*, and is provided with a valve, *e*.

If desired, the pipe H may be made to extend downward, through tube C, to a level with the top of holes *f*, and also, if desired, the goose-neck may be made separate, and screwed on above the valve *e*.

The operation of my improved fountain is as follows:

The body and bottom piece of the fountain, fig. 1, being cast as aforesaid, and lined with porcelain or other enamel, are securely united by the tube C in the manner described. A sufficient quantity of water is then introduced through the neck, finding its way into the fountain through the holes *f*, the air escaping through the holes *g*. Gas from a separate generator of the required strength and volume, is then forced into the water in the same way, and the pipe H is then secured in the neck, when the fountain is ready for use. By turning the valve *e*, the pressure of the gas in the upper part of the fountain forces the soda-water through the holes *f*, and up through the goose-neck in any desired quantity, until the contents of the fountain are completely exhausted.

I do not claim cast-iron fountains of any particular shape.

I claim—

1. A portable soda-water fountain, constructed as described, in which the tube or hollow rod C is the channel of induction and eduction, and also the bond of union, substantially as described and for the purpose specified.

2. In combination with the tube C, as aforesaid, the fountain A, and movable bottom B, and nut D, substantially as and for the purpose specified.

ELISHA M. FOWLER.

Witnesses:

R. H. MARSH,
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