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PORTABLE DISPENSING DEVICE

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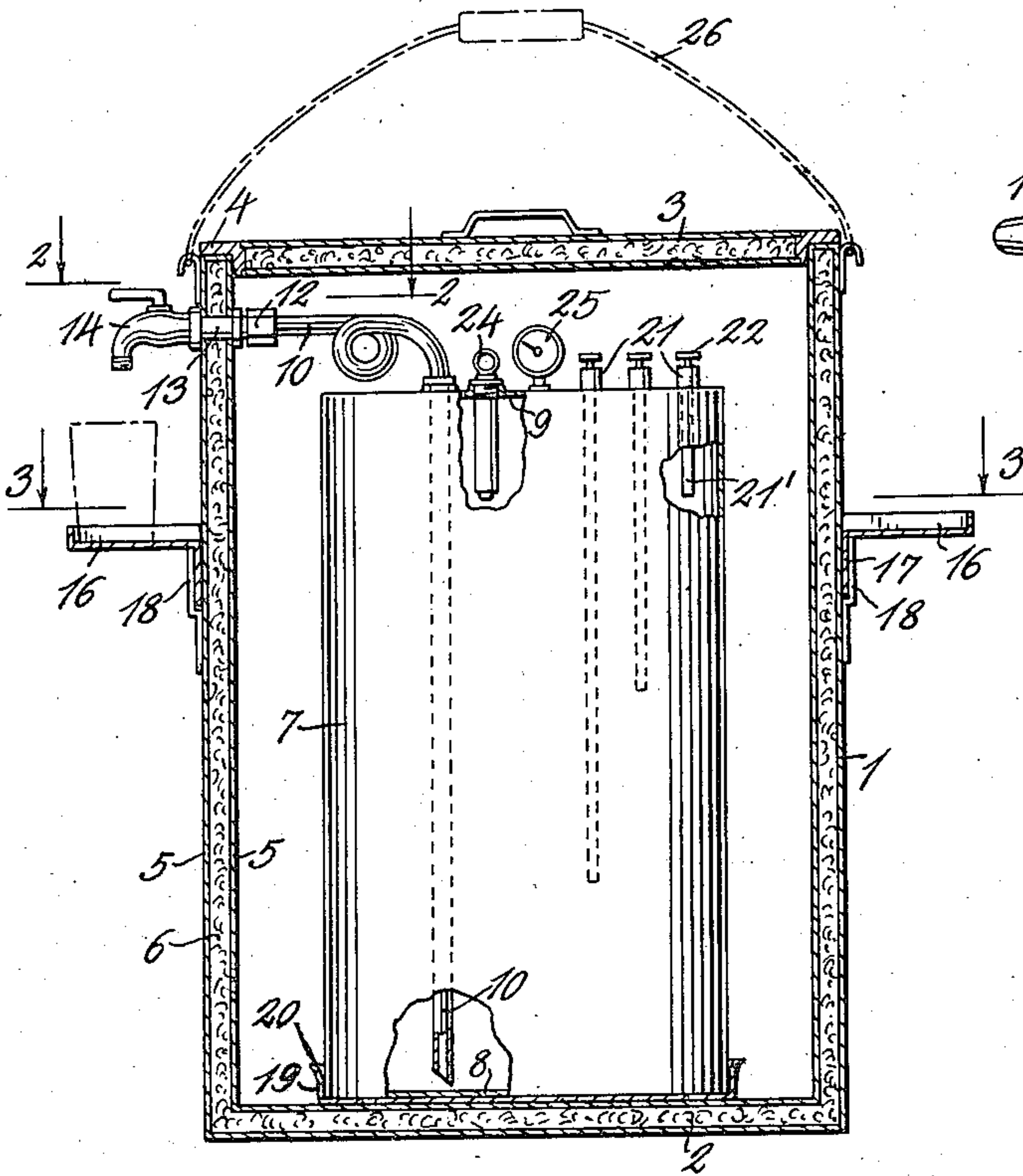


Fig. 1.

