No. 806,095. PATENTED DEC. 5, 1905.

C. BARROW.

BOTTLE FILLING DEVICE.

APPLICATION FILED DEC. 19, 1904.

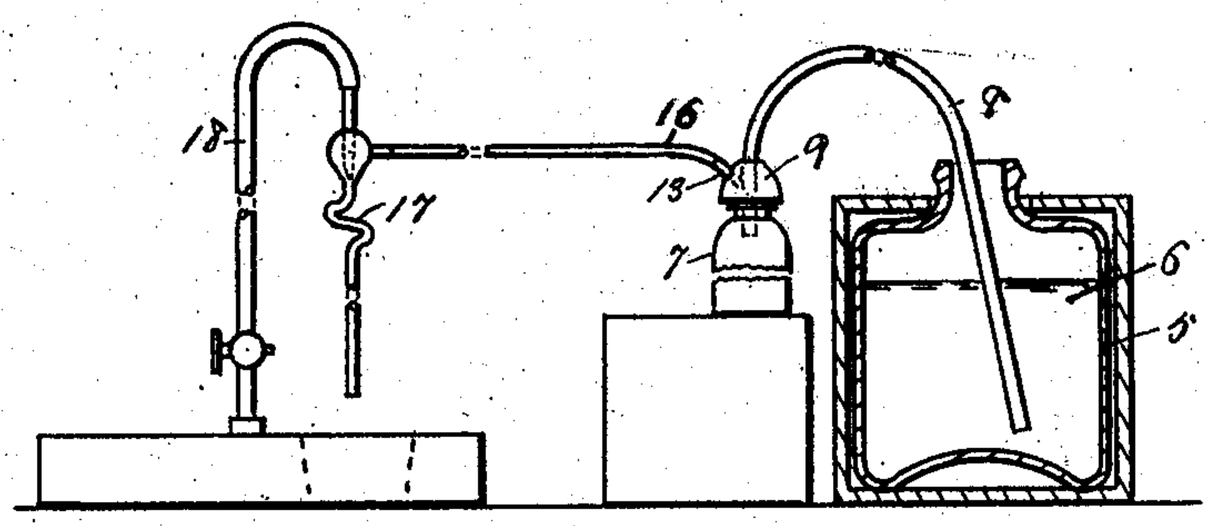

Fig. 1.

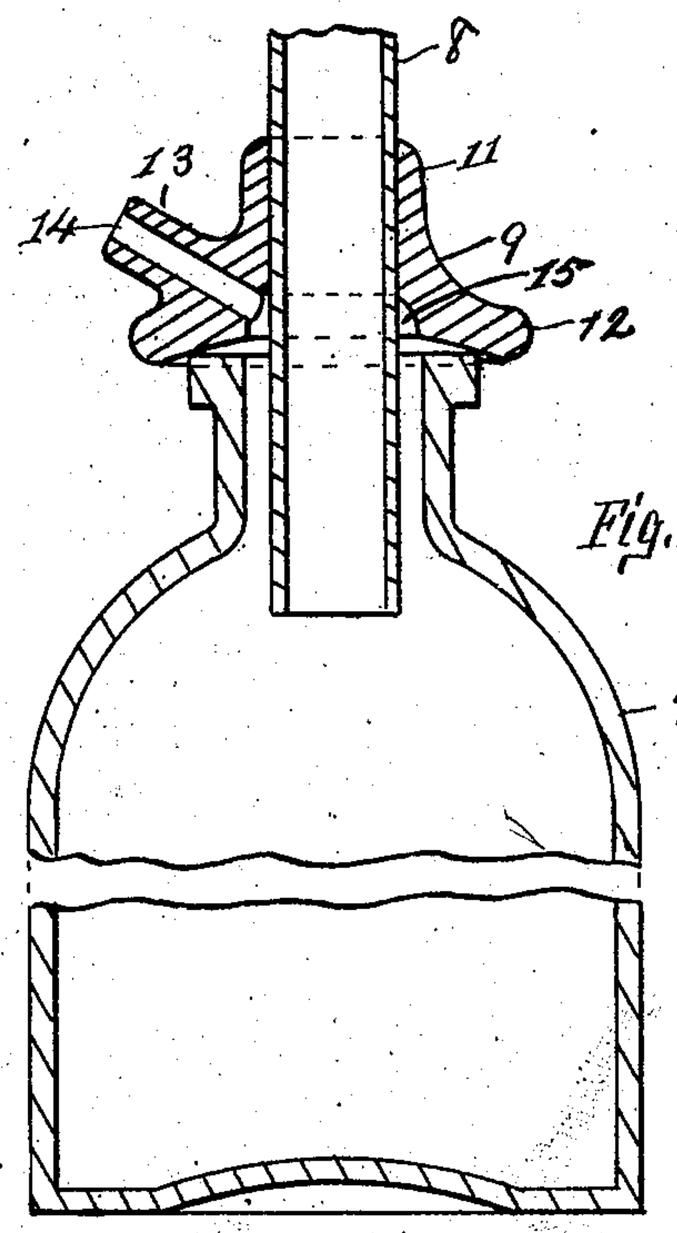

Fig. 2.

