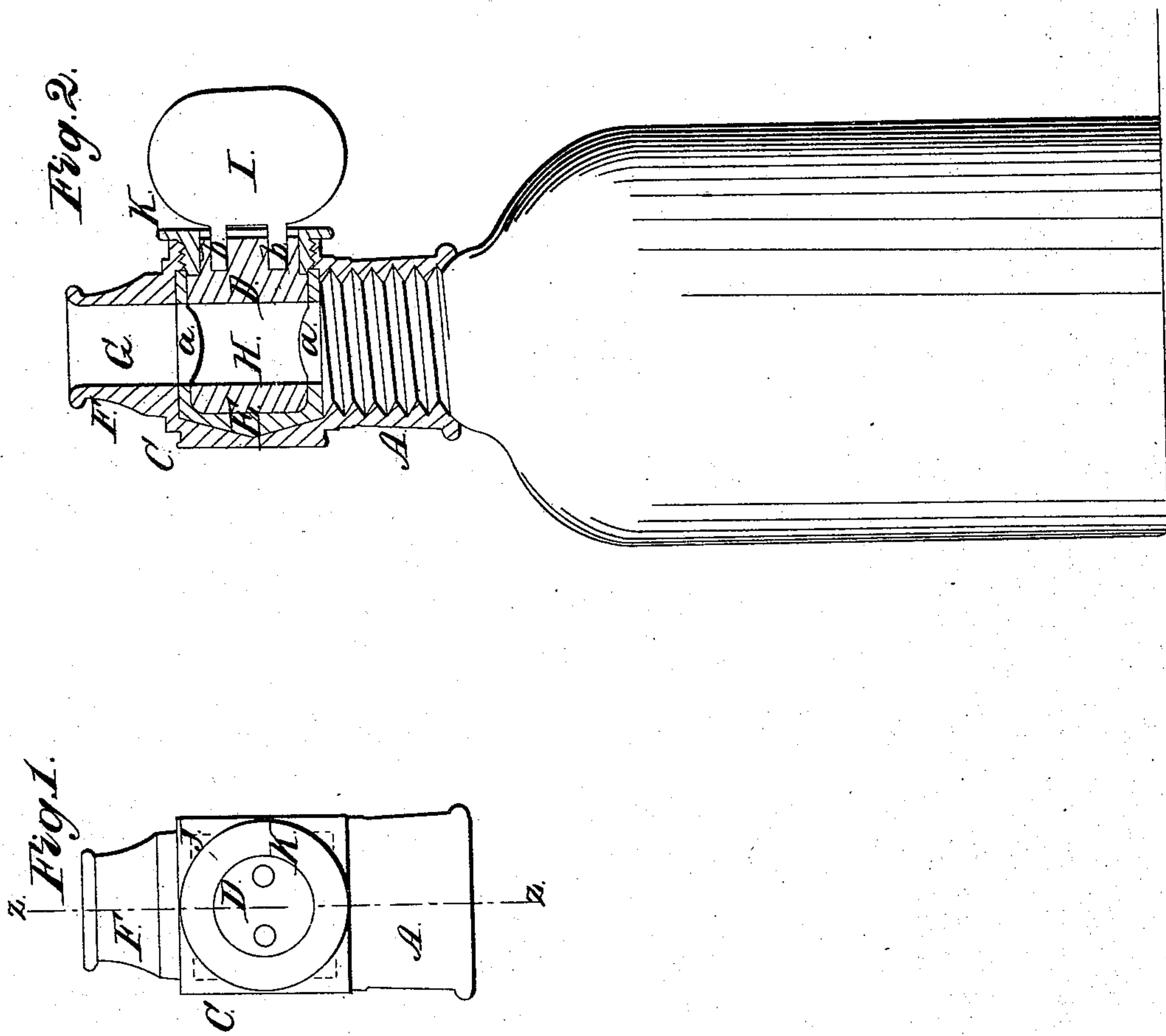


I. W. FOX.
Bottle Faucet.

No. 14,982.

Patented May 27, 1856.



UNITED STATES PATENT OFFICE.

I. W. FOX, OF DURHAMVILLE, NEW YORK.

IMPROVED METHOD OF DRAWING FLUIDS FROM BOTTLES.

Specification forming part of Letters Patent No. 14,982, dated May 27, 1856.

