

No. 779,178.

PATENTED JAN. 3, 1905.

L. PEROTTI.
LIQUID DROPPER.
APPLICATION FILED MAY 13, 1904.

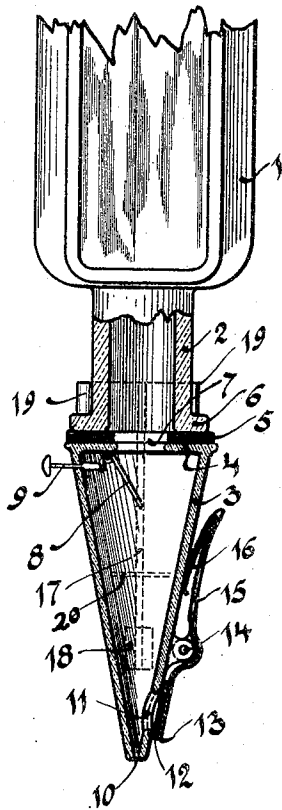


Fig. 1

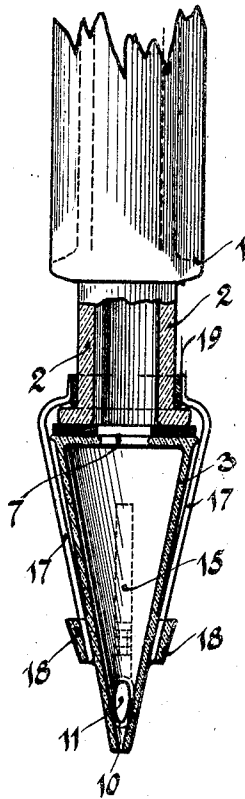


Fig. 2

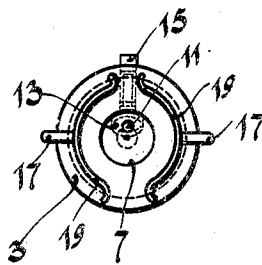


Fig. 3

Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS PEROTTI, OF NEWARK, NEW JERSEY.

LIQUID-DROPPER.

SPECIFICATION forming part of Letters Patent No. 779,178, dated January 3, 1905.

Application filed May 13, 1904. Serial No. 207,868.

To all whom it may concern:

Be it known that I, LOUIS PEROTTI, a subject of the King of Italy, and a resident of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Liquid-Droppers, of which the following is a specification.

The object of the present invention is to provide for a liquid-dropper, and particularly for a device which will permit to discharge the liquid in drops, a teaspoonful, or table-spoonful, according to the prescription. This device has also the object to prevent the liquid from being overdosed and the patient or the person handling the medicine-bottle from coming in contact with the said liquid.

My invention consists in the arrangement of a conical funnel having a small opening at its bottom which causes the liquid contained therein to flow in drops and another opening at one side and at the lower end of the funnel, which opening is of a larger size and adapted for the discharge of a greater quantity of the liquid, as a table-spoonful or a teaspoonful. This second opening is controlled by a suitable valve, so that the funnel can be used either for the discharge of the liquid in drops, a table-spoonful, or teaspoonful.

The funnel is arranged in such a manner that the same can be readily applied to bottles of various sizes and is for this purpose provided with spring-arms suitably attached thereto, the free ends of which are formed to jaws serving as a clasp. The funnel is applied to the bottle in such a way that it extends in line with the longitudinal dimension of the bottle, and the open top thereof registers with the mouth of the bottle.

In order to make my invention more clear, the same is illustrated in the accompanying drawings, in which similar numerals denote similar parts, and in which—

Figure 1 is a vertical section through the liquid-dropper. Fig. 2 is a vertical section of the device, taken at right angles to that shown in Fig. 1; and Fig. 3, a top view thereof.

Referring to the drawings, 1 denotes an ordinary medicine-bottle, the bottom of which is broken away, and 2 the neck of the bottle.

The device forming the subject of the present invention consists of a conical funnel 3, of glass, metal, or any suitable material and of a volume which is exactly equal to that of a table-spoon. This funnel has at its top 4 a circular hole 7, the size of which may correspond with that of the mouth of a medicine-bottle or may be somewhat smaller or larger than the same. Said funnel 1 is adapted to be applied to the neck of a bottle in such a manner that the top 4 of the funnel 3 will fit upon the top 6 of the neck 2 and the hole 7 therein will register with the mouth of the bottle. The bottom of the funnel has a small opening 10, which will cause the medicine or the liquid contained therein to flow in drops.

