No. 654,597. Patented July 31, 1900.

C. M. BRADY.

SIPHON.

(Application filed Apr. 28, 1900.)

(No Model.)

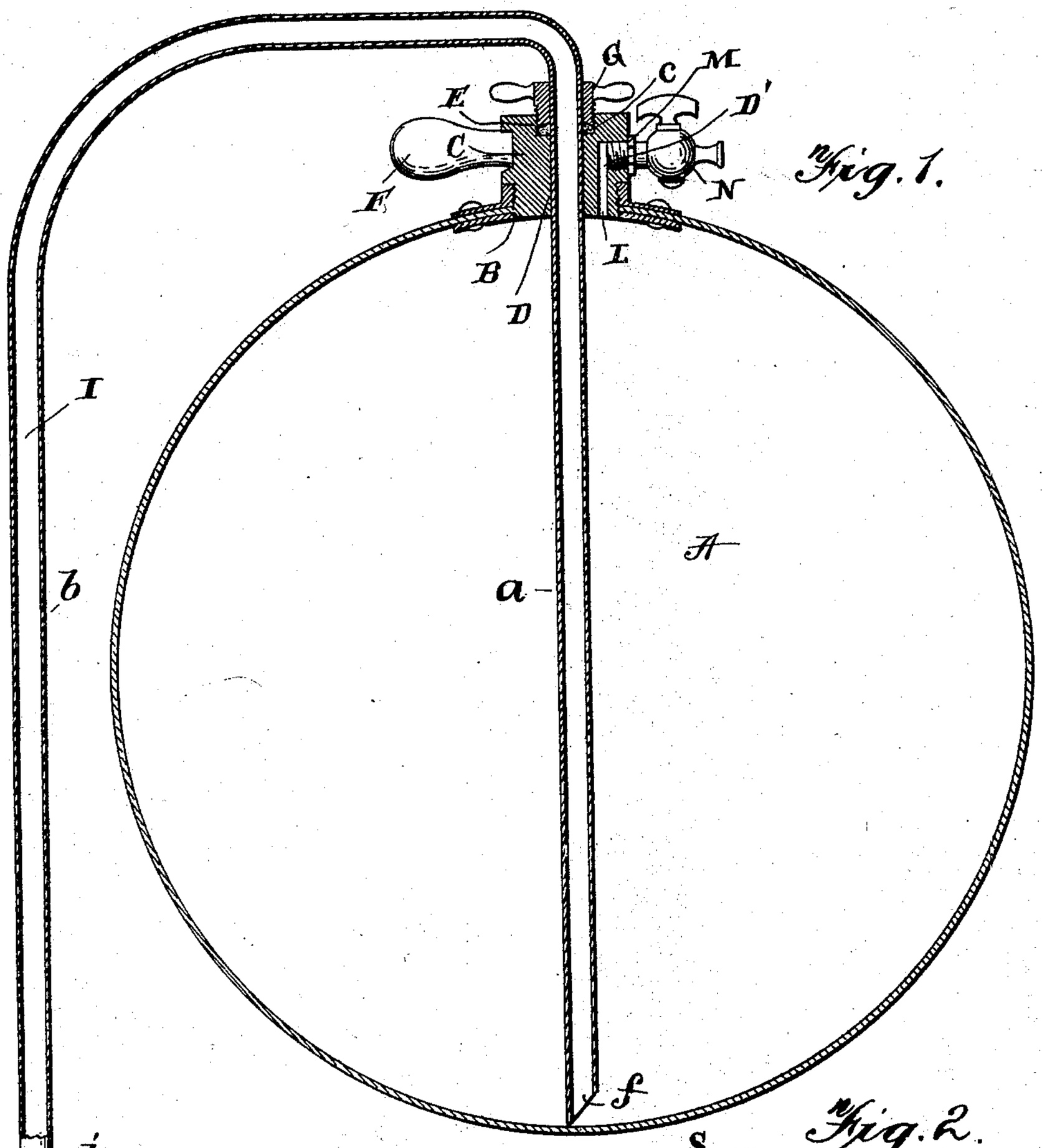


Fig. 1.