To all whom it may concern:

Be it known that I, I. WILLARD FOX, of Durhamville, in the county of Oneida and State of New York, have invented certain new and useful improvements in faucets, peculiarly adapted to bottles containing effervescing liquids, and for other purposes; and I do hereby declare that the same are described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and use, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Figure 1 is a front elevation representing the faucet closed. Fig. 2 is a sectional elevation representing the faucet cut through the line *z z*, Fig. 1, and applied to a bottle.

In the accompanying drawings, A is the socket of the faucet, provided with a female screw on its inside to fit the male screw on the nose of the bottle B, to which it is applied in Fig. 2. The socket A, which is made circular, is connected with a square box or chamber, C, which contains the plug D, and its packing E, which surrounds the plug. The spout or nose F of the faucet is made circular upon the opposite side of the chamber C from the socket A, so that when the faucet is opened, as represented in Fig. 3, there is a straight channel, through which the contents of the bottle B may be poured; or if it is empty it may be filled and the plug D turned so as to shut the channel.

In making this faucet of britannia or other compositions of the softer metals, the socket, chamber, and nose may be all cast in one piece, the front side of the chamber C being left open the full size of the interior of the chamber (see the dotted lines in Fig. 1) to introduce the india-rubber packing E, which packing may be made in a mold fitted for the purpose, or otherwise. The packing E is made to fit the interior of the chamber C, with a cavity in it for the plug D, and two holes, *a a*, on opposite sides, which correspond with the orifice in the nose of the bottle and the hole G in the nose F of the faucet, and also with the hole H in the plug when it is turned in the position represented in Fig. 2. The plug D is made in the form represented, and the corners of the inner end may be rounded, so that it may be placed in the cavity provided for it with greater fa-

cility. It has a hole H directly through it, as represented, the edges of which hole should be beveled or rounded off, so as not to fracture the packing when the plug is turned by the key I, provided with two projections, *b b*, fitted to two holes in the outer end of the plug, as represented. The outer end of the plug may be faced with some harder metal more capable of resisting the action of the projections on the key. The square plate J is fitted to the open end of the chamber C, and has a circular rim upon it around the opening through the plate, which opening is large enough for the plug D to pass through it with a female screw in it, the opening to which the male screw on the cap K is fitted. The cap K is a circular plate, with a hole in it corresponding to the outer end of the plug D, and its outer edge may be milled, so as to turn it more readily, and it has a circular rim on it provided with a male screw to fit the female screw in the plate J, so that when the packing is inserted in the chamber the plate J may be put over it and soldered in, and the plug D inserted in the packing and the plate K screwed on, so as to hold the plug in, which completes the faucet ready for use.

When this faucet is applied to the nose of a bottle, as represented in Fig. 2, the end of the bottle-nose is screwed against the packing, so as to pack the space tight between the end of the nose and the plug of the faucet, so as to resist the pressure of the contents of the bottle.

I contemplate that the construction of faucets with my improvements may be modified in various ways which will readily suggest themselves to skillful artisans, and that the chamber for the packing may be made circular and fluted on the inside to prevent the packing from turning with the plug, and that the hole or cavity in the packing for the plug may be made entirely through it, or otherwise, as may be preferred; also, that the hole in the plate J may be made small enough to fit the outer end of the plug, which may be inserted in the packing before the plate is soldered in; also, that when the chamber for the packing is made circular, and ribbed or fluted to prevent the packing from turning, the plate J may be dispensed with, and a thread or screw cut on the inside or outside of the chamber, and the cap K made to fit it, so that the packing can be removed and replaced without unsoldering or soldering.

This faucet is particularly intended for glass, stone, earthen, and other bottles, used to hold effervescing beverages which act strongly against the interior, and by using it the expense of corks and twine and the labor of tying in the cocks may be saved.

The advantages of the above-described improvements are, first, the same material which packs the plug packs the end of the bottle nose or pipe to which the faucets are applied, and saves the necessity of any other packing; second, when the faucets are made as contemplated, the packing can be removed and renewed with facility as often as it becomes necessary.

I believe I have described the construction, operation, and use of my improvements so as to enable any person skilled in the art to construct and use the same. I will now specify what I desire to secure by Letters Patent.

I am aware that the plugs of faucets have been surrounded with leather, gutta-percha, and some other similar substances to pack them. Therefore I do not claim, broadly, surrounding them with such substances; but

What I do claim is—

Packing the plugs of faucets, substantially as described, with india-rubber, gutta-percha, leather, or other similar substances, when the same piece which packs the plug is made to pack the end of the bottle nose, pipe, tube, or other article to which the faucet is applied, substantially as described.

I. WILLARD FOX.

Witnesses:

S. E. BARNES,
THOS. H. DAY.