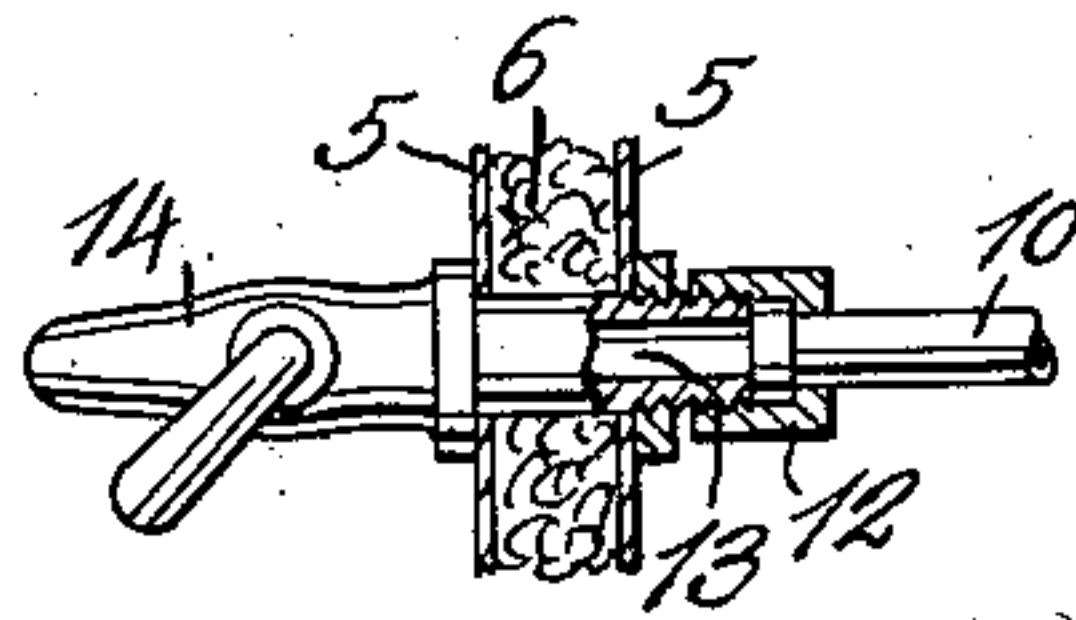


Fig. 2.

