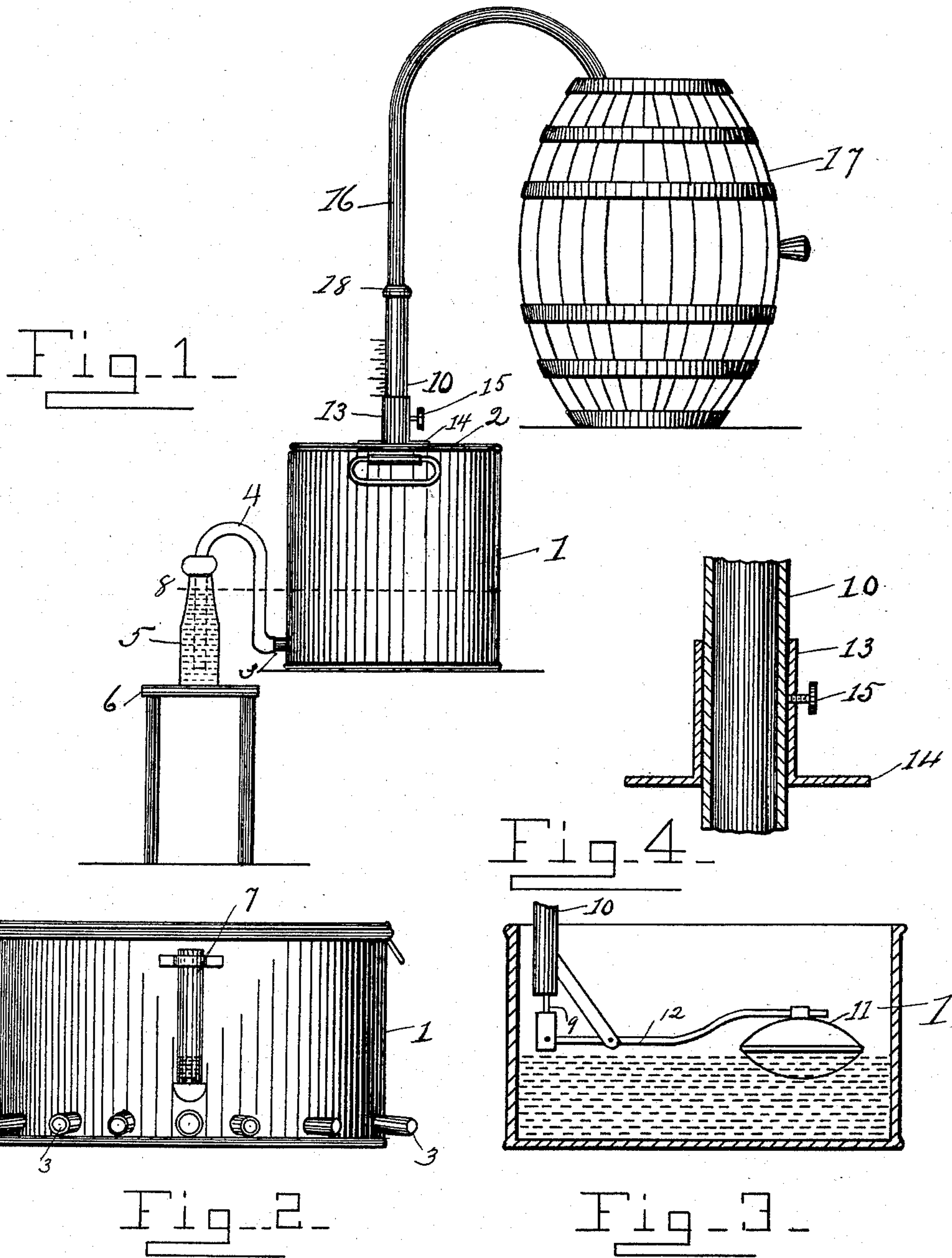


(No Model.)

R. KOLLIKER.
BOTTLING MACHINE.

No. 518,527.

Patented Apr. 17, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT KOLLIKER, OF PITTSBURG, PENNSYLVANIA.

BOTTLING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 518,527, dated April 17, 1894.

Application filed August 31, 1893. Serial No. 484,456. (No model.)

To all whom it may concern:

Be it known that I, ROBERT KOLLIKER, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bottling-Machines, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to "bottling machines" and consists in certain new and useful improvements, to be hereinafter more particularly described and specifically pointed out in the claims.

15 The object of the invention is to construct a machine whereby bottles may be easily filled with liquid, and a uniform and steady flow from the barrel obtained; furthermore, to regulate the flow of the liquid, filling the bottles to a certain height, thereby effectually preventing any overflow that would otherwise take place; a further object being, to provide novel means whereby the height of the fluid in the tank may be regulated to comply with different sizes of bottles, in this way obviating the necessity of employing an adjustable table such as used in conjunction with machines of this class heretofore.

