

(No Model.)

L. H. GRISTE.
BOTTLE.

No. 598,923.

Patented Feb. 15, 1898.

FIG. 1.

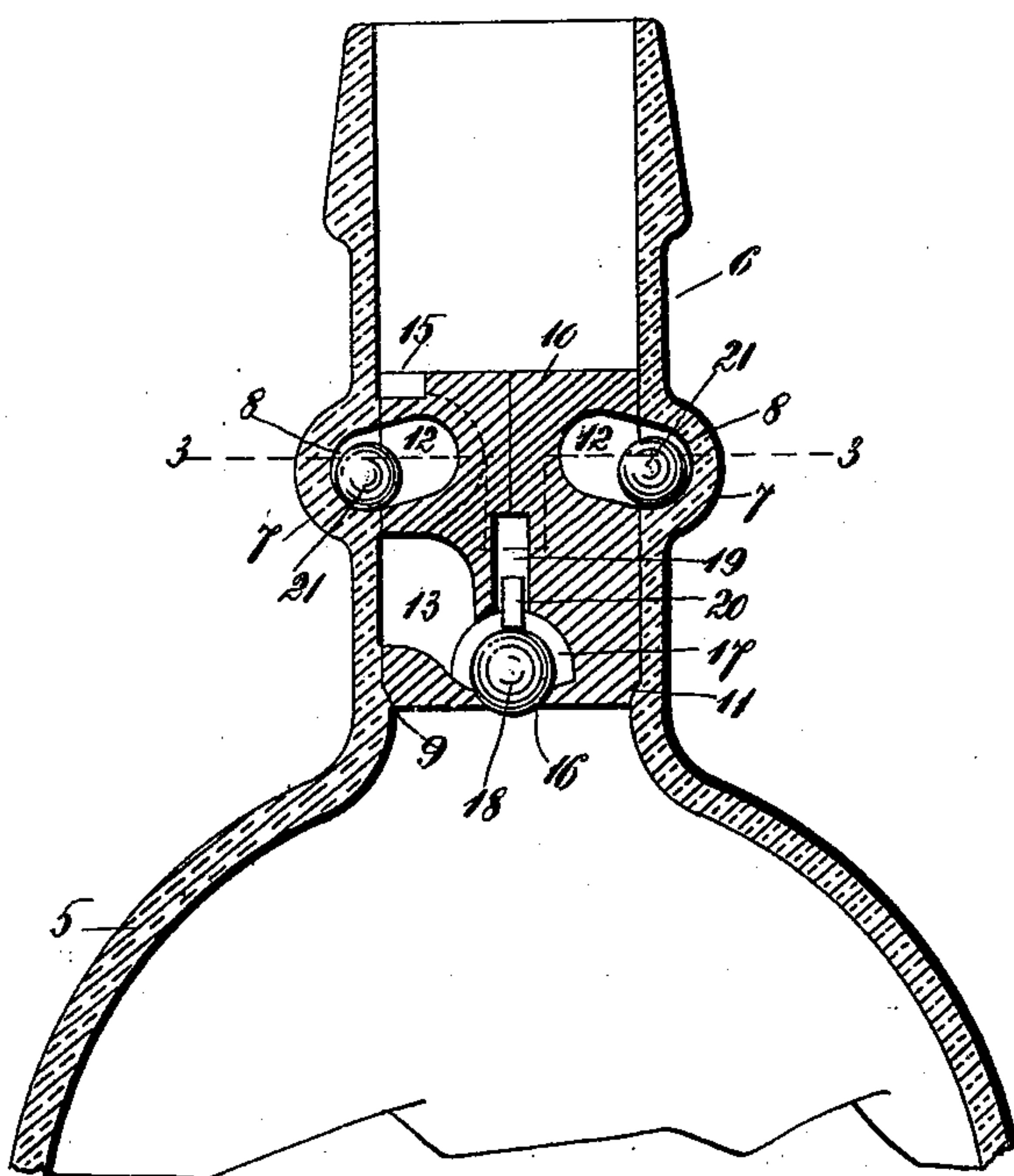


FIG. 2.

