No. 645,741. Patented Mar. 20, 1900.

W. W. WINTON.

INHALER.

(Application filed June 5, 1899.)

(No Model.)

FIG. 1.

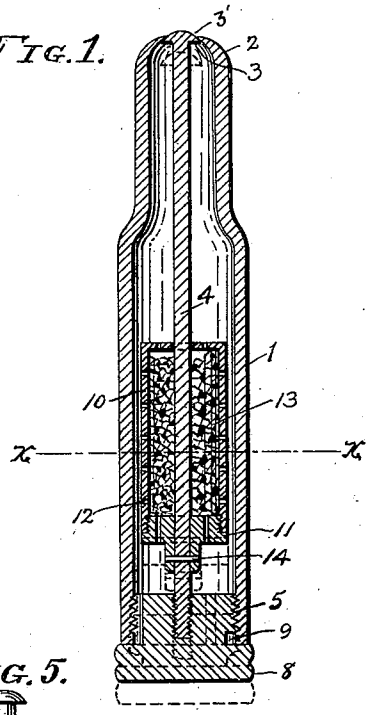


FIG. 2.

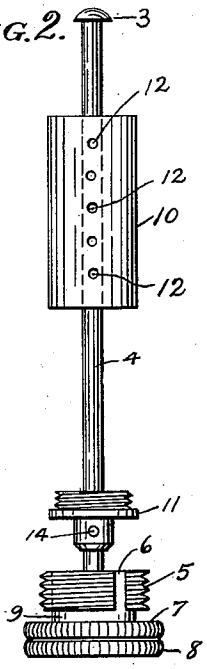


FIG. 5.

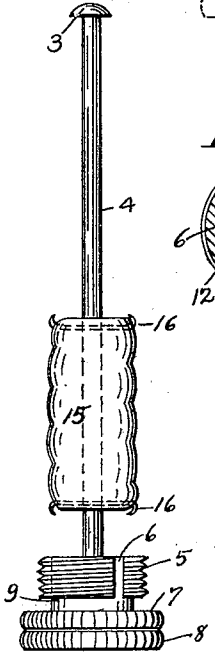


FIG. 4.

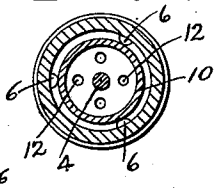
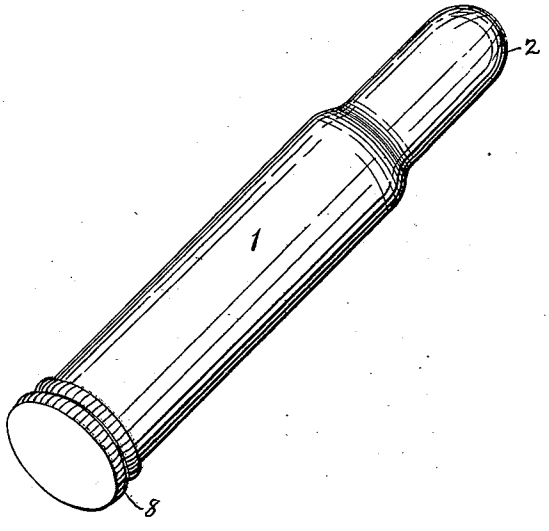


FIG. 3.



WITNESSES:

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INHALER.

SPECIFICATION forming part of Letters Patent No. 645,741, dated March 20, 1900.

Application filed June 5, 1899. Serial No. 719,365. (No model.)

To all whom it may concern:

Be it known that I, WALTER W. WINTON, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Inhalers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to inhalers, such as are applied to the nostrils for the purpose of inhaling medicaments; and the objects of the invention are to provide an improved form for such inhalers, a perfect sealing instrument of the kind, a more convenient receptacle for medicaments, to make them more easily replenished, and other objects as are set forth herein and embodied in the claims.

To this end the device consists of the construction, arrangement, and combination of parts herein described, and illustrated in the accompanying drawings, in which—

Figure 1 is a view of one of my inhalers cut in cross-section lengthwise. Fig. 2 is a detail elevation of the interior parts of my inhaler, showing the medicinal-salt receptacle partly disconnected. Fig. 3 is an exterior view of one of my inhalers in the closed position. Fig. 4 is a view in cross-section taken on the line *x x* of Fig. 1. Fig. 5 is a view of the interior parts of my inhaler when a saturated fabric is substituted for a salt-receptacle.

