

(No Model.)

2 Sheets--Sheet 1.

G. D. BARR.  
Bottle Filler.

No. 233,187.

Patented Oct. 12, 1880.

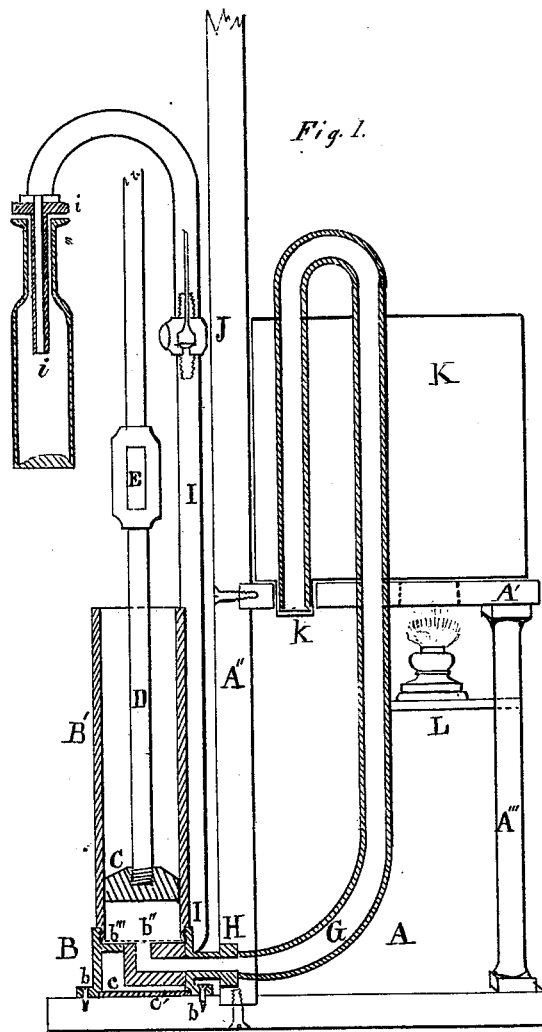


Fig. 1.

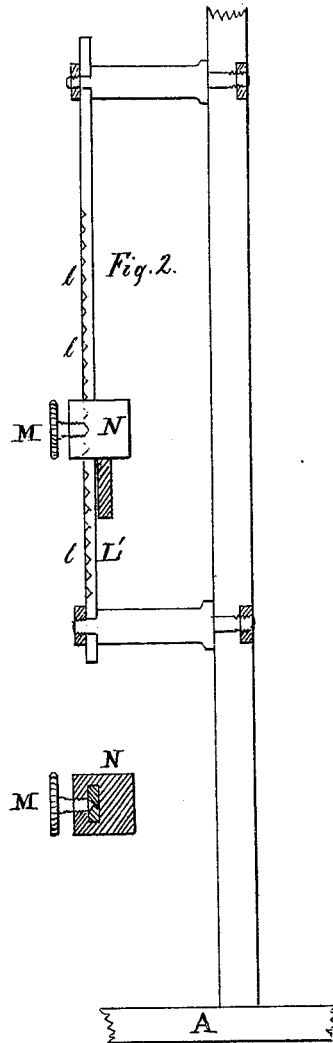


Fig. 2.

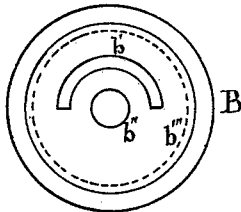


Fig. 3

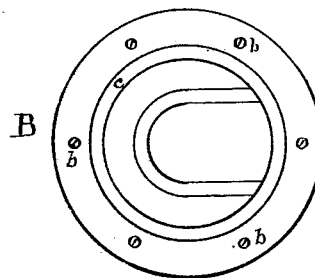


Fig. 4

Witnesses  
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T. J. Edwards

Inventor  
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(No Model.)

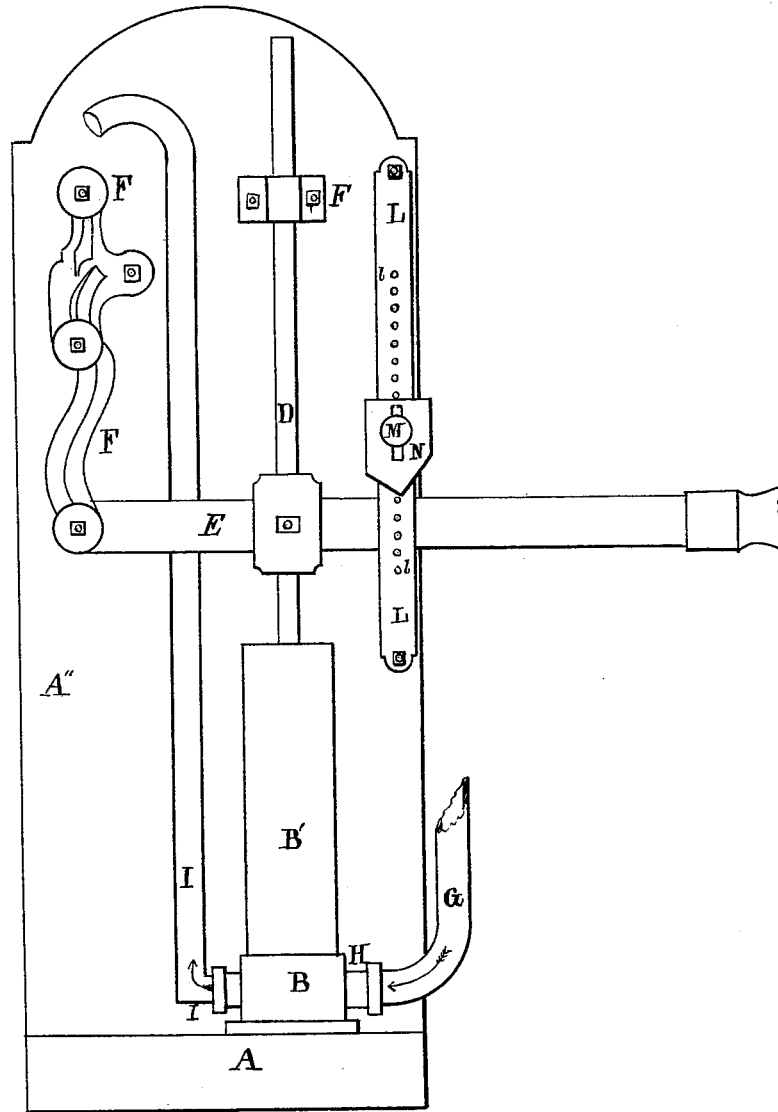
2 Sheets--Sheet 2.

