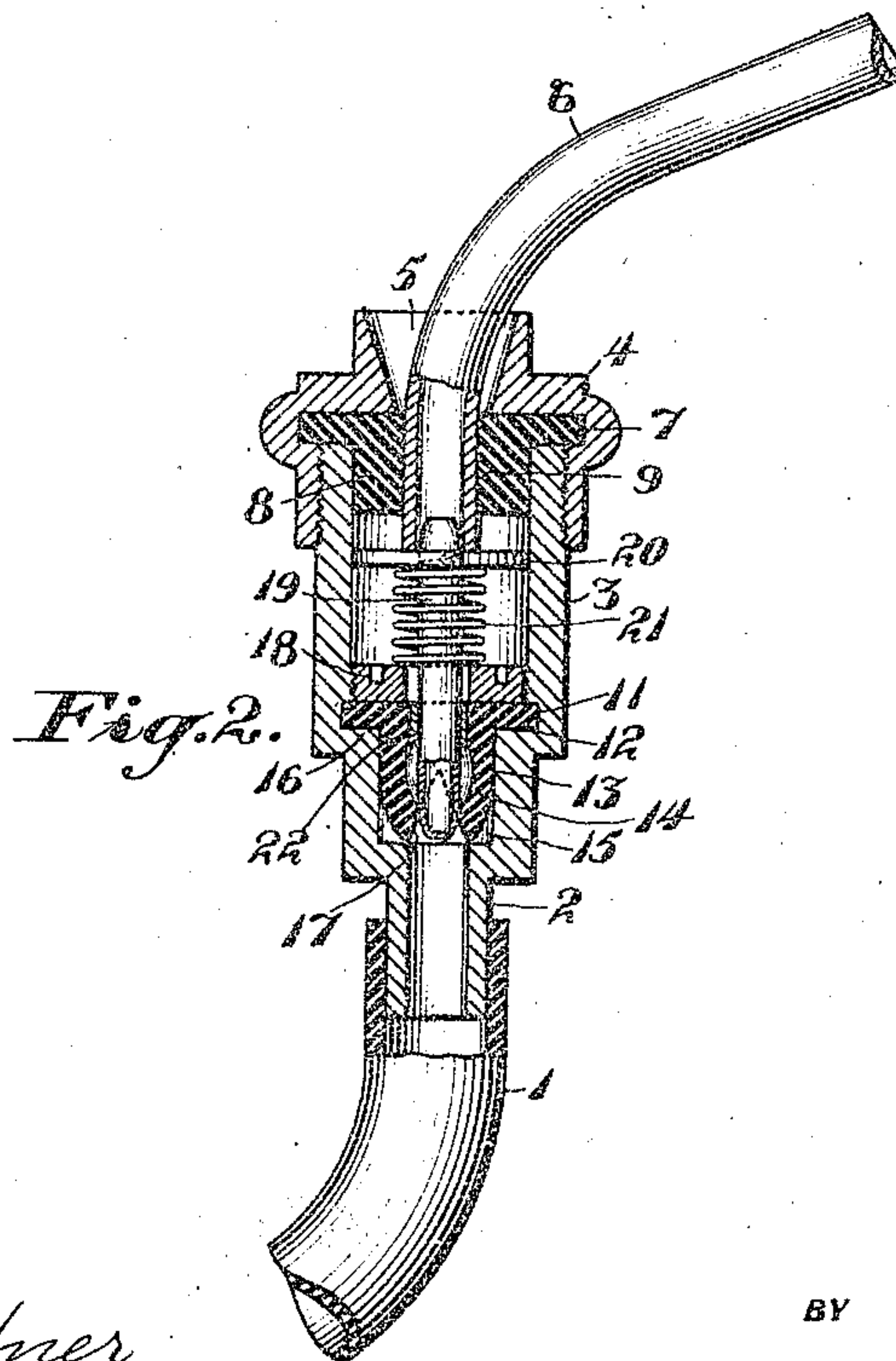
