No. 669,098.

Patented Mar. 5, 1901.

T. T. OVERSHINER.

INHALER.

(Application filed May 26, 1900.)

(No Model.)

Fig. 1.

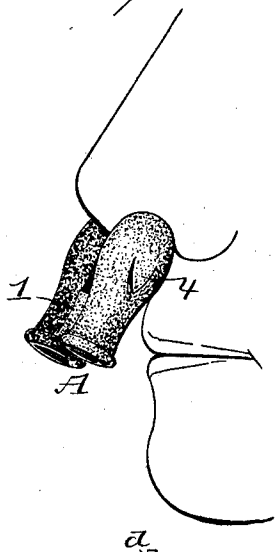


Fig. 2.

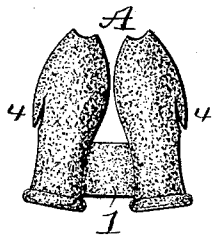


Fig. 3.

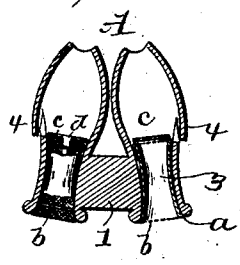
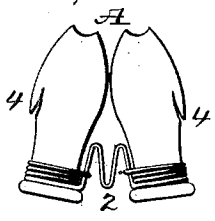


Fig. 4.



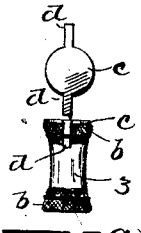


Fig. 3a.

Fig. 5.

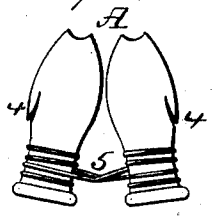


Fig. 6.

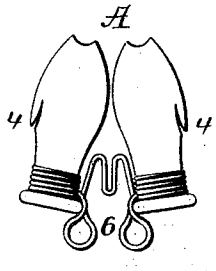
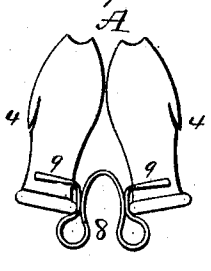


Fig. 7.



WITNESSES

E. L. Nottingham

G. F. Downing.

INVENTOR

T. T. Overshiner

Pyst. A. Seymour

Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

TIMOTHY TAYLOR OVERSHINER, OF MARION, INDIANA.

INHALER.

SPECIFICATION forming part of Letters Patent No. 669,098, dated March 5, 1901.

Application filed May 26, 1900. Serial No. 18,140. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY TAYLOR OVERSHINER, a resident of Marion, in the county of Grant and State of Indiana, have invented certain new and useful Improvements in Inhalers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved inhaler, one object of the invention being to provide an inhaler which will cling to the nostrils of the user and which will be so constructed that only air inhaled will be medicated, thus greatly saving the medicine employed.

A further object is to provide an inhaler which will be especially adapted for use in dusty or unhealthy atmospheres and which will absolutely protect the lungs from dust and impurities of any sort.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view illustrating my improvements. Fig. 2 is a view of the inhaler detached. Fig. 3 is a view in section of the same. Fig. 3ª is a view of the medicine-tube detached, and Figs. 4, 5, 6, and 7 are views of modified forms of my invention.

My inhaler comprises two soft-rubber nasal tubes or nipples A, connected at their lower ends by a block of elastic material 1, adapted to press the upper ends of the tubes or nipples together and clamp the cartilage of the nose between them and support itself in proper position for use. The block of elastic material and the nasal tubes are preferably molded integral or they may be secured together as desired. A small tube 3, preferably of glass, having a peripheral flange *a* at each end, is disposed in the lower end of each tube or nipple A and is adapted to contain medicine inclosed in the tube by means of small pieces of cloth *b*, secured over the flanged ends of the glass tube, and a rubber sheet *c*, having flaps *d* at opposite sides, secured over the upper flanged end of the glass tube, constitutes a valve, which will be raised from the tube when air is inhaled therethrough, but which will be forced down on top of the tube and prevent any air exhaled from passing through the tube, as will be readily understood. Each nipple or nasal tube A is cut in its side wall to form a flap-valve 4 for a purpose which will now be explained.

When the patient desires to use my improved inhaler, he pulls the upper ends of the tubes or nipples A apart and inserts them in the nostrils, and when they are released the elastic block 1 will force the upper ends of the nipples or tubes toward each other and clamp the cartilage of the nose between them and support the inhaler in proper position, and owing to the fact that the nasal tubes are of soft rubber they can be inserted far enough and will conform to the shape of the nostrils to entirely fill them. When air is inhaled, it will be drawn through the lower end of the nasal tubes, through the medicine in the glass tubes 3 and become thoroughly impregnated with medicine, raise the valves *c*, and pass into the lungs, the valves 4 at the same time closing to prevent the entrance of air through the walls of the tubes; but when the air is exhaled the valves *c* will close the passage through the tubes 3 and compel the air to force the flap-valves 4 outward and escape through the side walls of the nipples, thus carrying practically no medicine with the air exhaled.

When my improved inhaler is to be used in dusty or other injurious atmospheres, the glass medicine-tubes can be removed and a packing or filling of absorbent or suitable medicated body inserted in the tubes.

Instead of constructing my improved inhaler as above described I might make the same as shown in Fig. 4. In this form of my invention I provide a coil of wire around the lower end of each tube to secure an M-shaped spring 2 in place to press the upper ends of the nasal tubes toward each other; or I might connect the tubes by cross-wires 5, as shown in Fig. 5, to form springs to press the upper ends of the nasal tubes toward each other; or I might provide the M-shaped spring with finger-loops 6, as shown in Fig. 6, to facilitate separating the upper ends thereof; or I might provide a bow-spring 7, having finger-loops 8

at its ends and connected with the respective nasal tubes by clamping-springs 9, as shown in Fig. 7.

Various other slight changes might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. An inhaler comprising two tubes of soft pliable material to render them conformable to the shape of the nostrils of the user, a valve in the wall of each of said pliable tubes, and an elastic device normally pressing the forward ends of said tubes toward each other.

2. An inhaler comprising two soft-rubber nasal tubes or nipples, a block of elastic material connecting said nipples or tubes and adapted to press them toward each other at one end and a medicated body in each tube or nipple.

3. An inhaler comprising two soft-rubber nasal tubes or nipples, an elastic device normally pressing the tubes toward each other at one end, a medicated body in each tube or nipple and an outlet-valve forming an integral part of the wall of each tube or nipple.

4. An inhaler comprising a soft-rubber nipple having a portion of its wall cut and forming an integral outlet-valve and a valved medicine-receptacle located in said nipple below said outlet-valve.

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

TIMOTHY TAYLOR OVERSHINER.

Witnesses:

PEARL STRATTON,

CLARA OVERMAN.