No. 809,662. PATENTED JAN. 9, 1906.

J. BARNES.

INHALER.

APPLICATION FILED AUG. 11, 1905.

Fig: 1.

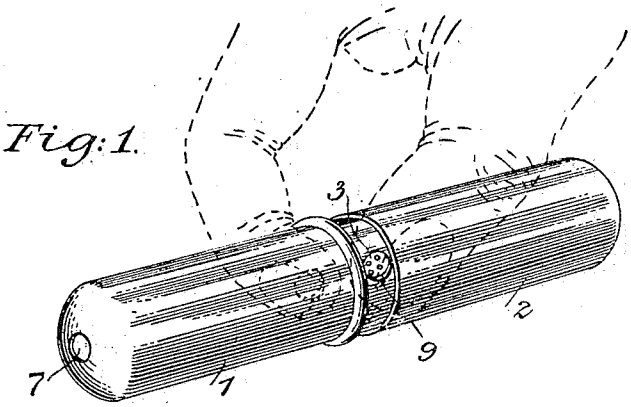
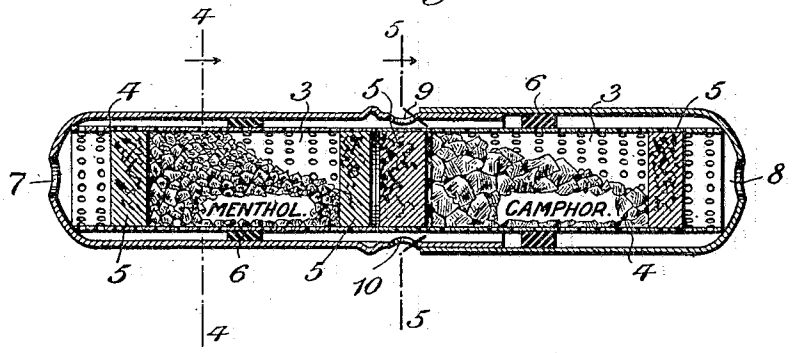


Fig: 2.



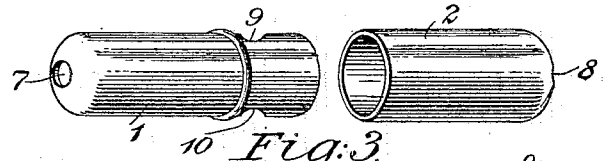


Fig: 3.

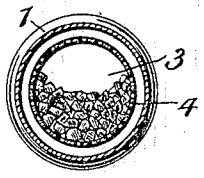


Fig: 4.

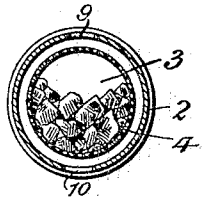
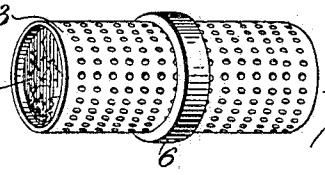


Fig: 5.

Fig: 6.



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UNITED STATES PATENT OFFICE.

JOSHUA BARNES, OF NEW YORK, N. Y.

INHALER.

No. 809,662. Specification of Letters Patent. Patented Jan. 9, 1906.

Application filed August 11, 1905. Serial No. 273,701.

To all whom it may concern:

Be it known that I, JOSHUA BARNES, a citizen of the United States, and a resident of the borough of Brooklyn, city and State of New York, have invented certain new and useful Improvements in Inhalers, of which the following is a specification.

By my present improvements I provide an inhaler of a construction making it more effective for its intended purpose and at the same time rendering it cheap and practical to market.

Furthermore, by my present improvements I am enabled to use a plurality of volatile substances in the inhaler, thus securing what may be called a "compound" inhaler, in which the user may inhale any one of the volatile substances to the exclusion of the others or all at once, as he desires.

