

(No Model.)

J. M. HARDING.
INSUFFLATOR.

No. 419,942.

Patented Jan. 21, 1890.

Fig. 1.

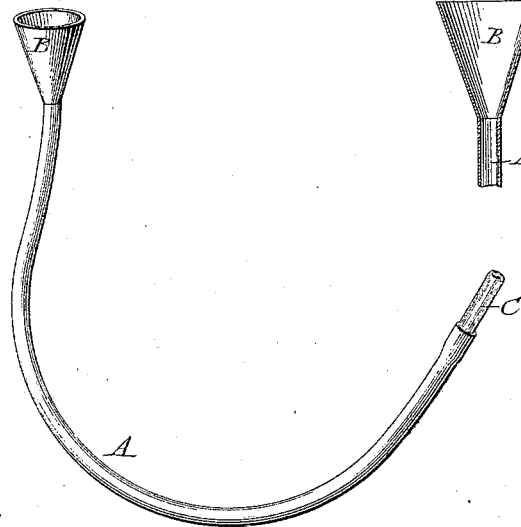


Fig. 2.

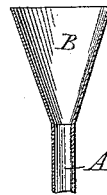


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

JOSEPH M. HARDING, OF OIL CITY, PENNSYLVANIA.

INSUFFLATOR.

SPECIFICATION forming part of Letters Patent No. 419,942, dated January 21, 1890.

Application filed March 30, 1889. Serial No. 305,347. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. HARDING, a citizen of the United States, residing at Oil City, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Insufflators, of which the following is a specification.

My invention relates to that class of devices used for applying remedial agents or medical compounds to the nasal passages for the cure of catarrh and similar diseases; and the invention consists in the peculiar construction of a device which I term an "insufflator," as hereinafter more fully described.

Figure 1 is a perspective view of the device complete. Fig. 2 is a sectional view of a portion somewhat enlarged, and Fig. 3 is a view illustrating the manner of using the device.

In the application of medicines for the treatment of catarrh affecting the nasal passages or cavities two methods are in use—one in which the medicine in the form of a vapor or powder is drawn in by inhalation, the instruments used for this purpose being termed "inhalers," the other plan consisting of blowing or forcing the medicine into the nasal passages and cavities by the breath of the patient, the instruments used for this purpose being termed "insufflators." My invention belongs to the latter class, and its peculiarity consists more especially in a flexible bowl or funnel-shaped termination, which serves the twofold purpose of containing the medicine to be applied and also operates as a valve to close the nostril while in use, and thus prevent the escape therefrom of the breath and the medicine carried by it.

To accomplish these results, I construct my insufflator as follows: I first provide a small flexible tube A, as shown in Fig. 1, and to one end secure a mouth-piece C, which may be of glass, ivory, hard rubber, or any similar material which can be held in the mouth without collapsing or being pressed together in such a manner as to prevent the free passage of the breath through the same when desired. To the opposite end of the flexible tube A, I secure a funnel-shaped bowl B, as shown in Figs. 1 and 2, this bowl being made of soft rubber or similar suitable material and of such a size that when inserted in the nostril it will

fill the same, so as to prevent the escape of air around its edges under a moderate pressure. This bowl B is made sufficiently soft and thin to enable it to be pressed or varied in shape as may be necessary to adapt itself readily to the interior of the mouth of the nostril to which it is applied and yet of sufficient stiffness or rigidity to cause it to expand, so as to fill the nostril and retain its exterior wall in close contact with the interior wall of the nostril when inserted. By experiment I find that by making this bowl B of comparatively thin soft rubber it fulfills these conditions admirably.

The method of using the device is as follows: The medical compound or remedy in the form of a fine powder is placed in the bowl B, and the bowl is then inserted in the nostril, as shown in Fig. 3. The mouth-piece C is then inserted in the mouth, when the patient blows through the tube, and thereby forces or blows the compound up the nostril. As in the act of blowing from the mouth there is no pressure of the breath through the nostrils, it follows that there is in the nasal passages a comparative vacuum, which facilitates the passage and distribution of the finely-powdered medicament therein, thereby enabling it to be distributed over the entire surface and brought into direct contact with the diseased or affected portions.

The device is simple and cheap of construction, and, being small and flexible, can be conveniently carried in the pocket or in a portable case prepared for the purpose, and, above all, enables the patient to apply the remedy by himself at any time or place.

What I claim as my invention is—

The herein-described insufflator, consisting of a flexible tube A, having at one end a mouth-piece and at the opposite end the flexible bowl B, adapted to fit in the nostril and close the same, substantially as shown and described.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOSEPH M. HARDING.

Witnesses:

JOHN M. FISKE,
JAMES S. GREVES.