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COMPRESSED AIR FEED LIQUID CONTAINER.

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1,377,923. Patented May 10, 1921.

Fig. 1.

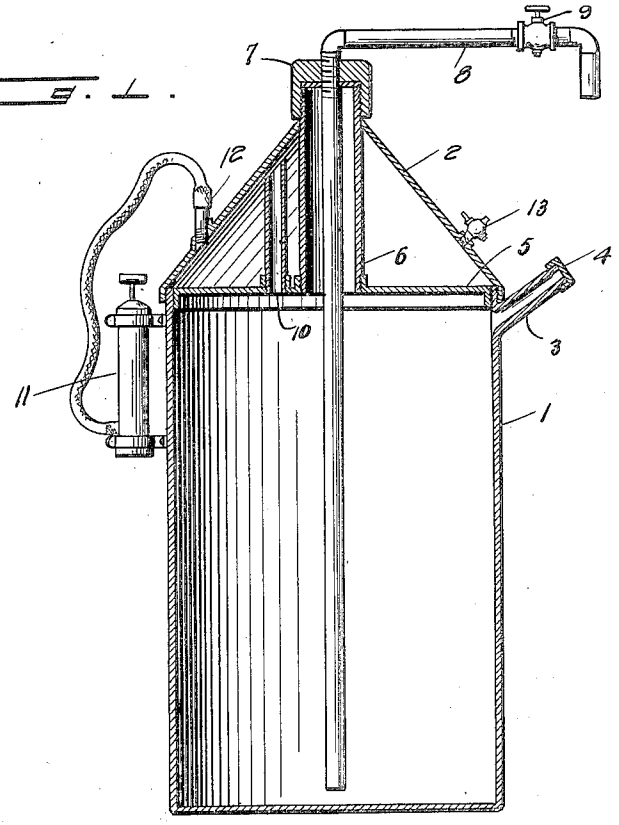
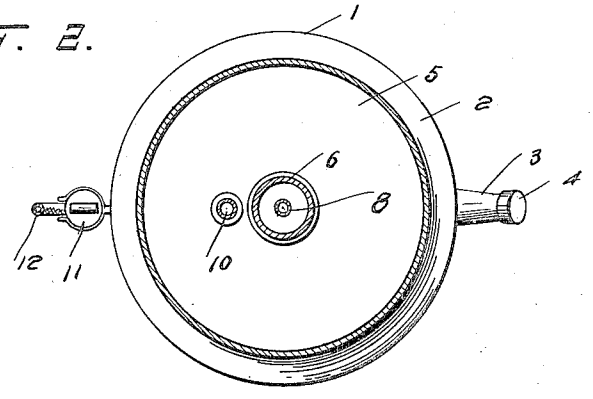


Fig. 2.



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COMPRESSED-AIR-FEED LIQUID-CONTAINER.

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To all whom it may concern:

Be it known that I, EMIT M. POSA, a citizen of the United States, residing at Burleson, in the county of Johnson and State of Texas, have invented certain new and useful Improvements in Compressed-Air-Feed Liquid-Containers; and I do hereby declare the following to be 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.

This invention relates to compressed air feed liquid containers and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a container of the character stated which is of simple and durable structure and which is provided with an air reservoir adapted to retain air under pressure and which may be fed to the body of the container when the liquid outlet of the container is opened so that the liquid may be forced from the container under the influence of the compressed air.

With this object in view, the container comprises a body provided at its top with a cone shaped dome separated from the body by a transversely disposed partition. An air pump mechanism is arranged to discharge air into the said dome. A tube passes vertically through the dome and through the partition and an outlet pipe passes through the tube and enters the lower portion of the body. The said pipe is provided with a valve. An air pipe passes through the partition and extends up into the air dome and its upper end is spaced from the top of the dome. By this arrangement, when the pump mechanism is used for forcing air into the dome and a body of liquid is contained within the retainer, the liquid is maintained under air pressure. Therefore, when the valve of the outlet pipe is opened, the air expands and passes down through the pipe which communicates with the dome and forces the liquid from the body of the container up through the outlet pipe. The liquid will continuously flow so long as the air is under pressure and the valve in the outlet pipe is open. When the valve in the outlet pipe is closed, the flow of the liquid is instantly stopped or interrupted.

In the accompanying drawings:

Figure 1 is a vertical sectional view of the liquid container.

Fig. 2 is a sectional view taken on a plane extending horizontally through the dome at a point below the pipe 12 and pet-cock 13.

The compressed air feed liquid container comprises a body 1 provided at its upper end with a cone-shaped dome 2. The body 1 is provided at its side and in the vicinity of its upper end with a pouring spout 3 which is normally closed by a suitable closure 4. A partition 5 is disposed transversely across the body 1 at a point above the spout 3. A tube 6 passes centrally through the partition 5 and the upper portion of the dome 1 and is closed at its upper end by means of a cap 7. A pipe 8 passes through the cap 7 and the tube 6 and extends down into the body 1 with its lower end spaced from the bottom of the said body. The pipe 8 is provided with a valve 9. An air pipe 10 passes through the partition 5 and extends up into the dome 2 with its upper end spaced from the top of the dome. An air pump 11 is carried at the side of the container body 1 and is connected by means of a pipe 12 with the dome 2.

When the liquid is placed into the body 1, the cap 7 may be removed and the liquid may be poured into the body through the tube 6. When it is desired to force the liquid out of the body 1 and when the cap 4 is applied to the spout 3, air is forced under the dome 2 by using the pump 11 in a usual manner. The valve 9 may then be opened and the air under pressure will pass down through the pipe 10 and bear against the upper surface of the liquid which is in the body 1 of the container and force the liquid up through the pipe 8 and through the valve 9. When a sufficient quantity of the liquid has been withdrawn from the body 1, the valve 9 is closed and thus the flow of the liquid is stopped or interrupted. The dome 2 is provided with a pet-cock 13 which provides means by which the air pressure in the body 1 and dome 2 may be reduced at will.

From the foregoing description, taken in conjunction with the accompanying drawings, it will be seen that a compressed air feed liquid container of simple and durable

structure is provided and that the same may be conveniently and economically used for drawing or dispensing liquid in desired quantities and at desired intervals of time.

Having described the invention what is claimed is:—

1. A compressed air feed liquid container comprising a body, a dome mounted thereon, a partition separating the dome from the body, means for forcing air under the dome and above the partition, a tube passing through the partition and the dome, a pipe passing through the tube and entering the body, a valve mounted upon the pipe, a cap carried by the pipe and adapted to close the tube and an air pipe passing through the partition and entering the space under the dome and having its end spaced from the top of the dome.

2. A compressed air feed liquid container comprising a body having a dome mounted thereon, a partition separating the body from the dome, the body being provided with a spout at a point below the dome, a closure for the spout, a tube passing through the partition and the dome, a pipe passing through the tube and entering the body, a valve mounted upon the pipe, a closure mounted upon the pipe and adapted to close the tube, means for forcing air under the dome and a pipe passing through the partition and disposed under the dome and having its ends spaced from the top of the dome.

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

EMIT M. POSA.

Witnesses:
L. D. HARBIN,
EASTON LAWSON.