

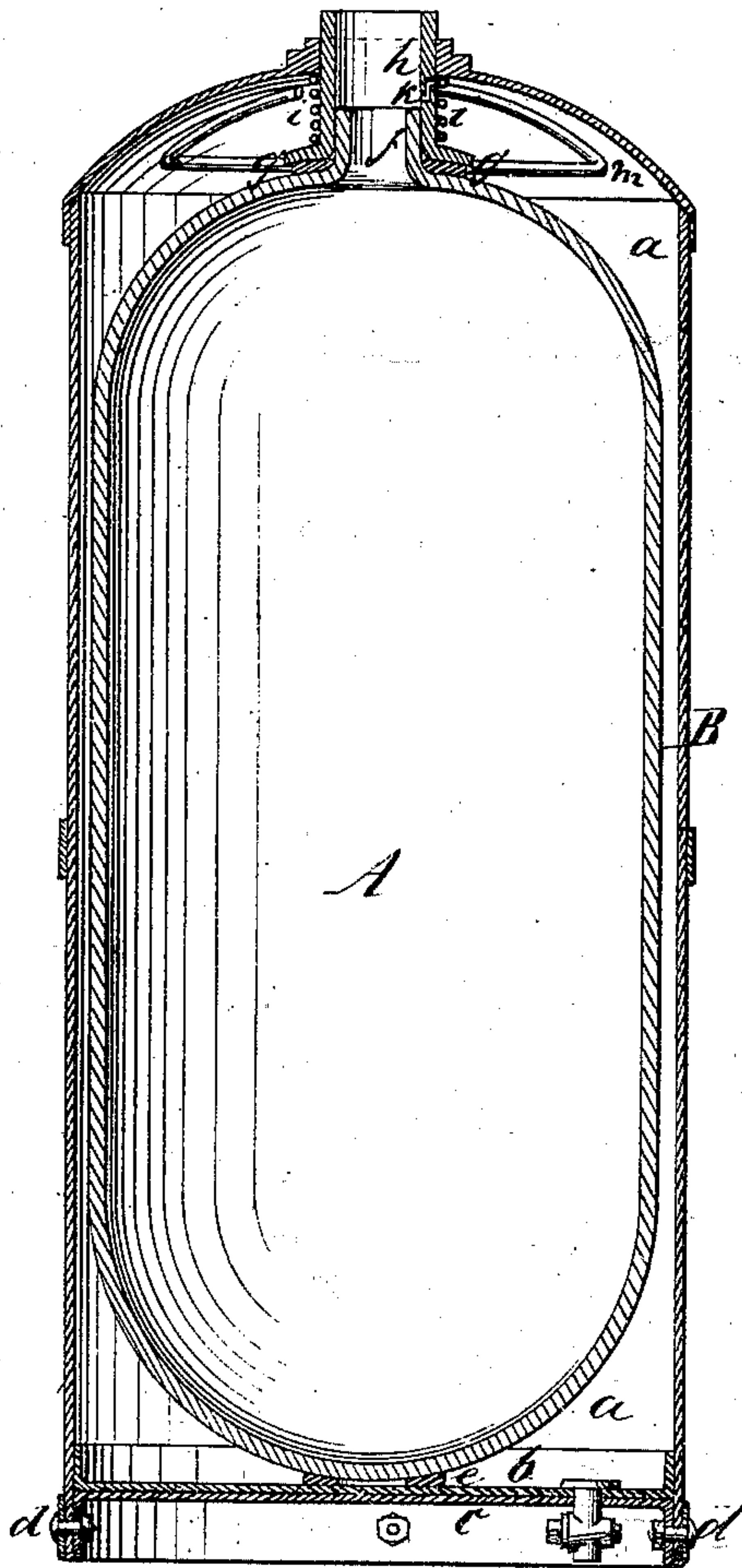
F. W. WIESEBROCK.

Fountains for Soda-Water, &c.

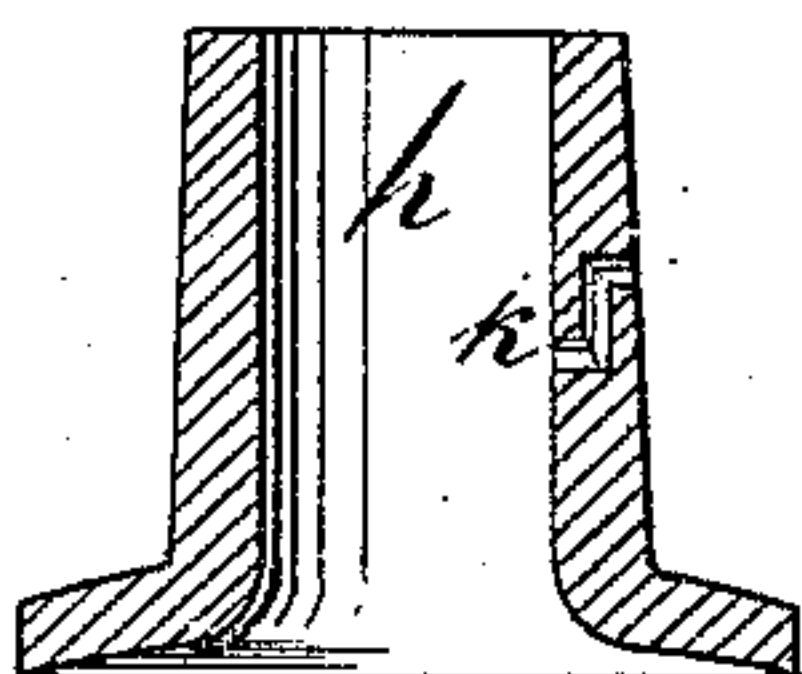
No. 147,459.