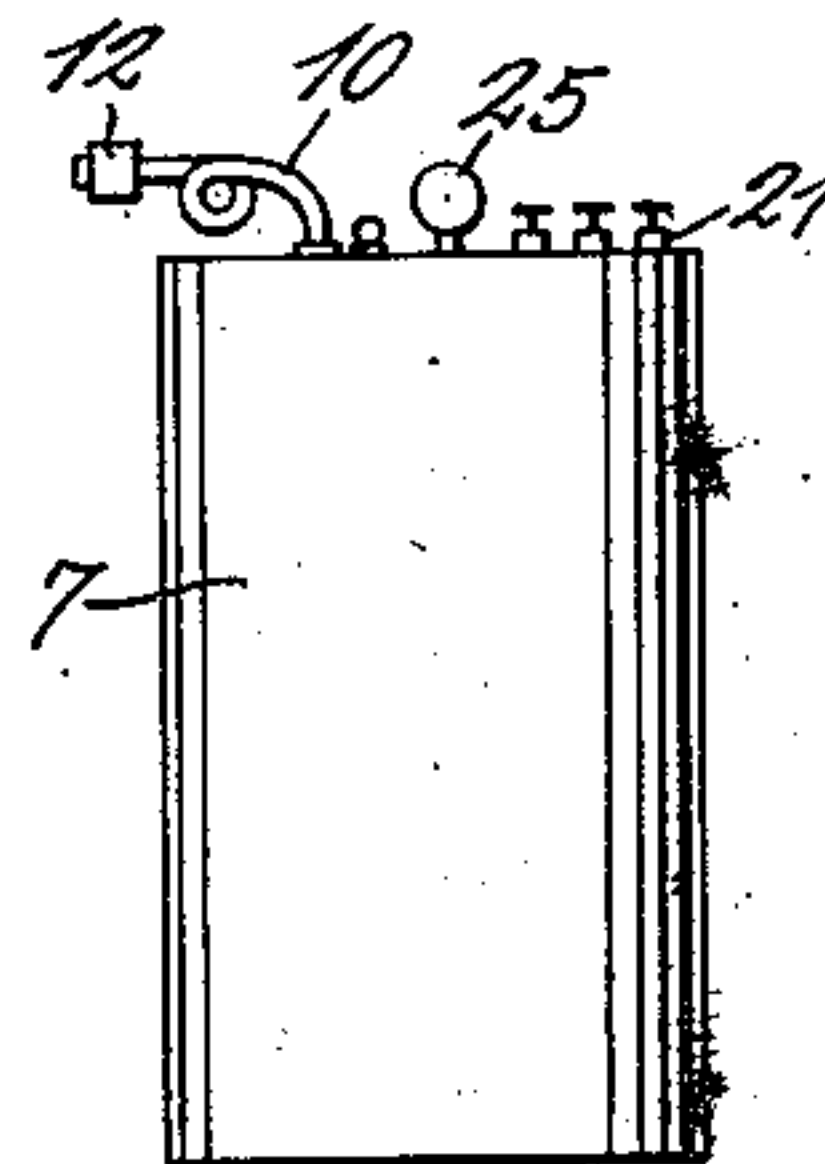


Fig. 4.