Fig. 3.

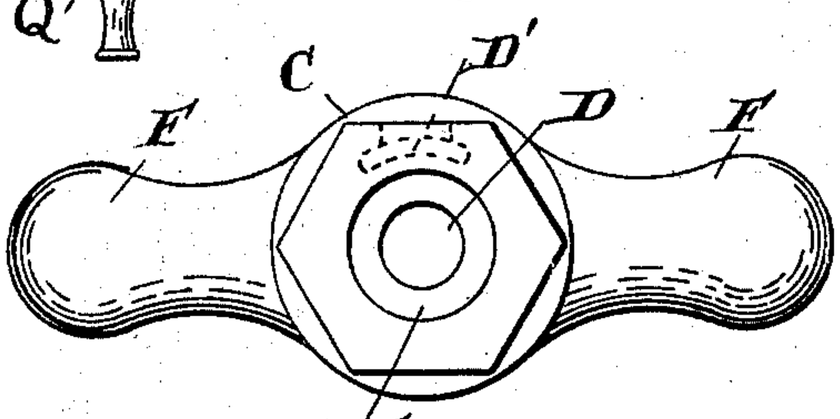
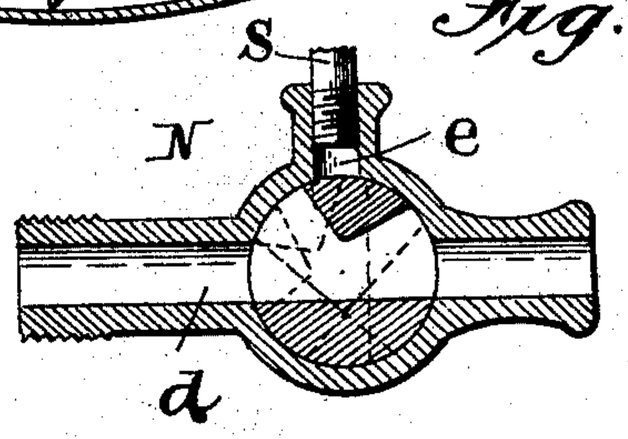


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CLYDE MORDICA BRADY, OF BRUNSWICK, GEORGIA.

SIPHON.

SPECIFICATION forming part of Letters Patent No. 654,597, dated July 31, 1900.

Application filed April 28, 1900. Serial No. 14,738. (No model.)

To all whom it may concern:

Be it known that I, CLYDE MORDICA BRADY, a citizen of the United States, residing at Brunswick, in the county of Glynn and State of Georgia, have invented new and useful Improvements in Siphons, of which the following is a specification.

My invention relates to improvements in siphons, and pertains to a siphon adapted to be attached to a barrel, cask, or other vessel for drawing the liquid thereform and adapted to be hermetically sealed for the purpose of preventing the evaporation of the liquid within the vessel, all of which will be fully described hereinafter and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a vertical sectional view of a siphon embodying my invention, showing it applied to a barrel, cask, or other vessel. Fig. 2 is a horizontal sectional view of the top or faucet which performs the double function of a pump connection and an air-vent when the faucet is in operation. Fig. 3 is a top plan view of the bung through which the siphon passes.

Referring now to the drawings, A indicates a barrel, cask, or other vessel to which the siphon is to be applied, the said cask or tank having a bung-opening B, here shown as provided with screw-threads.

C is my improved siphon-bung, which has the lower screw-threaded portion adapted to fit in the screw-threaded opening B of the cask or barrel and with a central longitudinal opening having an enlarged upper internally-screw-threaded end E. This bung C is provided with one or more handles F, by means of which it is screwed into the barrel-opening B for the purpose of attaching it or unscrewed therefrom for the purpose of detaching it.