Patented Feb. 10, 1874.

*Fig 1.*



*Fig 2.*



Witnesses:  
Ernst Bilhuber  
Henry Denton

Inventor:  
Friedrich W. Wiesbrock  
Van Santvoord & Haust  
attys



# UNITED STATES PATENT OFFICE.

FRIEDRICH W. WIESEBROCK, OF NEW YORK, N. Y.

## IMPROVEMENT IN FOUNTAINS FOR SODA-WATER, &c.

Specification forming part of Letters Patent No. 147,459, dated February 10, 1874; application filed January 28, 1874.

*To all whom it may concern:*

Be it known that I, FRIEDRICH W. WIESEBROCK, of the city, county, and State of New York, have invented a new and Improved Fountain for Effervescent Liquids; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, which drawing represents a central section of my fountain.

This invention relates to an improvement on a soda-fountain for which a patent was granted to Carl Schultz and Thomas Warker, August 9, 1864, No. 43,798, and which consists of a glass fountain, which is surrounded by an atmosphere of a pressure equal to that of the gas contained in said fountain. My present improvement consists in the arrangement of a disk of lead or other suitable metal under the bottom of the fountain, said disk being soldered to the vessel which envelops the fountain, and retained by a flanged bottom that is secured to the envelope by screws or other suitable fastenings, in such a manner that, by said disk, a tight joint is produced; and, at the same time, by removing the flanged bottom, which, when in position, serves to support the disk against the internal pressure, easy access can be had to the disk, and by cutting out said disk, the fountain can be readily removed, and the entire apparatus can be easily kept in the proper working order; also, in the arrangement of a bell-shaped tube, which is depressed by a spring upon a gasket of india-rubber or other suitable material, placed on the neck of the fountain in such a manner that the fountain is held in position by a yielding pressure, allowing for expansion and contraction of the different parts, while, at the same time, the escape of gas from the fountain and from the space surrounding the same is effectually prevented.

In the drawing, the letter A designates a fountain, which is, by preference, made of glass or other vitreous material that will not be attacked by soda-water or other liquid of a similar nature. This fountain is enveloped by a jacket, B, of sheet metal or other suitable material, of sufficient strength to resist the pressure to which the same will be exposed, and this

jacket is made somewhat larger in diameter than the outside diameter of the fountain, so as to leave an annular space, *a*, which is filled with an atmosphere of a pressure equal to that of the gas in the fountain, so that the latter will be exposed to a uniform pressure inside and outside, and, consequently, it is not liable to break by the pressure of the effervescent liquid contained therein. The jacket B is closed by a disk, *b*, of lead or other soft metal, which is soldered to the sides of the jacket, so as to produce a tight joint, and prevent the escape of gas from the gas-space *a*. This disk is supported by a flanged bottom, *c*, which is secured in position by screw-bolts *d*, as shown, so that it can be readily removed whenever it is desired to gain access to the interior of the jacket. After the flanged bottom has been removed, the disk *b* can be readily cut out or unsoldered, and the fountain can be removed and replaced without difficulty. Between the disk *b* and the fountain is placed a cushion, *e*, of india-rubber or other suitable material, so as to prevent injury to said fountain by sudden blows or shocks. The fountain is provided with a neck, *f*, round which is placed a gasket, *g*, of india-rubber or other suitable material, and on said neck is fitted a bell-shaped tube, *h*, which is pressed upon the gasket *g* by a spring, *i*, bearing at one end against the top of the jacket, and on the opposite end against the flange of the tube *h*.

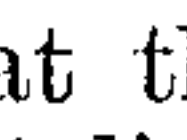
By these means the fountain is retained in position by a yielding pressure, so that it will not be affected by any expansion or contraction of the jacket B, and, at the same time, a tight joint is produced between the tube *h* and the fountain.

The connection between the tube *h* and the stop-valve or faucet that serves to draw the liquid from the fountain may be effected in any desirable manner, and I have not represented the same, since it forms no part of my present invention.

In the disk *b* is secured a faucet, *j*, which serves to remove any liquid which may find its way into the gas-space *a*. The bell-shaped tube *h* is provided with one or more lateral channels, *k*, through which the gas-space *a* communicates with the interior of the fountain, so that the pressure of the gas in the gas-space will



always be the same as in the fountain. In the channel *k* is secured a small tube, *m*, which is coiled round the neck *f*, and the open end of which is turned upward, so that when the fountain is laid down the liquid contained therein is prevented from running out into the space *a*.

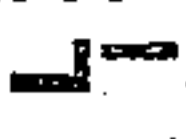
The channel *k* is, by preference, formed as shown in Fig. 2, on a larger scale. From this figure it will be seen that this channel is made in the form of a , so that the liquid contained in the fountain is not liable to escape through the same when the fountain is carried on a wagon, while the gas finds its way to the gas-space *a* without difficulty.

The jacket B can be strengthened by hoops, or in any other desirable manner.

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

1. The disk *b*, in combination with the flanged bottom *c*, jacket B, and fountain A, substantially as shown and described.

2. The spring *i*, in combination with the tube *h*, gasket *g*, fountain A, and jacket B, substantially as set forth.

3. The -shaped gas-channel in the tube *h*, in combination with the fountain A and jacket B, substantially as described.

4. The combination of a tube, *m*, with the channel *k*, fountain A, and jacket B, substantially as set forth.

This specification signed by me this 9th day of January, 1874.

F. W. WIESEBROCK.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.