

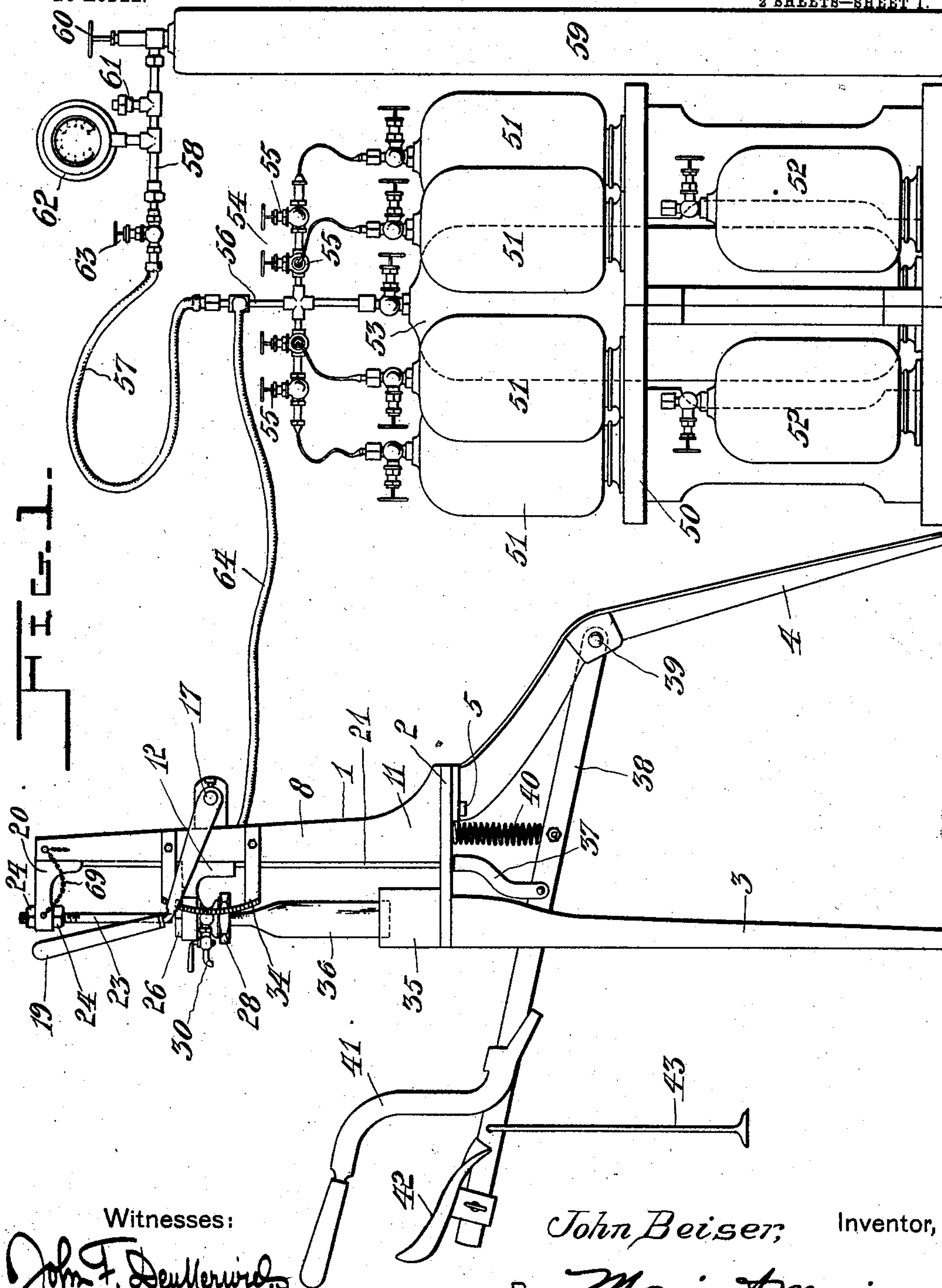
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J. BEISER.  
BOTTLING APPARATUS.  
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NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

*John F. Deufferwald*  
*F. D. Ammen*

*John Beiser,* Inventor,

By

*Marion Marion*

Attorneys





# UNITED STATES PATENT OFFICE.

JOHN BEISER, OF MONTREAL, CANADA.

## BOTTLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 721,854, dated March 3, 1903.

Application filed September 22, 1902. Serial No. 124,384. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BEISER, a citizen of the United States of America, residing at 1996 St. Catherine street, in the city of Montreal, county of Hochelaga, Province of Quebec, Canada, have invented certain new and useful Improvements in Bottling Apparatus; and I do hereby declare that the following is 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.

My invention relates to the art of bottle filling and corking, and its object is to provide apparatus for this purpose constructed and arranged with a special view for bottling upon short notice and in an expeditious manner carbonated beverages of different kinds.

My invention consists in a certain construction and combination of parts to be more fully described hereinafter, and definitely set forth in the claims.

In the drawings, which fully illustrate my invention, Figure 1 represents the same in side elevation. Fig. 2 represents particularly the corking apparatus in front elevation, the operating-lever being shown in section. Fig. 3 shows, upon an enlarged scale, a vertical section of the upper portion of the corking apparatus, this section being taken substantially upon the line 3 3 of Fig. 2. Fig. 4 is a horizontal cross-section taken on the line 4 4 of Fig. 3. Fig. 5 is a plan of a portion of the bottling apparatus shown in Figs. 2 and 3. Fig. 6 is substantially a side elevation of an auxiliary filling-cap which I use in filling peculiarly-formed bottles. Fig. 7 is a plan view of a stand shown in Fig. 1 and carrying cylinders containing different kinds of beverages intended for bottling.

The same numerals of reference denote like parts in all the figures of the drawings.

Referring more particularly to the parts, 1 represents a housing or guide provided below with a base-plate 2, supported upon front and rear standards, indicated, respectively, by 3 and 4, attached to the same by means of suitable bolts 5. As indicated most clearly in Fig. 2, the front standard 3 has an elongated upper portion provided with a vertical slot 6, through which passes an operating-lever, which will be described more fully here-

inafter. The lower portion of this standard is formed into two legs 7, which may be formed substantially as shown in Fig. 2. The construction of the rear standard 4 is best illustrated in Fig. 1, and it should appear from the drawings that the construction and arrangement of these supports are such as to insure good stability for the apparatus resting upon them. Referring again to the housing 1, it may be said that it comprises substantially upright side members 8, provided with cross members 9 near the upper and lower portions thereof. On their inner faces these side members are provided with vertical slots or grooves 10, extending from the upper extremity of the same to a point opposite the lower one of the cross members 9, below which point the side members are reduced in thickness, as indicated at 11. A movable filling-head 12 is provided, which is adapted to be guided vertically by means of the aforesaid grooves 10. This head projects forwardly, as indicated, and is provided with a vertical opening 13, in which is mounted a suitable cork-chamber 14, which cork-chamber will be more fully described hereinafter. At its rear this filling-head is formed into a vertical rack 15, which coöperates with a segment 16, which segment is rigidly carried by an arbor 17 and operated by means of a lever 18, a suitable handle 19 being provided for this purpose, wherefore the filling-head 12 may be raised or lowered at the will of the operator. Above the filling-head 12 is mounted in a similar manner a corking-head 20, to the lower portion of which is attached a draw-rod 21, which hangs vertically downward, as indicated, and passes through an enlarged opening 22 in the aforesaid filling-head. This corking-head projects forwardly and carries a vertical corking-plunger 23, which is adjustable by means of the nuts 24, and this plunger is substantially in axial alinement with the bore 25 of the aforesaid cork-chamber, as will be readily understood. This cork-chamber 14 is held in place by a suitable nut 26, mounted upon its threaded extremity, and its lower portion is formed into an enlarged chamber, in which is carried a sealing-washer 27, having a conical bore opening downwardly, as indicated, this washer being held in place by a cap-nut 28. As indicated, the upper portion of the bore 25



flares outwardly to facilitate the introduction of a cork. At a point above the sealing-washer 27 an inlet connection 29 is provided for admitting fluid to the cork-chamber, and  
 5 a drip-cock 30 is provided, as indicated, suitable pipe connections 31 being provided for conducting fluid to the cork-chamber, which pipe connections should include a suitable valve or stop-cock 32. Referring again to  
 10 the hand-lever 18, it will appear that the same is provided with a lip 33, which is adapted to coöperate with a fixed quadrant 34, the teeth of which project downwardly, as indicated, wherefore when the filling-head has  
 15 been depressed by means of the lever the same may be maintained in this depressed position. The quadrant 34 may be secured to one of the side members 8, as indicated.

