T. E. DANIELS.

Pocket-Inhalers.

No. 165,799. Patented July 20, 1875.

Fig. 1.

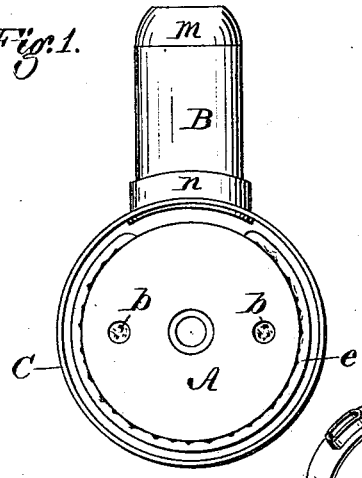


Fig. 2.

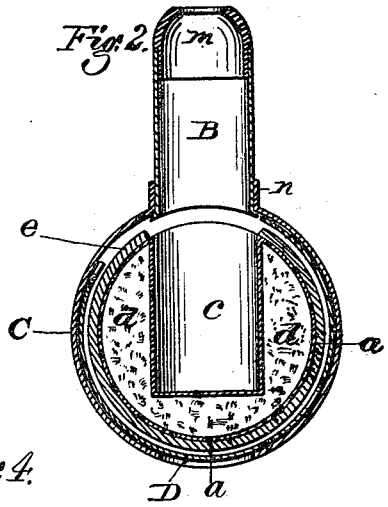


Fig. 4.

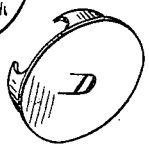


Fig. 3.

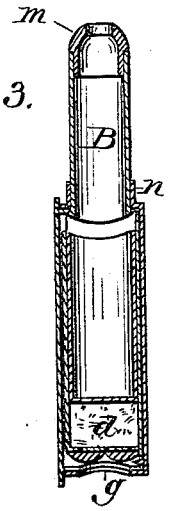


Fig. 7.

Fig. 8.

Fig. 5.

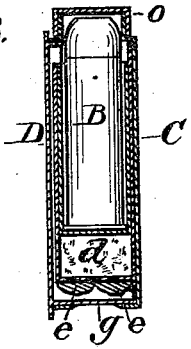
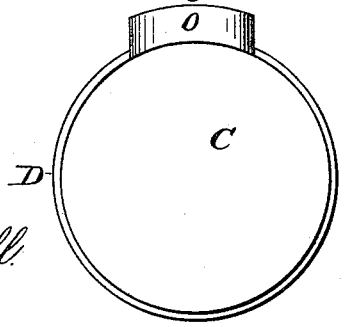


Fig. 6.



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UNITED STATES PATENT OFFICE.

TAYLOR E. DANIELS, OF DETROIT, MICHIGAN.

IMPROVEMENT IN POCKET-INHALERS.

Specification forming part of Letters Patent No. **165,799**, dated July 20, 1875; application filed June 5, 1875.

To all whom it may concern:

Be it known that I, TAYLOR E. DANIELS, of Detroit, in the county of Wayne and State of Michigan, have invented certain Improvements in Pocket-Inhalers, of which the following is a specification:

My invention consists in the manner of constructing a small box or case containing material to absorb and retain the desired fluid, and provided with a mouth-piece and air-passages, as hereinafter more fully explained.

The object of the invention is to provide a small and a cheap instrument, which may be readily carried in the pocket when charged, and which may be used for a considerable length of time without recharging it.

Figure 1 represents a face view of my device, with one side removed to expose the interior and the parts arranged in position for use. Fig. 2 represents a central section of the same in the direction of its width; Fig. 3, a central cross-section of the same; Fig. 4, a perspective view of the inside box and the parts of its case; Fig. 5, a side view of the instrument closed up; Fig. 6, a cross-section of the same; Figs. 7 and 8, views showing the detached nostril-piece.

In constructing the device I provide a circular box, A, having a series of fine perforations, *a*, in its periphery, one or more holes, *b*, in its side, and a pocket or cup, *c*, extending inward from its periphery, as shown. The interior of the box, outside of the pocket *e*, I fill with sponge or similar material *d*, and around the periphery of the box I secure a band or bands of soft paper or similar porous material, *e*. In the pocket *c* I mount a sliding tube or mouth-piece, B. The box A I inclose in a case or body composed of two circular plates, C and D, provided with peripheral flanges, and fitted together in the same manner as the parts of a common pill-box, the flange *g* of the part D fitting within the flange of the other part, and encircling the periphery of the box, as shown. Through the rear edge of the case I make an opening, *g*, for the admission of air, and in the front edge I make an opening, through which the tube or mouth-piece is extended when the instrument is to be used. The mouth-piece is provided around its inner end with a flange or bead, which, coming in contact with inside of the case, prevents the tube from being drawn entirely out of the case, although permitting it to be drawn out of the box A, so as to communicate with the annular space between the box and the case occupied by the porous paper. The mouth-piece is also provided at its outer end with a detachable tip or end piece, *m*, to be used when the instrument is applied to the nostril instead of the mouth. On the front of the case, around the opening in which the mouth-piece is mounted, I form a flange, *n*, which serves both to support and steady the mouth-piece when it is extended, and also to retain a cap or cover, *o*, by which the opening is closed when the instrument is carried in the pocket.

The instrument is charged by removing one side of the case, and pouring the liquid through the holes *b* into the sponge *d*, from which it gradually passes out through the perforations *a* into the paper *e*, which is kept constantly saturated therewith.

When using the instrument the mouth-piece is extended and the air-inlet *g* left open, as shown in Figs. 1 and 3, so that upon drawing the breath through the mouth-piece the air is caused to pass around through the saturated paper *e* between the box and the casing, whereby it is thoroughly charged or impregnated with the chemicals therein, and cleansed of all impurities.

When the device is to be carried in the pocket the mouth-piece is pushed back into the body, the cap *o* applied over the front opening, and the two parts C D of the case turned in relation to each other until their rear openings are out of line, and the air-inlet is thereby closed, as shown in Figs. 5 and 6.

When thus closed the instrument presents a neat and compact appearance, the evaporation of the fluid is prevented, and the person of the bearer is protected from the fluid and its vapor.

The instrument is cheap, simple, and compact, is quickly adjusted for use, is very efficient in its operation, and is adapted for long use without being recharged.

It is obvious that the form of the parts may be varied to a limited extent, and that they be made of any suitable materials, and also

that an opening may be made to permit the introduction of the fluid without separating the case.

What I claim as my invention, is—

1. The inhaler, consisting of the case C D, the internal box A, provided with the perforations *a*, and the absorbent materials *d* and *e*, and the sliding tube or mouth B, constructed and operating substantially as shown.

2. A case or body for a pocket-inhaler, consisting of two circular flanged plates, C D, provided with an inlet-opening, *g*, and arranged to turn one within the other for the purpose of closing said opening.

3. In an inhaler the combination of a perforated box, A, an absorbent filling, *d*, and an incircling band, *e*, of porous material located in the air-passage, substantially as described.

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Witnesses:

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