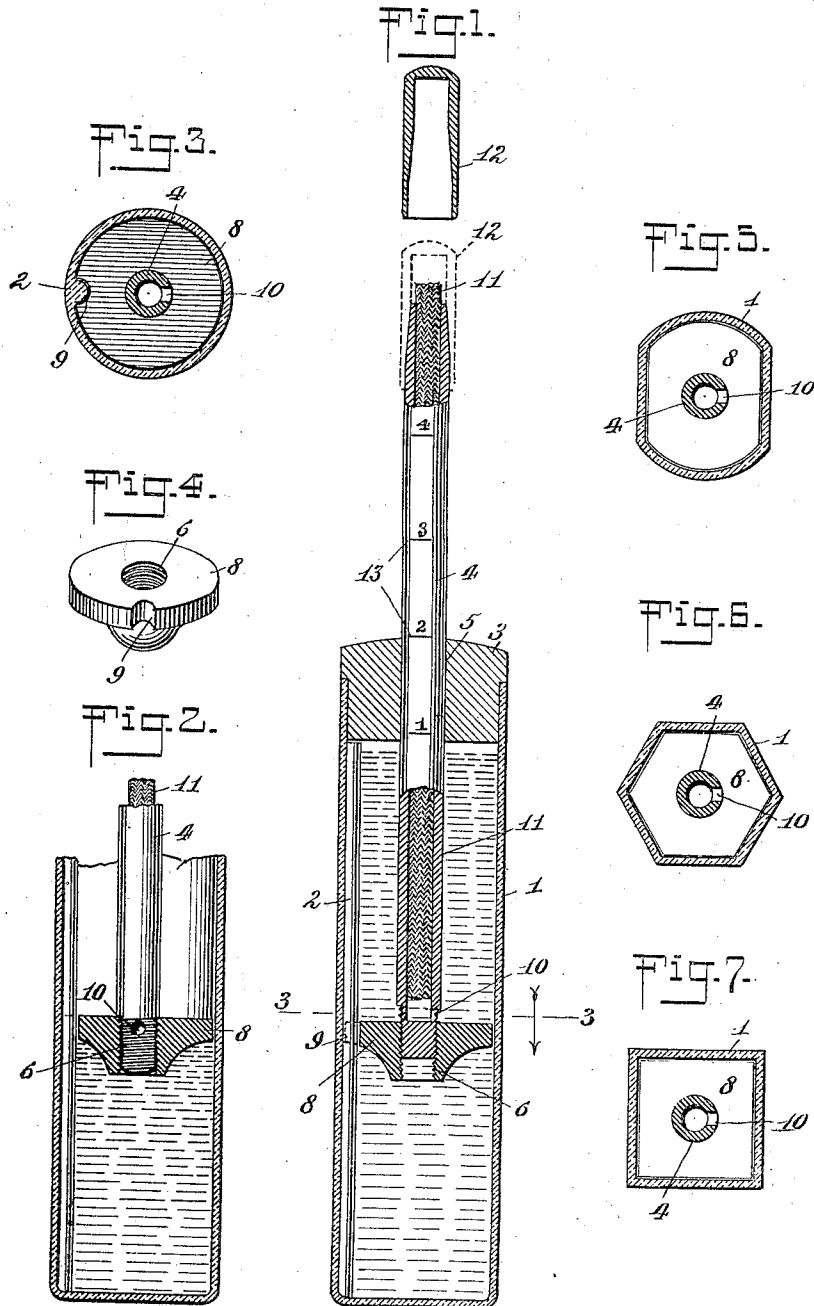


W. F. LERCH.
LIQUID DISPENSING DEVICE.
APPLICATION FILED AUG. 14, 1919.

1,343,085.

Patented June 8, 1920.



WITNESSES

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WILLIAM F. LERCH, OF HARTFORD, CONNECTICUT.

LIQUID-DISPENSING DEVICE.

1,343,085.

Specification of Letters Patent.

Patented June 8, 1920.

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To all whom it may concern:

Be it known that I, WILLIAM F. LERCH, a citizen of the United States, and a resident of the city of Hartford, in the county of Hartford and State of Connecticut, have invented a new and Improved Liquid-Dispensing Device, of which the following is a full, clear, and exact description.