The cork-chamber shown in Fig. 3 is adapted  
 20 ed for filling ordinary bottles.

The bottling operation is conducted substantially as follows: A block 35 (shown in Fig. 1) is placed upon the base-plate 2, which  
 25 block is provided with a suitable recess conforming to the shape of the base of the bottle 36, whereupon the handle 19 is operated, depressing the filling-head in the manner described until the sealing-washer 27, which,  
 30 by the way, is preferably formed of rubber, seats itself firmly over the mouth of the bottle. When the filling-head has been depressed in this manner, it will enable a cork or stopper to be introduced in the flaring  
 35 mouth of the cork-chamber, whereupon the corking-head 20 will be depressed by mechanism to be described later, forcing the cork well within the bore of the cork-chamber. When this has been done, the valve 32 may  
 40 be opened to fill the bottle, whereupon a further depression of the corking-head 20 will pass the cork through the cork-chamber and into the neck of the bottle, as will be readily understood. The mechanism for operating  
 45 the corking-head comprises an offset foot 37, secured to the threaded extension of the aforesaid draw-rod 21 and having a bifurcated extremity attached to a corking-lever 38. As indicated in Fig. 1, this corking-lever has its  
 50 fulcrum at 39 upon the standard 4 and projects well in front of the machine, as indicated, where it is adapted to have attached to it convenient means for depressing it, a spring 40 operating to return it to its normal  
 55 position. This corking-lever may be operated by means of an offset handle 41, slidably mounted upon it, or a movable saddle 42 may be used, upon which the operator may sit, so as to apply his whole weight to move the lever, or a removable swinging stir-  
 60 rup 43 may be employed for this purpose.

An auxiliary filling-nipple 44 is provided, and it has a threaded opening 45, wherefore it may take the place of the removable cap 28. Its body constitutes a stop-cock 46, and  
 65 its lower portion terminates in a short tubular extension 47, which is adapted to be introduced into the spout of the siphon-bottle

or similar receptacle, as will be readily understood, a sealing-washer 48 being employed, which is retained in position by a cap-nut 49. 70

Near the apparatus which has been described I provide a stand 50, upon which are mounted a plurality of cylinders 51 52, containing beverages of different kinds. The  
 75 cylinders 51 are represented in use and arranged so as to surround a central cylinder 53 of large size, this central cylinder being intended to contain that beverage for which there is the greatest demand. Above these  
 80 cylinders is mounted a spider 54, constructed of piping, as indicated, including pipe connections and individual valves 55, controlling communication between each of the cylinders 51 with the central pipe 56. This central pipe  
 85 connects, by means of a suitable hose 57, with a pipe 58, leading to a gas-cylinder 59 of the common form used in commerce. The cylinder 59 may be surmounted by a suitable  
 90 bleeder-valve 60, and the pipe 58 carries the gas from the cylinder 59 through a safety-valve 61, a pressure-gage 62, and a valve 63. A section of hose 64 is adapted to lead the beverages  
 95 from the central pipe 56 to the cork-chamber, passing through the valve 32, which has already been referred to. Now by manipulating the valves between the gas-cylinder 59 and the cylinders 51 any one of the cylinders  
 100 51 may be charged to the desired pressure, and evidently by closing the valves leading from the cylinder 59 any one of the cylinders 51 may be brought into communication through the hose connection 64 with the bottling  
 105 apparatus. From the arrangement and construction of this apparatus it should readily appear that the beverages in the cylinders 51 could be quickly charged from the cylinder 59, being suitably shaken during the charging  
 110 operation to facilitate the absorption of the gas in a manner well understood. Furthermore, if the attendant had been engaged continuously in bottling a particular kind of beverage he could upon a few moments notice adapt the  
 115 apparatus for bottling any other beverage contained in any of the cylinders 51 upon the stand, and it should also appear that from the nature and construction of this apparatus its portability becomes a marked feature, adapting it to be carried from place to place  
 120 upon a wagon or other vehicle, so that the attendant could dispense bottled beverages in quantities to suit the demand.