The accompanying drawings illustrate one of the forms which my improvements may take, and in which—

Figure 1 is a perspective view of an inhaler within my invention; Fig. 2, a longitudinal section of the same inhaler, the section being taken centrally through the holes in the casing; Fig. 3, a perspective view of the two parts of the casing separated from each other; Fig. 4, a sectional view through the line 4 4 in Fig. 2 looking in the direction of the arrow; Fig. 5, a sectional view through the line 5 5 in Fig. 2 looking in the direction of the arrow, and Fig. 6 a perspective view of a perforate receptacle for containing the volatile substance with connected parts also shown.

The form of inhaler within my invention illustrated comprises a cylindrical casing in two parts 1 and 2. The open ends of these parts fit snugly one within the other to form a complete casing and at the same time may be readily separated to charge the casing with the volatile substance or substances employed. To hold the volatile substance, I provide one or more perforate receptacles 3. These receptacles may be formed in a number of ways, but preferably consist of a perforate cylindrical portion 4, with corks 5 closing the ends of the cylinder. The purpose of these perforate receptacles is to receive and hold the volatile substance and at the same time permit it to evaporate through the perforations. To secure the perforate receptacles within the casing and at the same time to direct the flow of air through the device, I provide washers 6 of rubber or other suitable packing material. These washers, as shown, surround the perforate receptacles at their middle portion and snugly secure said receptacles within the casing. Suitable openings are provided in the casing for the entrance and exit of air. Thus in the device illustrated there is an opening in each end of the casing (designated, respectively, 7 and 8) and two opposite openings 9 and 10 in the middle portion of the casing, where the perforate receptacles adjoin.

In the device illustrated it will be apparent that when the opening 8 (see Fig. 2) is applied to the nose and the middle openings 9 and 10 closed with the fingers, as in Fig. 1, the act of inhalation will cause air to be sucked in at the opening 7, up along the outside of the menthol-receptacle, thence through the perforations in said receptacle into the interior thereof, thence through the perforations in said receptacle on the other side of the washer 6 across to the camphor-receptacle, and finally in analogous manner into, through, and out of said receptacle, and thence through opening 8 into the nose. It will be apparent, therefore, that when the inhaler is used with the middle openings closed combined inhalations of menthol and camphor can be obtained. While this is desirable in connection with certain maladies, for other purposes it is necessary to obtain inhalations of either menthol or camphor separately. To do this with my inhaler, it is merely necessary to leave the middle openings 9 and 10 unobstructed, and if camphor inhalations alone are wanted to apply the camphor-opening 8 to the nose and close the menthol-opening 7; vice versa, if menthol inhalations alone are wanted the menthol-opening in the casing should be applied to the nose and the opening at the camphor end closed with the finger, the middle openings being left unobstructed. In both of these cases the air is sucked in through the middle openings, circulates around the outside of the particular perforate receptacle, thence through its perforations into the interior of said receptacle, thence out of said receptacle through the perforations therein on the other side of the washer or partition, and finally through the opening in the end of the casing into the nose.

It will be noted that corks in the outside of the receptacles are set in or depressed below the edge of the receptacle. The purpose of this is to uncover a sufficient number of perforations in the overhanging end of each receptacle to permit the air to circulate freely

from the spaces at the ends of the casing into the annular spaces between the inside of the casing and the perforate receptacles, and vice versa.

In conclusion it may be stated that the compound form of my inhaler is peculiarly effective for menthol and camphor, since these substances liquefy if permitted to contact. However, I in no wise limit myself to camphor and menthol, since other substances may be employed.

What I claim is—

1. In an inhaler, the combination of a casing; a perforate receptacle within said casing; a partition extending between said receptacle and casing, the latter being provided with an opening on each side of said partition.

2. In an inhaler, the combination of a casing; a perforate receptacle within said casing; a partition extending between said casing and said receptacle; another perforate receptacle within said casing; another partition extending between said casing and said last-named receptacle; the casing being provided with an opening where the said receptacles adjoin, and with further openings located at the other ends of said receptacles.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSHUA BARNES.

Witnesses:

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