30 A still further object of my invention is to construct a machine that will be very simple in its construction, strong, durable and comparatively inexpensive to manufacture.

While my invention relates to bottling machines in general, it is especially designed and adapted for filling beer or other malt liquors in bottles, in which heretofore great difficulty has been experienced by reason of the tendency of the beer to foam and of the difficulty to accomplish the proper feeding of beer from the barrel, and loss of carbonic acid caused by exposure to the atmosphere. By the employment of this machine, the difficulties are overcome, and the beer conveyed from the reservoir or supply tank into the bottles without objectionable foaming or overflowing of the liquid.

Referring to the accompanying drawings forming a part of this specification and wherein like figures of reference indicate similar parts throughout the different views, Figure 1. is a front elevation of my improved bottling machine, illustrating the rela-

tive position of the different parts. Fig. 2 is a view in side elevation of the supply reservoir. Fig. 3. is a vertical sectional view of the supply reservoir showing the interior arrangement of the same. Fig. 4. is a detail view of the adjustable supply pipe carrying the automatic cut off valve.

In the drawings 1, represents a suitable tank or reservoir containing the liquor to be delivered to the bottles, provided with a removable lid or cover 2, secured thereto in any suitable manner forming a practical air-tight connection.

3, represents a series of nipples communicating with the reservoir 1, to which are attached gum tubes 4, said tubes are the outlet of the reservoir or tank and feed the bottles 5, the latter standing on a table 6.

The figure 7 represents an independent liquor gage arranged on the outside of the reservoir and communicating with the same in the well-known manner.

8, represents the liquor line in the tank and bottles, 9, the automatic cut-off valve attached to the supply pipe 10 and regulated by a float 11, rigidly attached to the stem 12, actuating the valve 9.

The figure 13, represents a sleeve or collar having a flange 14 attached to the lid and embracing the supply pipe extending through the lid or cover, said sleeve or collar carries a set screw 15 operating against the supply pipe.

16 is a gum hose leading from the barrel 17 and coupled at 18 to the supply pipe of the reservoir.

The barrel is provided with a vent hole, as will be understood.

The operation is as follows:—For starting the machine the bottles are placed on the table and the feeding tubes inserted in the bottles, the liquor is then siphoned to the reservoir from the barrel, the reservoir being in such a position that its top will be on a level or below the bottom of the barrel. From the reservoir the liquor is fed through the supply tubes to the bottles; as the liquor rises in the reservoir the float will correspondingly rise and actuate the cut off valve when the liquor reaches a certain level in the tank, *i. e.* to a line with the lower portion of the bottle necks; the liquor being siphoned in the bottles from

the tank, it will be impossible for the liquor to rise in the bottles above the desired height. A liquor gage being arranged on the outside of the tank to indicate the height of the fluid.

5 When it is desired to remove a bottle the gum tube is taken out and the end laid over the top of the tank, this will cause the flow to cease from the outlet to which said tube is attached and an empty bottle is then replaced

10 for the filled one; it will be noticed that this operation is continuous and there will always be a uniform flow of the liquid until all the bottles are filled or the supply in the barrel exhausted. The pressure caused by conveying the beer from the barrel to the reservoir, together with the siphon of the reservoir will admit the liquid to flow freely through the feeding tubes. When quart bottles are

15 filled and it is desired to fill pints, the set screw of the sleeve or collar is turned thus allowing the supply pipe carrying the cut off valve to be lowered, thus regulating the liquor level to the desired height; this supply pipe may contain a scale and characters such as:—

20 One-half gallon, Quarts, "Fives," Pints, &c., the pipe being adjusted to meet the requirements of the liquor level and the corresponding capacity of the jugs and bottles of different sizes.

It will be particularly noted that various 30 changes may be made in my invention without departing from the general idea involved.

Having fully described my invention, what I claim as new, and desire to obtain by Letters Patent, is— 35

1. In a bottling machine, the combination with the supply tank having a sleeve or collar at the top thereof, of the graduated supply pipe adjustably secured within said collar, the automatic cut-off valve attached to 40 the lower extremity of said supply pipe, the float controlling said valve and a series of flexible discharge tubes leading from the supply tank, substantially as described.

2. In a bottling machine, the combination 45 with a tank provided with a liquor gage flexible discharge tubes and a closed top, as described, and a collar at the top of said tank, of the supply pipe adjustably secured within said collar, an automatic cut-off valve attached 50 to the supply pipe and a float to control said valve for the purpose set forth.

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

ROB. KOLLIKER.

Witnesses:

H. C. EVERT,

H. E. SEIBERT.