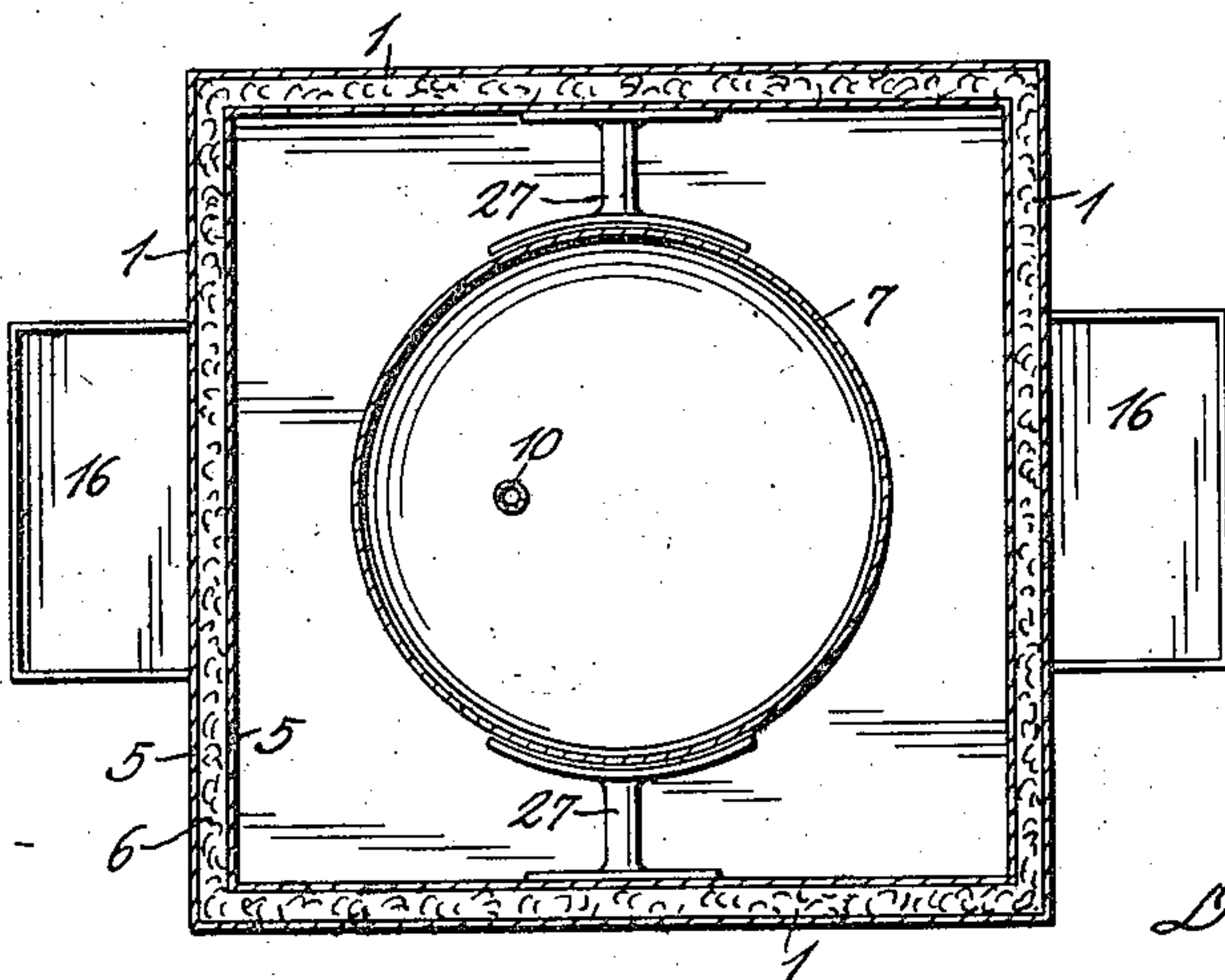


Fig. 3.

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PORTABLE DISPENSING DEVICE

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2 Claims. (Cl. 225—16)

This invention relates to improvements in portable refrigerating and dispensing devices for use in dispensing beverages such as beer.

It is the object of this invention to produce a portable device that can be employed for transporting and dispensing beverages and which shall be so constructed that it can be easily filled and which shall also permit the container to be surrounded with ice, or other refrigerant so as to maintain the contents at the proper low temperature.

Another object of this invention is to produce a device in which air pressure can easily be applied to the liquid so that it will flow from the container whenever it is to be dispensed.

A still further object of the invention is to produce a device in which the container is located in a heat insulated box and secured thereto in such a way that it can be readily removed, but which, when in place, will be held in assembled position in respect to the box.

A still further object is to produce a device in which a removable drip pan is secured to the outside of the refrigerator box, in position to catch any drip that may take place.

The above and other objects that may appear as the description proceeds are attained by means of a construction and an arrangement of parts that will now be described in detail, and for this purpose reference will be had to the accompanying drawing in which the preferred embodiment of the invention has been illustrated, and in which:

Fig. 1 is a vertical section through the heat insulated box and shows the container in place therein, a portion of the container being broken away to better disclose its construction;

Fig. 2 is a section taken on line 2—2, Fig. 1;

Fig. 3 is a section taken on line 3—3, Fig. 1; and

Fig. 4 is a side elevation of the container showing it removed from the heat insulating box.

In the drawing the cylindrical container 7 has been shown as enclosed in a box comprising four sides 1, a bottom 2 and removable top or cover 3. The box consists of walls formed by a central core 6 of heat insulating material.

The insulating material is covered, preferably on both sides, by sheet metal plates 5. The box must be constructed so as to be watertight because it is the intention to employ ice for cooling the contents of the container. The cover is constructed in the same manner as the walls and is of a size to fit inside of the box as shown in Fig. 1. A flange 4 is secured to the outer edge of the cover and rests on top of the box in a manner

clearly apparent from the drawing. The upper surface of the cover is flat and is suitable for use as a tray on which glasses can be supported when the dispenser is in use. The sides 1 of the box are each provided with one or more hooks 18, that serve to receive the flanges 17 of the drip pans or shelves 16. These shelves can be constructed in any suitable way but have been shown as having a flat bottom, vertical flanges and a downwardly projecting flange 17. One side of the box is provided with an opening directly above one shelf and extending through this opening is a short pipe 13. This pipe can be soldered to the metal surfaces of the walls as indicated or can be held in place by any other suitable means. A faucet 14 is secured to the outer end of pipe 13. The inner end of pipe 13 has a threaded section with which a threaded coupling member 12 cooperates. The upper surface of the bottom 2 is provided with a round pan-like member 19 having an outwardly inclined flange 20 with which the lower end of the container 7 cooperates in a manner clearly shown in Fig. 1. The container 7 is of cylindrical shape and the ends 8 and 9 are preferably flat. Secured to the inside of two opposing sides 7 are supports 27 that are provided at their inner ends with arcuate sections which engage the outer surface of the container and hold it in upright position. The top of the container has been shown as provided with three spaced openings, each of which has a petcock 21 that can be opened and closed by means of a valve member 22. Where the container is of sufficient size to hold several gallons of liquid, for example three gallons, each petcock has a pipe 21' opening at a different level, the lower one is located at such a level that when the liquid is up to this level, there will be one gallon in the container, and when it is up to the level of the lower end of the second pipe, there will be two gallons in the container. The lower end of the other pipe is located at the three gallon level. When filling the container, the petcock corresponding to the number of gallons desired is left open and when the liquid reaches this level, it will flow out thus indicating that the desired quantity of liquid has been introduced into the container.

