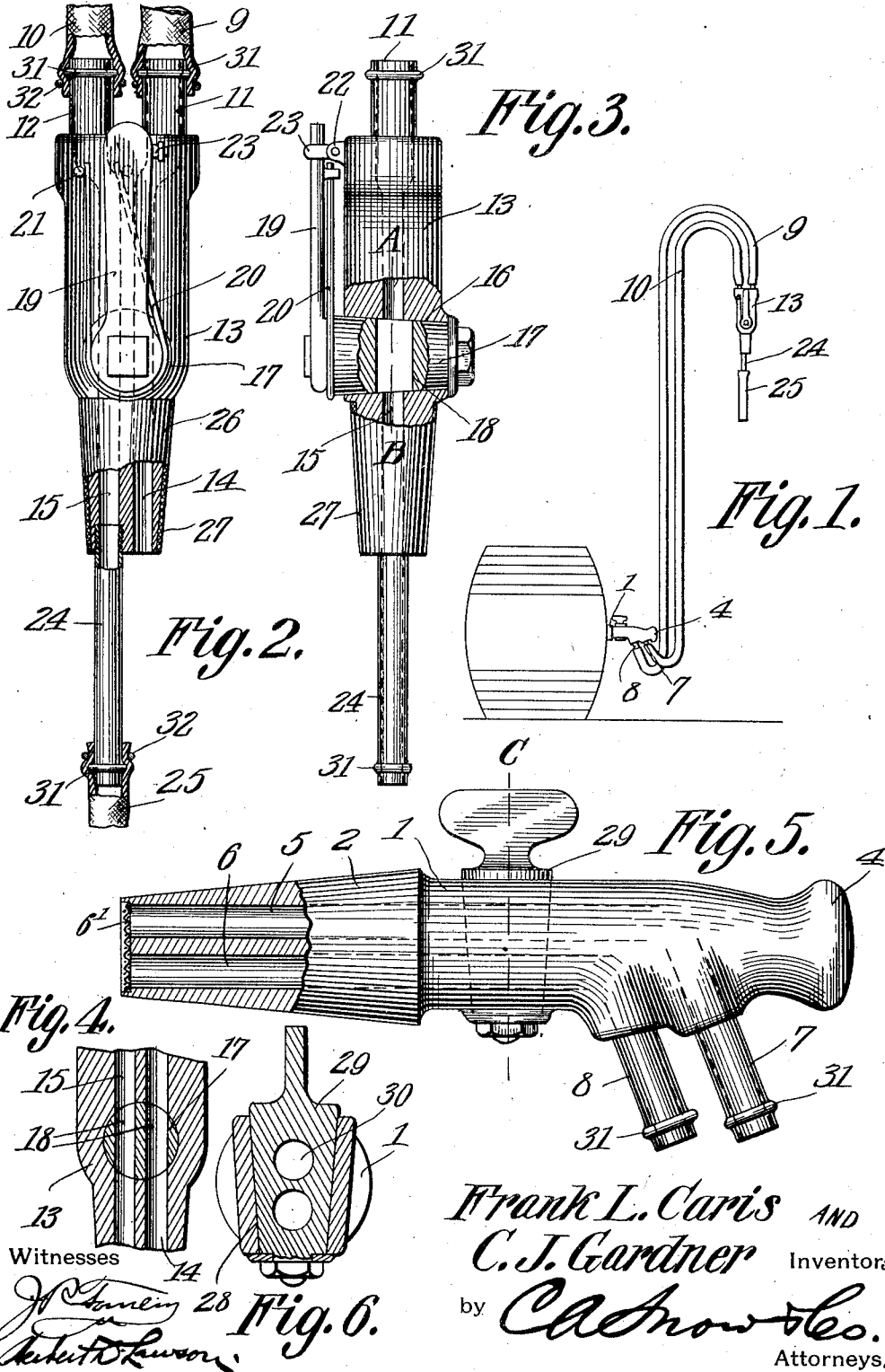


F. L. CARIS & C. J. GARDNER.  
 APPARATUS FOR FILLING BOTTLES.  
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Witnesses  
*J. Hamilton* 28  
*Robert Lawson*

Frank L. Caris AND  
 C. J. Gardner Inventors,  
 by *C. A. Snow & Co.*  
 Attorneys.

# UNITED STATES PATENT OFFICE.

FRANK L. CARIS AND CLARENCE J. GARDNER, OF RAVENNA, OHIO.

## APPARATUS FOR FILLING BOTTLES.

996,972.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed November 23, 1910. Serial No. 593,879.

To all whom it may concern:

Be it known that we, FRANK L. CARIS and CLARENCE J. GARDNER, citizens of the United States, residing at Ravenna, in the county of Portage, State of Ohio, have invented a new and useful Apparatus for Filling Bottles, of which the following is a specification.