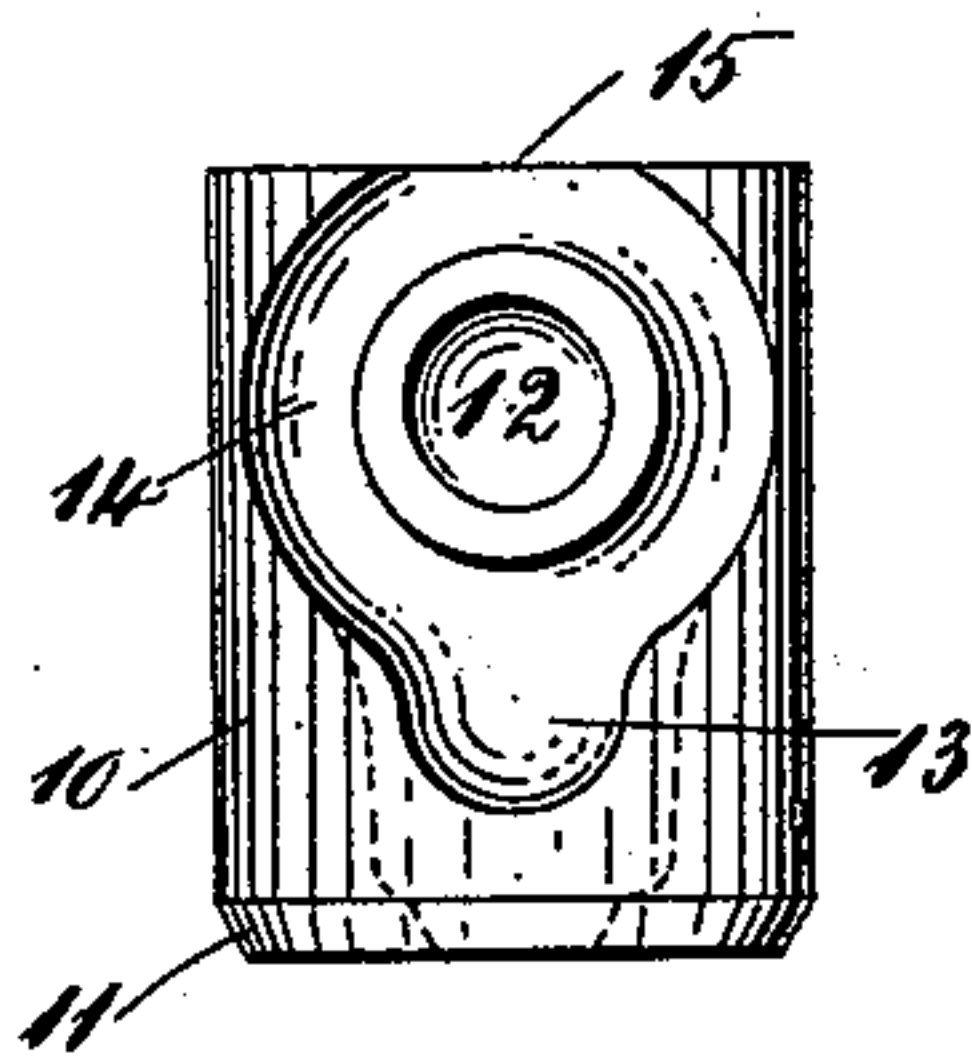
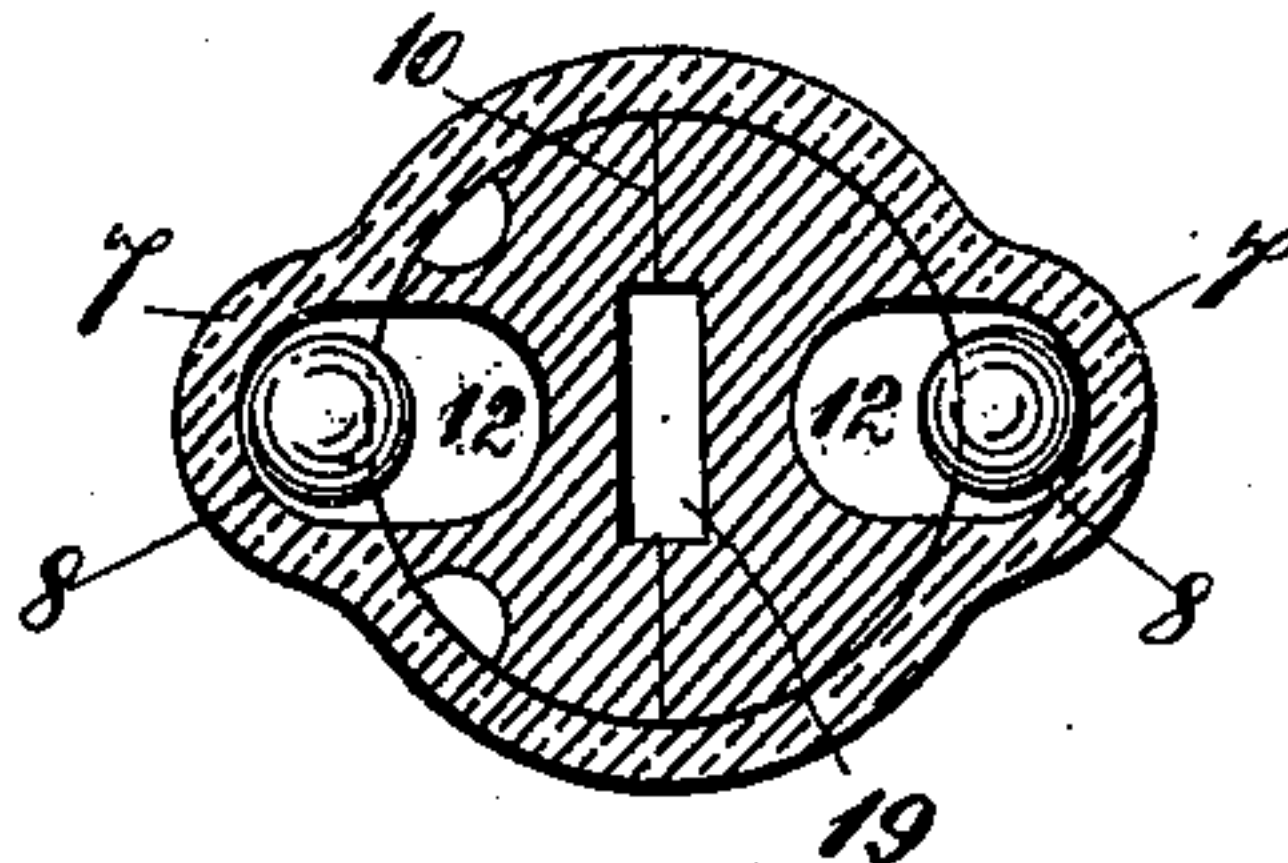