In order to limit the downward movement of the corking-head 20, I provide a short section of chain 69, connecting the head with the housing 1, as indicated. 125

I do not limit myself to the precise form of my invention which I have described, and modifications thereof not departing from the spirit of the same should be considered within the scope of the following claims. 130

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a bottling-machine, in combination,



a vertical guide, a filling-head mounted therein, a lever, a segment operated thereby, said filling-head comprising a rack meshing with said segment, a quadrant having teeth, and  
 5 said lever having a lip adapted to engage therewith to maintain said filling-head in a depressed position.

2. In a bottling-machine, in combination, a vertical guide, a filling-head movable there-  
 10 upon, said filling-head having a vertical opening therethrough, a corking-head above said filling-head, a pull-rod passing through said opening and connecting with said corking-head, and means for normally maintaining  
 15 said corking-head in an elevated position.

3. In a bottling-machine, in combination, a filling-head, means for guiding the same vertically, a corking-head above said filling-head, said filling-head having an opening, a  
 20 member passing therethrough and connecting with said corking-head, a lever adapted to control said filling-head, and means for normally maintaining said corking-head in an elevated position.

4. In a bottling-machine, in combination, a filling-head, a corking-head thereabove, means for guiding said head vertically, said filling-head having an opening therethrough, a member passing through said opening and  
 30 connecting with said corking-head, a lever controlling said filling-head, a lever adapted to control said corking-head, and a spring constraining said corking-head.

5. In a bottling-machine, in combination, a housing having a vertical groove therein constituting a guide, a filling-head guided by said groove, a corking-head thereabove guided by the same groove, means for depressing said filling-head, means for depressing said cork-  
 40 ing-head, and means for constraining said corking-head toward an elevated position.

6. In a bottling-machine, in combination, a housing having vertical guideways, a filling-head guided thereby, a corking-head there-  
 45 above movable in the same guideways, said filling-head having an opening therethrough, a member passing through said opening and connecting with said corking-head, a lever controlling said member, and a lever control-  
 50 ling said filling-head.

7. In a bottling-machine, in combination, a housing having substantially vertical guide-ways, a filling-head movably mounted there-  
 in, a corking-head thereabove and mounted

in the same guideways, said filling-head hav- 55  
 ing an opening therethrough, a member con-  
 nected with said corking-head and passing  
 through said opening, a lever adapted to de-  
 press said filling-head, and means for locking  
 said filling-head against return. 60

8. In a bottling-machine, in combination, a housing having substantially vertical guide-ways, a filling-head movably mounted upon  
 said guideways, a corking-head thereabove  
 and mounted in the same guideways, said 65  
 filling-head having an opening therethrough, a member passing through said opening and  
 connected with said corking-head, a lever  
 adapted to depress said filling-head, means  
 for locking said lever against return, and a 70  
 lever connected with said member.

9. In a bottling-machine, in combination, substantially vertical guideways, a filling-head movable therein, a corking-head there-  
 above and mounted in the same guideways, 75  
 said filling-head having an opening there-  
 through, a pull-rod passing through said open-  
 ing and connected with said corking-head, a  
 lever connected with said pull-rod, and a  
 spring normally constraining said lever. 80

10. In a bottling-machine, in combination, vertical guideways, a filling-head mounted  
 on said guideways, a corking-head thereabove  
 and mounted in the same guideways, said fill-  
 ing-head having an opening therethrough, a 85  
 pull-rod passing through said opening and  
 connecting with said corking-head, a lever  
 adapted to depress said filling-head, means  
 for locking said lever against return, a lever  
 connected with said pull-rod, and a spring 90  
 normally constraining said last lever.

11. In a bottling-machine, in combination, a substantially vertical guide, a filling-head  
 mounted thereupon, a corking-head mounted  
 upon said guide thereabove, a segment co- 95  
 operating with said filling-head, a lever con-  
 trolling said segment and adapted to depress  
 said filling-head, means for locking said lever  
 against return, a pull-rod depending from  
 said corking-head, a lever connected there- 100  
 with, and a spring constraining said corking-  
 head upwardly.

In witness whereof I have hereunto set my  
 hand in the presence of two witnesses.

JOHN BEISER.

Witnesses:

J. A. MARION,  
 F. MYNARD.