This invention relates to improvements in liquid dispensing devices, and more particularly to a device for containing iodine or similar liquids such as antiseptics or astringents, to treat cuts, wounds, sores and the like, and for use in the treatment of the throat and gums, for surgical and dental operations, for treatment of insect bites, and in fact for a wide range of uses, permitting the liquid to be used either internally or externally.

A further object is to provide a device of the character stated which controls the dispensing of the liquid to permit just the desired amount of liquid to be used to the best advantage.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a view in longitudinal section, partly in elevation, illustrating my improvements.

Fig. 2 is a fragmentary view in longitudinal section showing the receptacle partially filled.

Fig. 3 is a view in section on the line 3—3 of Fig. 1.

Fig. 4 is a perspective view of the disk 8.

Figs. 5, 6 and 7 are views similar to Fig. 3 but illustrating modifications.

1 represents a container having an internal longitudinal key 2, and normally closed at its open end by means of a stopper 3 which may be made of cork or other suitable material.

A tube 4 projects through a central opening 5 in the plug 3 and is movable therein, but sufficiently tight to prevent leakage around the same.

The inner end of the tube is closed and made with external screwthreads 6 engaging a threaded opening 7 in a disk 8.

The disk 8 fits the container 1 and has a

keyway 9 receiving the key 2 to prevent rotary movement of the disk.

If the container is of any other shape in cross section than circular, the key and keyway can be dispensed with as the disk can be shaped to fit the container. Examples of such modified shapes are illustrated in Figs. 5, 6 and 7.

An inlet opening 10 is provided in the wall of tube 4 and this opening may be closed by screwing the tube down into the opening 6.

A wick 11 may be located in the tube 4 and project beyond the end thereof, to be used as a brush or mop to apply the liquid.

A friction cap 12 is employed to close the outlet end of the tube.

The tube 4 is provided on its outer face with a scale 13 indicating spoonfuls or other liquid measure.

The disk 8 acts as a cut off but the fit of the disk in the container is not sufficiently tight to prevent the passage of liquid around the same when pressure is applied.

To permit the dispensing of the liquid the tube 4 is turned to expose the opening 10 and when the container is inverted or due to capillary attraction the wick is saturated with the liquid and can be used as a brush or mop.

With the wick removed, the device can be operated to measure the quantity of liquid desired. For example, if the container is full of liquid and two teaspoonfuls are desired the tube and disk 8 will be moved to the position shown in Fig. 1. A further downward movement of the disk 8 will force the liquid around the same to the top thereof.

The tube may be used as a straw to suck the liquid if desired.

When the tube is screwed downward the opening 10 will be closed and sealed against leakage.

If the device is to be used as a dropper the tube 4 will be turned so the disk 8 will partially close the opening 10 and hence the feed of the liquid will be very slow.

Various slight changes might be made in the general form of the parts described without departing from my invention, and hence I do not limit myself to the precise details set forth but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of the appended claims

I claim:

1. A device of the character described, comprising a container, a tube movably mounted in one end of the container, a disk in the container held against turning movement, said tube having an inlet controlled by the disk.
2. A device of the character described, comprising a container, a disk in the container held against rotary movement and having a screwthreaded opening therein, a tube projecting through one end of the container, said tube at its inner end having screwthreaded engagement in said opening in the disk, and said tube having an inlet in its wall closed by the disk when the tube is screwed therein.
3. A device of the character described, comprising a container, a disk in the container, a tube projecting through the container and movably connected to the disk,

said tube having an inlet opening controlled by the disk, and a wick in the tube projecting beyond the outlet end thereof.

4. A device of the character described, comprising a container, a disk movable longitudinally of the container and acting as a liquid cut off, a stopper in the container having a central opening, a tube movable in said opening and having screwthreaded engagement with the disk, a liquid scale on the tube, and an inlet to the tube controlled by the position of the tube and disk.

5. A device of the character described, comprising a container having a longitudinal key, a disk in the container having a keyway receiving the key, an outlet tube having screwthreaded engagement with the disk, and an inlet to the tube controlled by the position of the disk.

WILLIAM F. LERCH.