FIG. 3.



WITNESS

W. H. Grist
John R. R. R.

INVENTOR

Laura H. Grist
BY
Edgar Tate & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

LAURA HENRIETTA GRISTE, OF NEW YORK, N. Y.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 598,923, dated February 15, 1898.

Application filed March 24, 1897. Serial No. 628,964. (No model.)

To all whom it may concern:

Be it known that I, LAURA HENRIETTA GRISTE, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bottles, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to bottles, jugs, jars, and similar vessels; and the object thereof is to provide a vessel of this class which having been once filled and sealed may be emptied of its contents, but cannot be refilled or reused.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a central vertical section of the upper part of a bottle and the neck thereof provided with my improvement, and Fig. 2 a side view of the sealing device or plug which I employ; Fig. 3, a section on the line 3 3 of Fig. 1.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in said drawings I have shown a bottle 5, provided with a neck 6, the opposite sides of which are provided with shoulders or projections 7, in which are formed cavities or recesses 8, and formed within the neck of the bottle, at or near the lower end thereof, is an inwardly-directed annular ledge or shoulder 9.

I also provide a plug 10, which is adapted to closely fit within the neck of the bottle and which may be composed of glass or any suitable material and which is beveled at its lower end, as shown at 11, and adapted to rest upon the ledge or projection 9, and formed in the opposite sides of said plug are cavities or recesses 12, which correspond with the cavities or recesses 8 formed in the neck of the bottle.