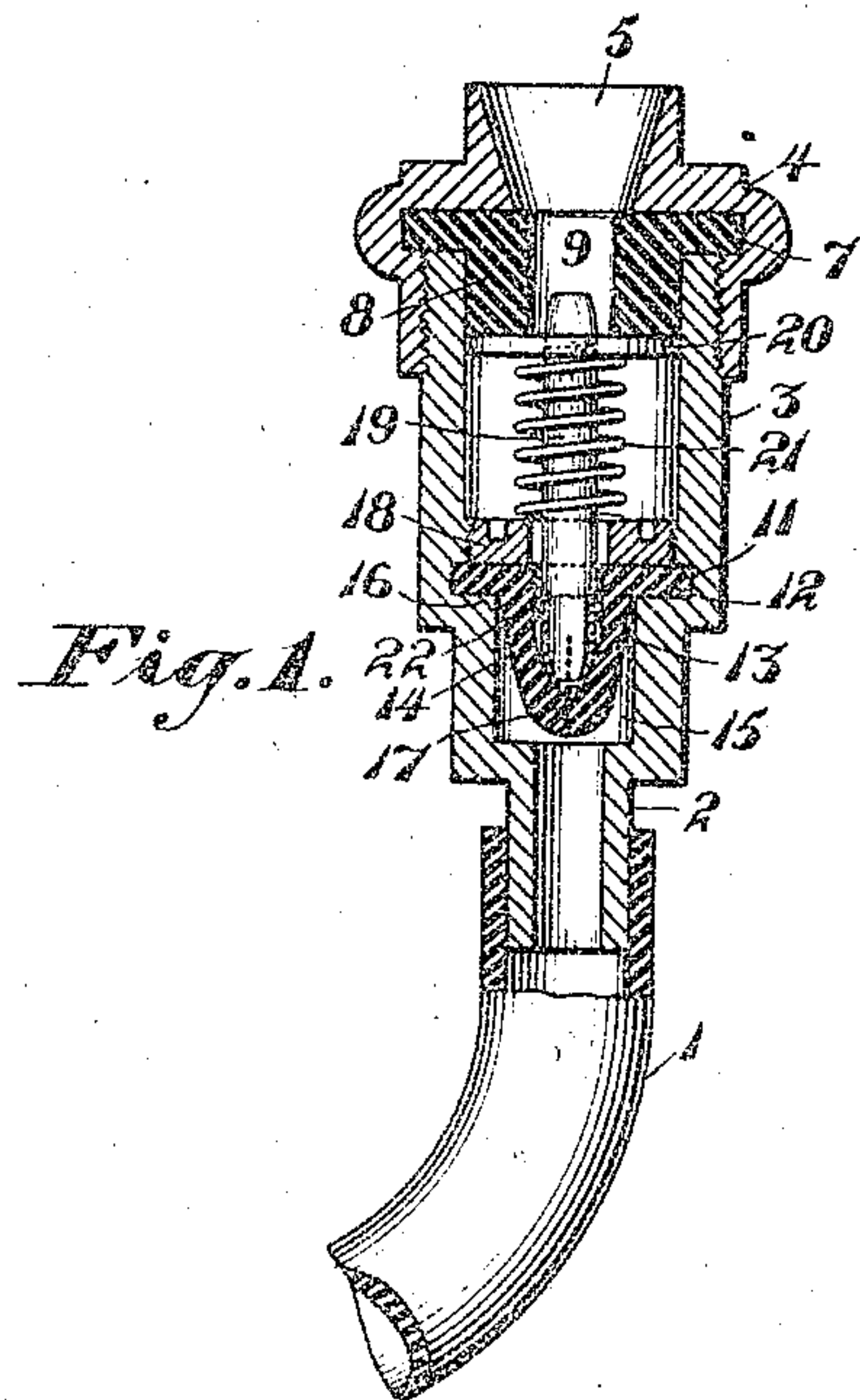