This invention relates to apparatus for use in filling bottles from kegs or barrels, the same being particularly adapted for bottling beer and the like.

One of the objects of the invention is to provide an inexpensive device of this character which can be readily handled by one person, there being improved means for discharging the liquid into the bottle and for permitting the escape of foam back to the keg or other receptacle from which the liquid is drawn.

A further object is to provide apparatus of this type having a nozzle in which is mounted a valve normally maintained in closed position but which can be conveniently held open during the filling operation.

With the foregoing and other objects in view, the invention consists in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings Figure 1 is a detail view of the complete apparatus. Fig. 2 is an enlarged view partly in section, partly in elevation of the nozzle and adjacent parts. Fig. 3 is a side view of the parts shown in Fig. 1, portions of the nozzle being shown in section. Fig. 4 is a section on line A—B of Fig. 3. Fig. 5 is a side elevation of the faucet included in the apparatus. Fig. 6 is a section on line C—D of Fig. 5.

Referring to the figures by characters of reference, 1 designates a faucet having a tapered end 2 adapted to be inserted into the bung opening of a keg or barrel, the small end of this tapered portion being provided with a screen 3 of wire fabric. A knob 4 is formed at the other end of the faucet so that the same can be readily manipulated or be placed in or removed from

position. The faucet has upper and lower bores or passages 5 and 6, screened at one end as indicated at 6' and the other or forward end portion of each of these passages being extended angularly, these passages opening, at their front ends, into tubes 7 and 8 respectively. Flexible tubes 9 and 10 are designed to connect the tubes 7 and 8 to tubular members 11 and 12 respectively projecting from one end of a nozzle 13 in which are formed passages 14 and 15 opening into the extensions 11 and 12 and intersected, at intermediate points, by a tapered bore 16 in which is mounted a valve 17. This valve has separate openings 18 therein adapted, when the valve is in open position, to register with the passages 14 and 15. A stem 19 projects radially from one end of the valve 17 and is engaged by one end of a spring 20. Said spring is wrapped loosely about the valve and has its other end attached to the nozzle 13, as indicated at 21. An ear 22 extends from the nozzle 13 and has a latch 23 pivotally connected to it, this latch normally lying in the path of the stem 19 so as to hold the spring 20 under stress and maintain the valve in open position.

A tubular extension 24 projects from the outlet end of the passage 15 and carries a short tube 25 of rubber or other flexible material and which is adapted to be inserted into the bottle to be filled. The discharge end of the nozzle is tapered, as indicated at 26 and is preferably provided with a covering 27 of cork or rubber.

The passages 5 and 6 within the faucet 2 are intersected, at intermediate points, by a tapered bore 28 in which is arranged a valve 29 having openings 30 adapted to register with the passages 5 and 6. By means of this valve the passages within the faucet may be partly or entirely closed should it be desired to cut off the flow of liquid from the keg or barrel for any reason, as, for example, the bursting of one of the tubes.

In order to prevent the flexible tubes from slipping off of the various tubular members to which they are connected, said members are preferably provided with annular ribs 31 over which the tubes are drawn, the ends of the tubes being held against spreading, by cords 32 or the like wrapped therearound back of the ribs.

It is to be understood that the valve 17 is held normally closed by the spring 20.

The tapered end 2 of the faucet 1 is inserted into the opening in the keg or barrel and the valve 29 then opened. The tube 25 is inserted into the bottle to be filled and the tapered portion 26 of the faucet is inserted into the mouth of the bottle so that the cork or rubber covering 27 will fit snugly within said mouth. The valve stem 19 is swung into engagement with the catch 33 and the liquid will flow from the barrel or keg through the faucet and the nozzle to the tubular extension 24 and the flexible tube 25 from which it will be discharged into the bottom of the bottle. The foam will escape from the bottle by way of the passage 14. As soon as the bottle has been filled the stem 19 is released from the catch and the spring 20 promptly shifts the valve to closed position.

20 What is claimed is:

In bottle filling apparatus, a nozzle, tubular extensions at one end thereof, said extensions being parallel, non-communicating passages opening through the extensions and intersected, at intermediate points, by a bore, a valve mounted for rotation within

the bore and having parallel openings adapted to register with the passages when the valve is in open position, a tubular extension detachably connected to one end of the nozzle and projecting into and communicating with one of the passages in the nozzle, a stem projecting radially from the valve, a spring engaging the valve and stem and secured to the nozzle, said spring constituting means for holding the valve normally shut, an ear upon the nozzle, and a latch pivotally connected to the ear and movable into the path of the stem to hold the valve open and the spring under stress, said latch being movable about a pivot lying in a plane parallel with the plane of movement of the stem.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

FRANK L. CARIS.  
CLARENCE J. GARDNER.

Witnesses:

E. R. TAYLOR,  
W. E. DUNHAM.