Formed in one side of the plug 10, below one of the cavities or recesses 12, is a circular opening 13, which is in communication with an annular groove 14, which extends around the cavity or recess 12, adjacent thereto, and which opens upwardly through the

top of the plug, at one side thereof, as shown at 15. The plug 10 is divided vertically and centrally, and consists of two parts, and formed centrally of the bottom thereof is a port or passage 16, above which is formed a chamber 17, in which is placed a ball-valve 18, and the chamber 17 is in communication with the circular opening 13 in the side of said plug, and above the chamber 17 in the lower end of the plug is a vertical angular chamber 19, which is in communication with the chamber 17, and in which is placed a vertically-movable weight 20.

I also provide two lock-balls 21, which are placed in the cavities or recesses 12 and which are adapted to roll out into the cavities or recesses 8 in the neck of the bottle, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

It will be understood that the valve-chamber 17 and the vertical rectangular chamber 19 are formed in the adjacent surfaces of the separate parts of the plug 10, and in practice the weight 20 and the valve 18 are placed in position in one of said parts before said parts are connected. After the bottle or vessel has been filled the plug 10 is inserted therein, the locking-balls 21 being held in the cavities or recesses 12 until said cavities or recesses pass below the upper end of the neck of the bottle, and when the plug 10 is forced downwardly into the position shown in Fig. 1 the said locking-balls 21 will roll out into the cavities or recesses 8 in the sides of the neck of the bottle. These balls are greater in diameter than the depth of the cavities or recesses 8, and said cavities or recesses 8 and the corresponding cavities or recesses 12 in the plug 10 are so formed that the bottoms thereof incline downwardly and outwardly, and no matter in what position the bottle or vessel is held one of said locking-balls will always rest in the corresponding cavity or recess 8 in the neck of the bottle, and it will be impossible to remove the plug.

The plug 10 may be composed of any desired material, and after the bottle or vessel has been filled and said plug forced into position the neck or nozzle of the bottle may be closed by a cork or stopper in the usual

manner, and whenever it is desired to empty the bottle or discharge a portion of its contents the cork or stopper is removed and the weight 20 and the valve 18 dropped downwardly or in the direction of the end of the neck 6, and the contents of the bottle are free to flow out through the port or passage 16 into the circular opening 13 and through the groove or passage 14 and out through the port or passage 15, and this operation may be continued or repeated until the bottle is entirely empty.

It will be understood that when the bottle is in an upright position the port or passage 16 is closed by the valve 18, and the vertically-movable weight 20 rests on said valve, and said valve cannot be dislodged from the chamber 17 and is always in position for use, and if the bottle is held in an upright position or tilted to one side the valve 18 will be seated, and no fluid can be poured into the bottle, and this operation of the valve 18 will be the same in any position in which the bottle can be held in an attempt to pour liquids thereinto. The valve 18 may also be made to serve as a float-valve, and when this is done the bottle cannot be filled by inverting it and forcing liquids thereinto.

My improvement is simple in construction and operation and perfectly adapted to accomplish the result for which it is intended.

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

In a bottle of the character described, a neck 6 having shoulders or projections 7 forming cavities or recesses 8, and also provided with a ledge or shoulder 9, a plug 10 adapted to fit closely within the neck of the said bottle, said plug being beveled at its lower end and adapted to rest upon said projection 9, said plug being also provided with cavities or recesses 12, which correspond with said recesses 8, and with a circular opening 13, and with an annular groove 14 which communicates with the upper surface of said plug at 15, said plug being divided vertically and centrally, and also provided with a port or passage 16, and chamber 17 which is in communication with said circular opening 13, and with a vertical angular chamber 19 communicating with said chamber 17, a ball-valve 18 in said chamber 17 and an angular weight 20 in said chamber 19 adapted to bear upon said ball-valve 18, two lock-balls 21 in said cavities or recesses 12 adapted to engage said cavities or recesses 8 in the neck of said bottle, substantially as and for the purpose described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 22d day of March, 1897.

LAURA HENRIETTA GRISTE.

Witnesses:

C. GERST,

A. C. VAN BLARCOM.