G. L. KENNEDY.  
FILLER FOR SIPHON BOTTLES.  
APPLICATION FILED SEPT. 2, 1909.

962,027.

Patented June 21, 1910.



WITNESSES:

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BY

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# UNITED STATES PATENT OFFICE.

GUY L. KENNEDY, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO NATIONAL CARBONATED LIQUID CO., OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

FILLER FOR SIPHON-BOTTLES.

962,027.

Specification of Letters Patent. Patented June 21, 1910.

Application filed September 2, 1909. Serial No. 515,976.

*To all whom it may concern:*

Be it known that I, GUY L. KENNEDY, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Fillers for Siphon-Bottles, of which the following is a specification.

The object of the present invention is to provide a simple, convenient, and efficient device for filling siphon bottles with carbonated liquid.

In the accompanying drawing, Figure 1 is a vertical section of the filler, showing the parts in position when the filler is not in use, certain parts being shown in side elevation: Fig. 2 is a similar view showing the parts when in use.

Referring to the drawing, 1 indicates a flexible tube which is connected to the source of supply of carbonated liquid. An end of said tube is secured upon a depending cylindrical extension 2 of a casing 3, on the upper end of which is screwed a cap 4 having an inwardly converging mouth or guideway 5, which is adapted to guide the end of the spout 6 of the siphon bottle into a central position. Between said cap 4 and the end of the casing is secured a flange 7 of a rubber gland 8, centrally apertured, as shown at 9, said aperture being adapted to receive and fit tightly around the extreme end of said spout. The inner surface of said casing is formed with a groove 11, within which is received a flange 12 of a rubber check valve 13, which, while, so far as I am aware, novel, forms the subject of a separate application, and is not claimed herein. It comprises, in addition to said flange 12, a central conoidal portion 14 which is received within a reduced portion 15 of said casing 3, said reduced portion forming a comparatively wide shoulder 16 against which the flange 12 rests. The apex of said conoidal portion is formed with a transverse slit 17, the lips of which, in the normal position of said valve, are maintained in close contact with each other by the resiliency of the rubber itself. The flange 12 of said check valve is additionally secured in place by means of a disk-shaped screw plug 18, screwed into an internally threaded portion of the casing. Said screw plug is centrally apertured to permit to pass therethrough a filling tube 19, the upper end of which is secured to a disk 20, which

slides within the inner surface of the casing and acts as a guide, and which is pressed against the inner side of the gland 8 by a helical spring 21 around said filling tube and compressed between said disk and the opposite surface of the screw plug. Said filling tube passes through a bushing 22, which is inserted within the entrance to the check valve and is held in place by the resiliency of the rubber thereof, the filling tube extending within the check valve to a point close to the transverse slit therethrough, but not sufficiently to open the same unless it is depressed.

To fill a siphon bottle, the filler is removed so that the end of the siphon spout passes into the converging mouth 5 and then through the aperture 9 in the rubber gland 8 and impinges against the disk 20, surrounding the end of the filling tube projecting through said disk. Further pressure against the end of the spout causes the disk to be pressed inward against the action of the spring 21, carrying with it the filling tube 19, the effect of which is to open the slit 17 in the apex of the check valve, thereby forming a communication between the source of supply of aerated liquid and the siphon bottle. The aerated liquid then passes through said extension 2, filling tube 19 and spout 6 into the siphon bottle the siphon valve (not shown) being held open when filling the bottle. Upon withdrawing the siphon spout from said filler, the spring 21 immediately restores the disk 20 to its place in contact with the gland 8, thus withdrawing the filling tube from the check valve 13, which immediately thereupon closes. The check valve in this combination forms an important feature of this invention, on account of the rapidity and certainty with which, when withdrawing of filling tube, the lips of the check valve close the instant that the filling tube is withdrawn, absolutely cutting off any further passage of the liquid therethrough, the pressure of the aerated liquid against the outer side of the check valve then only serving to maintain the check valve closed.

I claim:—

1. An apparatus of the character described, comprising a casing, a supply tube secured to one end thereof, a cap closing the other end thereof, having an inwardly converging mouth, a rubber gland secured be-



tween casing and cap, a check valve secured within said casing, having a hollow central conoidal portion slitted through its apex, a filling tube within said casing open at both  
5 ends, a disk secured to said tube, and a spring arranged to press said disk against said gland, the other end of said tube extending into said hollow conoidal portion of the valve, substantially as described.

10 2. An apparatus of the character described, comprising a casing, a supply tube secured to one end thereof, a cap secured to the other end and formed with an inwardly converging mouth, a centrally apertured gland between said cap and casing,  
15 a centrally apertured rubber check valve secured within the said casing, a filling tube open at both ends, a disk secured to one end of said filling tube, and a coiled spring  
20 around said filling tube and normally pressing said disk against said gland, substantially as described.

3. An apparatus of the character de-

scribed, comprising a casing, a supply tube secured to one end thereof, an apertured  
25 cap secured to the other end, a centrally apertured gland, the flange of which is secured between said cap and casing, a check valve having a flange secured within the  
30 said casing and having a hollow central conoidal portion slitted through its apex, a retaining disk on the said valve, a filling tube open at both ends, a disk secured to said  
35 filling tube at one end, and a coiled spring around the tube and between the two disks, the other end of the tube normally projecting into the hollow portion of the check  
valve, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing  
40 witnesses.

GUY L. KENNEDY.

Witnesses:

FRANCIS M. WRIGHT,  
D. B. RICHARDS.