The siphon proper consists of an essentially U-shaped pipe I, having the straight portions *a* and *b*, the portion *a* adapted to pass through and longitudinally move through the opening D of the bung C for the purpose of adjusting it to tanks or casks of different sizes and also for the purpose of enabling the U-shaped pipe to have a swiveling action for adjusting it over any receptacle to receive the liquid from the exit end *i* thereof. For the purpose of making an air-tight connection between the stem *a* of the pipe I and the bung C the upper enlarged screw-threaded portion E serves as a packing-box and which receives a gland or nut G for the purpose of compressing a suitable packing *c* against the said pipe and making a tight joint.

The bung C is provided with an air inlet and outlet opening D′, which is essentially L-shaped, as here shown, the horizontal upper end M being internally screw-threaded for the purpose of receiving a cock or valve N. This cock or valve N is a three-way valve and is constructed with two openings *d* and *e*, the opening *d* being an air-vent, as will hereinafter appear, and the opening *e* being a pipe connection. The valve is so constructed that either of the said openings can be thrown into communication with the interior of the tank or both of them cut off, the object of which will be described hereinafter. The vertical portion L of the opening through the bung is made in the form shown in dotted lines, Fig. 3, and communicates at its lower end with the interior of the barrel or cask and at its upper horizontal end with the cock or valve N.

The stem *b* of the siphon-pipe has its lower end extending below the bottom of the cask, and hence below the lower end of the stem *a* of the said pipe, and is provided with a suitable controlling-valve Q for the purpose of opening and closing the outlet end *i* of the said pipe in the operation of the siphon.

Connected with the pump-valve connection *e* is a flexible pump connection S, with which any desired form of air-pump (preferably of the well-known bicycle-pump) may be connected. The lower end of the stem *a* of the siphon-pipe I is beveled off, as shown at *f*, for the purpose of enabling the lower end of the pipe to be carried in contact with the lower end of the barrel or cask without closing the same.

The operation of my improved siphon is as follows: The valve N is turned so that communication is established through the pump connection and the opening L in the bung to the interior of the cask. Air is forced within the cask until the proper compression is obtained, when the valve is turned so as to close both the pump-connection opening *e* and the air-vent *d*. The compression necessary to start the siphon is that amount which will be required to force the liquid within the

cask up through the pipe I and out the lower end, when the valve Q will be closed. The siphon is now ready to operate without any further use of the pump. When it is desired to operate the siphon, the exit-valve Q of the siphon-pipe is opened and the valve turned to open the air-inlet *d*. Then the liquid will flow through the siphon into the receptacle placed therefor, and it can be instantly stopped by the closing of the valve Q. When the valve Q is closed, the air-vent N is also closed, and when the siphon is not in operation it will be seen that the hermetically-sealed cask or barrel for the reception of volatile liquids of all kinds is provided and which will prevent the evaporation thereof.

From this construction it will be seen that the siphon-pipe I can be readily adjusted vertically by a slight loosening of the packing-gland G to suit barrels of different sizes and that the pipe I being a continuous rigid pipe is cheap to manufacture, effective in operation, with no joints therein to be kept tight, and which can be readily oscillated within the bung for carrying it over the receptacle to receive the liquid within a predetermined limit.

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

A siphon adapted to be hermetically attached to a cask or vessel comprising a bung having a siphon-pipe opening, a siphon-pipe passing through the said opening into the barrel and having its outer end below its inner end and provided with a valve, the said bung having an opening with its inner end in communication with the barrel independent of the said siphon-pipe, the outer end of the said opening having an independent air-outlet and pump-connection inlet in communication therewith, and a valve adapted to independently control the said passages by throwing either of them in communication with the interior of the cask or closing both of them against communication therewith, substantially as described.

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

CLYDE MORDICA BRADY.

Witnesses:

ALBERT O. ANDERSON,

GUSTAVUS KING.