At one side the funnel 3 is provided with an opening 11, serving for the discharge of the liquid in greater quantities, as a table-spoonful or teaspoonful. This opening 11 is normally closed by a flap-valve 13, suitably applied on the outside of the funnel and adapted to turn upon a pivot 14. The valve 13 is provided with a handle 15, extending upward and having a spring 16 attached thereto and bearing against the wall of the funnel. The spring 16 of the handle 15 tends to keep the flap-valve 13 always closed. A washer 12 of any suitable material, as rubber or the like, may be applied to the inner surface of the flap 13 and adapted to form a tight closure of the valve 13.

At each side of the funnel ears 18 are provided, in which wires 17 are fastened, extending upward and forming spring-arms. The latter are provided at their free ends with jaws 19, of sheet metal or the like, serving as a clasp. The free ends of the jaws 19 are slightly bent outward, as seen from Fig. 3, thus permitting them to readily engage the neck of medicine-bottles of various sizes.

As stated above, the funnel is of such a size that its volume will be exactly equal to that of a table-spoon. At the outside or inside of the funnel a mark 20 may be provided at the point at which the volume of the funnel measured from the bottom thereof to said mark will be exactly equal to the volume of a teaspoon.

It will be seen that when the funnel will be entirely filled it will contain just a table-spoonful of the liquid, and when the same will be partly filled just up to the above-
 5 stated mark a teaspoonful of the liquid will be contained within the funnel, so that on opening the valve 13 the desired quantity of the liquid will be always discharged,

The funnel may be made in two different
 10 colors on its outside, so as to distinctly show the different volumes of a table- and a teaspoonful.

The top opening 7 of the funnel may be provided with a flap-valve 8, having a handle 9
 15 to be operated from the outside, which valve is adapted to close the said opening 1 when the funnel has been filled with the desired quantity of the liquid. In order to form a tight joint between the adjacent surfaces of
 20 the top 4 of the funnel and the top 6 of the neck 2 of the bottle, a washer 5, of any suitable material and having a central hole corresponding with that of the opening 7, may be applied to the top of the funnel.

25 I do not confine myself to the arrangements shown, as any change can be made in the various parts of the liquid-dropper of the present invention without departing from the spirit of the latter.

30 What I claim, and desire to secure by Letters Patent, is—

1. In a medicine or liquid dropper, the combination with a conical funnel to be applied to
 35 bottles of various sizes, having a small opening at the bottom of the funnel and a larger opening at one side of the funnel, of a flap-valve for said side opening, a spring tending to close the valve, a handle for the operation of the said flap-valve, and means whereby the

funnel can be removably applied to bottles of
 40 various sizes, substantially as set forth.

2. In a medicine or liquid dropper, the combination with a conical funnel to be removably applied to bottles of various sizes, and
 45 having a small opening at the bottom and a larger opening on one side of the funnel, the volume of said funnel being exactly equal to that of a table-spoon, of spring-arms attached to said funnel, said arms having their free
 50 ends formed to jaws which serve as a clasp adapted to engage the neck of the bottle, a valve adapted to close the side opening, means for operating said valve, the funnel being provided with a mark thereon to distinctly show
 55 the different volumes of the funnel, substantially, and for the purpose as specified.

3. In a medicine or liquid dropper, the combination with a conical funnel adapted to contain a table-spoonful of the liquid when entirely filled, or a teaspoonful when partly
 60 filled, and having an opening at one side of the funnel, through which a table- or tea-spoonful of the liquid can be discharged, a valve to close up said opening, a handle for the operation of said valve, a spring tending to close
 65 the valve, a second valve at the top of the funnel adapted to close said top when the funnel has been filled with the desired quantity of the liquid, substantially and for the purpose
 70 as specified.

Signed at New York, in the county of New York and State of New York, this 10th day of May, A. D. 1904.

LOUIS PEROTTI.

Witnesses:

GEO. H. ROSENTHAL,
 MABEL HAMBURGER.