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*Fig. 5.*



Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE D. BARR, OF GREENVILLE COURT-HOUSE, SOUTH CAROLINA.

## BOTTLE-FILLER.

SPECIFICATION forming part of Letters Patent No. 233,187, dated October 12, 1880.

Application filed August 18, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. BARR, a citizen of Greenville, residing at Greenville Court-House, in the county of Greenville and State of South Carolina, have invented certain new and useful Improvements in a Drug-gist's Universal Bottle-Filler; 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 or figures of reference marked thereon, which form a part of this specification.

This invention relates to an apparatus for filling bottles with liquids, which will be hereinafter more fully described, and set forth in the claims.

In the drawings, Figure 1 is a sectional elevation of the pump and frame. Fig. 2 shows the manner of attaching the guide and gage to the frame. Fig. 3 represents the top of the base, into which the barrel of the pump is screwed. Fig. 4 represents the other side of the base, showing how the pipe enters the base to let the fluid pass in and up. Fig. 5 represents an end view of the apparatus.

A is a bottom board or floor. For the largest size apparatus the dimensions should be about fifteen inches long and twelve inches wide.

A' is a shelf or platform placed at a convenient distance above the bottom, and on it are placed the reservoirs, to contain the different liquids as they may be wanted. This platform is supported on two corners by pillars A''', and on the opposite edge in the back board of the frame, A'', which board may be about thirty inches high and twelve inches wide, and is secured to the floor A by a groove and fastened by screws, as shown in Fig. 1.

The several reservoirs which may be used have a recess, *k*, in the bottom to permit all the liquid to be pumped out.

On the bottom board is placed a force-pump constructed as follows: A base, B, as shown in section, Fig. 1, and plan views, Figs. 3 and 4, is screwed to the board by small screws *b b*, &c. This base has on its top a semicircular opening, *b'*, and a central orifice, *b''*, which is continued through the base to the side, where

the pipe from the reservoir is connected to it. A leather valve, *b'''*, is placed over the base and covers the orifice *b''*, but has a semicircular-shaped slit to correspond with the opening *b'*, which opening is connected through the base, with the discharge-pipe I.

B' is the barrel of the pump, and is screwed to the base B. The lower part of base B, the under side of which is shown in Fig. 4, has a recess, *c*, in the rim, into which is secured a plate, *c'*, to be soldered in if of brass, or to be packed with rubber if of cast-iron, in which case the screws *b b* will secure it.

C is the piston, and D the piston-rod, to the upper end of which is attached the lever E, all of which are of the usual construction for an air-pump, and secured to the frame by castings F F F. The piston C is solid.

G is the supply-pipe from the reservoir, and is formed into a siphon to permit it to pass over the top edge of the reservoir, and the lower end of the pipe enters the recess K of the reservoir. The reservoirs by this arrangement can be changed without disturbing the supply-pipe or detaching it from the pump. After the pipe has been once filled the liquid will flow through the pipe and to the pump by its own pressure. This pipe G is attached to the pump by a brass coupling, H, for removal at pleasure.

I is the discharge-pipe, which is attached to the base B by a brass coupling similar to that for the supply-pipe G. In this pipe I is a metal check-valve, J, to check the passage of air in the upward movement of the lever to the pump. The outer end of discharge-pipe I has a coupling, to which any size of nozzle, *i*, may be attached.

K represents a reservoir, and *k* the recess in the bottom.

A part of the shelf A' may be left vacant, to permit the heat of a lamp, L, to reach the bottom plate of the reservoir, to warm the liquid in case of freezing or for bottling oils in cold weather.

*l* represents punch-holes in a gage-rod, L', for the insertion of the end of a set-screw, M, which is worked in a slide-gage, N, which acts as a stop to the lever of the pump, and prevents the lever, in its upward movement, from

going beyond a given point, to make the quantity of liquid always the same when the gage is set.

5 The piping for conveying the liquid should be either tin or glass lined, the pump either iron, brass, or porcelain lined, adapting it to all classes of liquids.

I claim—

10 1. The combination of a force-pump, supply-pipe entering the reservoir from above and extending to the recess in the bottom, whereby the reservoir may be removed without disturbing the pipe, and the discharge-pipe having a

check-valve in it, all substantially as and for the purpose described. 15

2. The base B of a force-pump having the central orifice  $b''$  and the concentric opening  $b'$ , in combination with the supply-pipe G and discharge-pipe I, as and for the purpose described. 20

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE D. BARR.

Witnesses:

J. F. DORROH, Jr.,

V. C. DARGAN.