Similar figures of reference denote like and corresponding parts throughout the several views.

In the drawings, 1 designates a cylindrical case of a convenient size suitably tapered at 2 to fit the nostril. The small end of the case 3′ is closed by the small hemispherical valve-lid 3 on the end of a stem 4, which extends centrally and longitudinally through the case. The stem 4 has a screw-threaded shank connecting it with a plug 5, which plug is adapted to close the larger end of the case at the same time that the valve-lid 3 closes the smaller end. The adjustment of the stem 4 may be accomplished by screwing it farther into or out of the said plug until the exact proper length is had. The larger end of the case is also internally screw-threaded, and a part of the plug 5 is threaded to engage with it; but the threads are grooved out in several lines, as at 6 6 6, and a neck 9 is turned on the plug with which the grooves 6 communicate. A milled knob 8, having a flat inwardly-facing annular surface 7, is formed on the outer end of the plug and serves as a handle in opening and closing the device. Disposed centrally on the stem 4 is a medicine-salt receptacle 10, cylindrical in form and of a little smaller diameter than the interior of the case, so as to leave free access of air between its outer walls and the inner walls of the case. Bore-holes 12 12, &c., in the ends and side walls of the receptacle serve to promote infusion of the contents into the air drawn through the inhaler. In one end of the cylinder 10 is a central aperture, through which the stem 4 may slide. The other end is internally screw-threaded to receive the screw-threaded plug 11, which may be fastened to the stem 4 by means of a pin 14.

The operation of the device may now be explained. The cylinder 10 is filled with medicinal salts, such as are used in inhalers, by unscrewing the cylinder, as shown in Fig. 2, and suspending it by holding the knob 8 between the thumb and finger, in which position the salts may be poured into the cylinder. The plug 11 is then screwed in through the end of the cylinder by turning the stem by means of the knob 8. The whole is then inserted in the larger end of the case and the plug 5 screwed inward until the face 7 rests tightly on the rim of the larger end of the case, the valve-lid 3 at the same time tightly closing the orifice 3′ at the small end of the inhaler. When it is desired to use the inhaler, a slight turn with the thumb and finger will produce a flat opening between the rim of the inhaler and the knob 8 and at the same time open the small end of the inhaler. The medicaments may then be inhaled in the usual way. When a liquid medicament is to be used, the receptacle 10 and plug 11 may be dispensed with and a more suitable fabric 15 may be wrapped about the stem 4 and secured with wire or other fastenings 16, and then saturated. Thus the replenishment of the inhaler is made effective and convenient, perfect cleanliness is maintained, and a perfect closing case is assured.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an inhaler, the combination of a cylindrical case with a contracted end having an opening at said contracted end, and being internally screw-threaded at the other end and adapted to be closed by a screw-threaded plug, a screw-threaded plug having air-grooves cutting its threads transversely, a central shaft extending from the said plug lengthwise through said cylindrical case to the contracted end, and being there provided with a knob adapted to completely close the said contracted end simultaneously with the plug end when the plug is screwed home, and a medicine-receptacle axially mounted on said shaft and removable from the case therewith; substantially as specified and for the purpose set forth.

2. In a new article of manufacture an inhaler comprised in the combination of a cylindrical case having a contracted end with an opening therein, and being internally screw-threaded at the other end which is adapted to be closed by a screw-threaded plug having a central shaft extending from it to the contracted end, a knob on the farther end of said shaft adapted to close the contracted end simultaneously with the plug end when the plug is screwed home, and the said central shaft being further provided with a cylindrical medicine-receptacle axially mounted and slidable thereon, the cylindrical sides thereof being perforated to permit saturation, a lid rigidly secured to said central shaft being adapted to fix the location of said receptacle and close it when filled with medicament, all arranged for joint operation in the manner and for the purposes specified.

In testimony whereof I affix my signature in presence of two witnesses.

WALTER W. WINTON.

Witnesses:
A. D. ALLEN,
D. G. MORAN.