For the purpose of supplying pressure to the container it is provided with a pump 24 and a pressure gauge 25 that designates the pressure within the tank.

The liquid is dispensed through a pipe 10 that extends downwardly through the tank and terminates near the bottom as shown in Fig. 1. The outer end of pipe 10 has been bent into a

coil and extending from this coil is a short section that has its end provided with a flange for engagement with the sleeve 12 as shown in Fig. 2. When the container is to be removed from the box, the sleeve 12 is rotated so as to disconnect it from the faucet, after which the container can be removed by lifting it upwardly so as to slide the lower end out of engagement with the flange 20. When beer is to be introduced into the container the keg or barrel from which the beer is taken is connected with the faucet by means of a flexible rubber tube after which the faucet is opened, thus permitting beer to flow into the container. If it is desired to introduce the beer against a pressure, the container can be inflated to the desired pressure and this pressure maintained by proper control of the petcock until the required amount of liquid has been introduced. After the desired amount of liquid has been introduced, the faucet is closed. Ice can now be packed about the container and the box and container will then be in position to be transported to the place where the contents is to be dispensed. Since the height to which the liquid is to be raised is not great, and since there is always a gas pressure derived from the gas within the liquid, the contents of the tank will always readily flow whenever the faucet 14 is open, but if any specified pressure is desired, this can easily be obtained by inflating the container by means of the pump 24.

The pump as well as the siphon or pipe 10 is secured in place by a threaded connection and can be removed when necessary for cleaning. The absence of joints in the pipe 10 prevents the beer from being agitated and this prevents the excessive formation of froth.

It is evident that by means of a device like that shown and described, beverages can be readily transported and dispensed and this makes it possible to serve liquid refreshments with greater ease and with a greater degree of cleanliness than would be possible in any other way. By means of this dispenser the use of bottles is unnecessary and the refreshments are served in bulk without the objection usually attending bulk service because the gases are not permitted to escape and therefore the liquid is as fresh as if dispensed from the keg or container in which it is shipped from the factory. The term "box" as used throughout the specification and claims is employed in a broad sense

to designate a receptacle for receiving the beverage container.

Having described the invention what is claimed as new is:

1. A combined refrigerating and dispensing device for liquids comprising in combination a box composed of heat-insulating material and having an open top, a removable cover for closing the top, a pipe extending through a wall of the box, a faucet attached to the outer end of the pipe, an air-tight container located within the box and in spaced relation to its walls so as to provide a space for receiving ice, means for supporting the container in upright position, a conduit extending from the container at its top above the ice-receiving space and having one end located adjacent the bottom of the container, a coupling for detachably connecting the exterior end of said conduit to the pipe, said coupling being located out of line with the container so as to permit the vertical introduction of the container into and withdrawal from the box upon detachment of the coupling, and a removable shelf beneath the faucet, said shelf having a down-turned flange and a plate secured to the outside of the box having its upper end offset therefrom to provide a pocket to slidably receive the down-turned flange.

2. A combined refrigerating and dispensing device for liquids comprising in combination a box composed of heat-insulating material and having an open top, a removable cover for closing the top, a pipe extending through a wall of the box, a faucet attached to the outer end of the pipe, an air-tight container located within the box and in spaced relation to its walls so as to provide a space for receiving ice, means for supporting the container in upright position, a conduit extending from the container at its top and having one end located adjacent the bottom of the container, a coupling for detachably connecting the exterior end of said conduit to the pipe, a pump operatively connected to the container for introducing air into the container, and means for measuring the contents of the container, said measuring means comprising a plurality of pipes extending through the top of the container and having their lower ends terminating at different elevations above the bottom of the container, and independently operable valves normally closing the outer ends of said pipes.

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