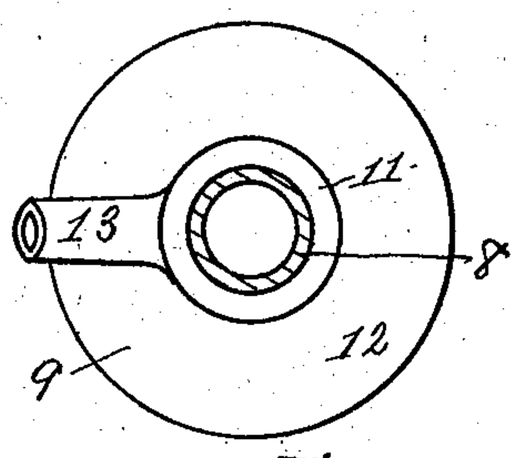

Fig. 3.

WITNESSES.

James G. Carr.
Samuel S. Carr.

Clyde Barrow. INVENTOR.

By Robert S. Carr, Atty.

UNITED STATES PATENT OFFICE.

CLYDE BARROW, OF SHARONVILLE, OHIO, ASSIGNOR OF ONE-HALF TO RAYMOND M. HUGHES, OF OXFORD, OHIO.

BOTTLE-FILLING DEVICE.

No. 806,095. Specification of Letters Patent. Patented Dec. 5, 1905.

Application filed December 19, 1904. Serial No. 237,465.

To all whom it may concern:

Be it known that I, CLYDE BARROW, a citizen of the United States, residing at Sharonville, Hamilton county, Ohio, have invented a new and useful Improvement in Bottle-Filling Devices, of which the following is a specification.

My invention relates to bottle-filling devices adapted to the use of chemists or others for filling bottles with corrosive or other liquids; and the objects of my improvement are to provide means to keep the bottle closed during the filling process, to prevent the escape of any irritating fumes, to avoid lifting the container, to prevent the danger of contact of the liquid with the hands of the operator, and to adapt the device to bottles of various sizes and shapes. These objects are attained in the following-described manner, as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my device in operation; Fig. 2, a diametrical section in operative position on a bottle; Fig. 3, a plan.

In the drawings, 5 represents a container of liquid 6; 7, a bottle supported with its mouth above the level of the liquid; 8, a tube having one end submerged in the liquid and terminating at the other end within the bottle.

Closure 9 consists of india-rubber or other suitable material and is formed with elastic sleeve 11, whereby it is automatically and adjustably secured on the tube 8, circular flange 12 concentric therewith, and nipple 13, which contains air-passage 14. The under side of flange 12 is elastic and preferably concave to facilitate its detachable engagement with the mouth of the bottle to exclude the air therefrom, and it contains annular recess or counterbore 15 contiguous to tube 8 and in communication with air-passage 14 and with the interior of the bottle regardless of the position of tube 8 in the neck thereof.

Tube 16, removably secured on the nipple, communicates with an aspirator 17, through which water under pressure is discharged from pipe 18, whereby the air is exhausted from the bottle during the engagement of the closure thereon, and the liquid is drawn therein through tube 8 until the bottle is sufficiently filled, when the closure and tube are removed and the liquid within the tube siphons back into the retainer. Bottles may be rapidly filled in this manner without spilling or the escape of any fumes and without endangering the hands of the operator by contact with the liquid.

Having fully described my improvement, what I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. As a new article of manufacture, a bottle-closure consisting of a single piece of elastic material in the form of a disk with an axial opening and formed with a sleeve on one side in registration with the opening for the adjustable insertion therethrough of a supply-pipe, a concave surface on the other side and a suction-passage extending through the disk from the juncture of the opening with the concave surface.

2. A bottle-filling device of the designated character having in combination a supply-pipe arranged to carry and discharge liquids from a lower to a higher level, an annular flange thereon having an elastic concave under surface adapted to removably cover and close the mouth of a bottle and formed with a suction-passage extending through said flange from a point in said surface contiguous to the pipe, and means to maintain a continuous suction through the passage for the purpose specified.

CLYDE BARROW.

Witnesses:
R. S. CARR,
SAMUEL S. CARR.