C. C. GARRETT.

Dropping-Bottle.

No. 165,091. Patented June 29, 1875.

Fig 1

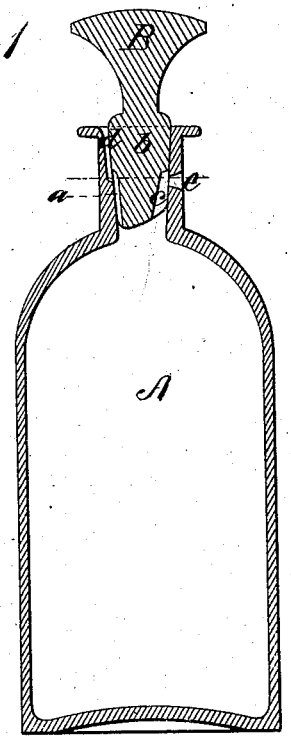


Fig 2

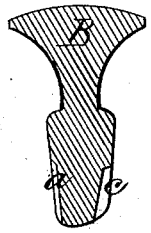


Fig 3

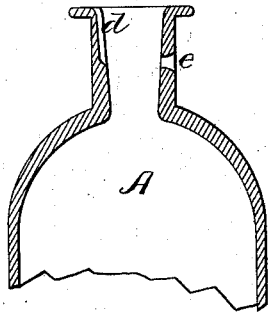


Fig 4

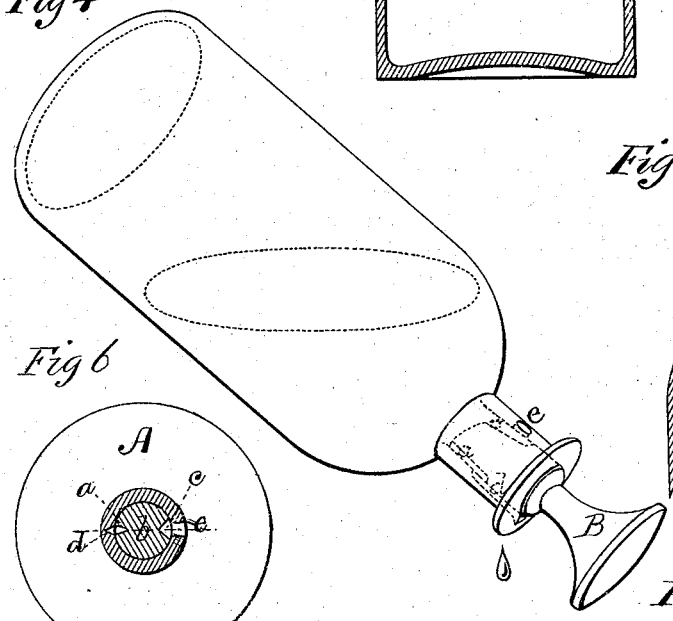


Fig 5

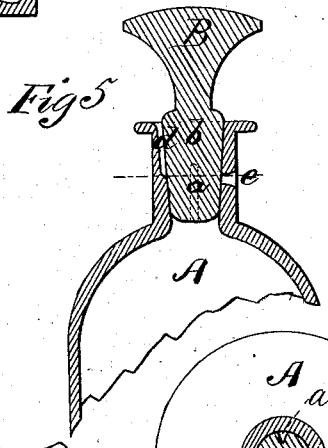
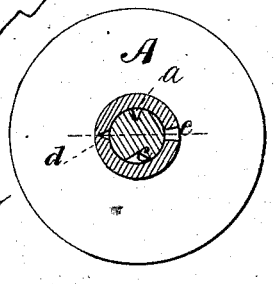


Fig 6

Fig 7



WITNESSES

Villette Anderson

E. F. Bates

INVENTOR

Charles C. Garrett,

Chipman & Fosdick & Co.,

ATTORNEYS

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

CHARLES C. GARRETT, OF CALVERT, TEXAS, ASSIGNOR OF ONE-HALF HIS RIGHT TO LOUIS M. OPENHEIMER, OF SAME PLACE.

IMPROVEMENT IN DROPPING-BOTTLES.

Specification forming part of Letters Patent No. **165,091**, dated June 29, 1875; application filed March 27, 1875.

To all whom it may concern:

Be it known that I, CHARLES C. GARRETT, of Calvert, in the county of Robertson and State of Texas, have invented a new and valuable Improvement in Dropping-Bottles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical central section of my bottle and its stopper. Fig. 2 is a vertical central sectional view of the stopper, and Fig. 3 is a sectional detail view of the bottle. Fig. 4 is a perspective view of the bottle, showing operation; and Figs. 5, 6, 7 are sectional detail views of the same.

This invention has relation to improvements in dropping-bottles. The object of the invention is to produce, for the benefit of physicians, nurses, and druggists, a bottle for dropping medicines, tinctures, and the like, which shall be of unerring accuracy in breaking up the fluid into drops as it leaves the bottle, and which will under no circumstances discharge more than a single drop at a time. To this end the nature of the invention consists in an induction air-groove and an eduction fluid-groove cut in the plug of a bottle-stopper, which are respectively adapted to be brought in line or registering with an induction air-orifice cut through the neck of the bottle and an induction-groove cut within the same, whereby air will be freely admitted into the interior of the bottle and the fluid allowed to escape therefrom, all as will be hereinafter more fully explained.

In the annexed drawings, A designates a bottle of the usual well-known form for containing fluid medicines, and B is a stopper fitting snugly within the neck of the same, forming an air-tight joint therewith. Plug *b* of this stopper is provided with an eduction fluid-groove, *a*, and an induction air-groove, *c*, cut in its opposite sides, which are designed to be brought in line, respectively, with an eduction fluid-groove, *d*, and an induction-aperture, *e*, cut the one in the inside of the neck of the said bottle and the other through the same, as shown in Fig. 1.

When the bottle is partly filled with a fluid medicinal extract, and it is desired to obtain from it a certain number of drops of the preparation, the said bottle is placed in the position shown in Fig. 4, its air-aperture *e* being upward, when the preparation will begin to flow through fluid-grooves *a d* drop by drop, air being admitted into the interior of the bottle through orifice *e* and groove *c*.

In practice I prefer to make grooves *a d* of smaller size than groove *c*, in order that the air may enter freely, and the fluid in escaping may be broken up into successively-formed drops, and not issue therefrom in a continuous stream. The former groove *a* and air-groove *c* will extend only up the plug to the extent of half its length, groove *d* being extended down the neck of the bottle to form a junction with the former, and aperture *e* being cut in the neck at a point reached by the latter, so that after the requisite number of drops has been obtained a slight turn in any direction will break their communication and effectually and at once prevent evaporation, thus preserving at all times the relative proportions prescribed by the formula of the fluids and matters held in suspense.

I am aware that a hollow stopper which, when turned, causes apertures therein to register or coincide with apertures in the neck of a bottle, and allows fluid to flow therefrom, and which, when turned in opposite direction, throws the said apertures out of line for the purpose of cutting off the flow of the fluid, is not new. Therefore I do not claim, broadly, such invention.

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

The bottle A, having eduction fluid-groove *d* and induction air-aperture *e*, and a stopper, B, having an eduction-groove, *a*, and an induction air-groove, *c*, combined and arranged substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES C. GARRETT.

Witnesses:
E. G. GARRETT,
A. P. OLDEN.