

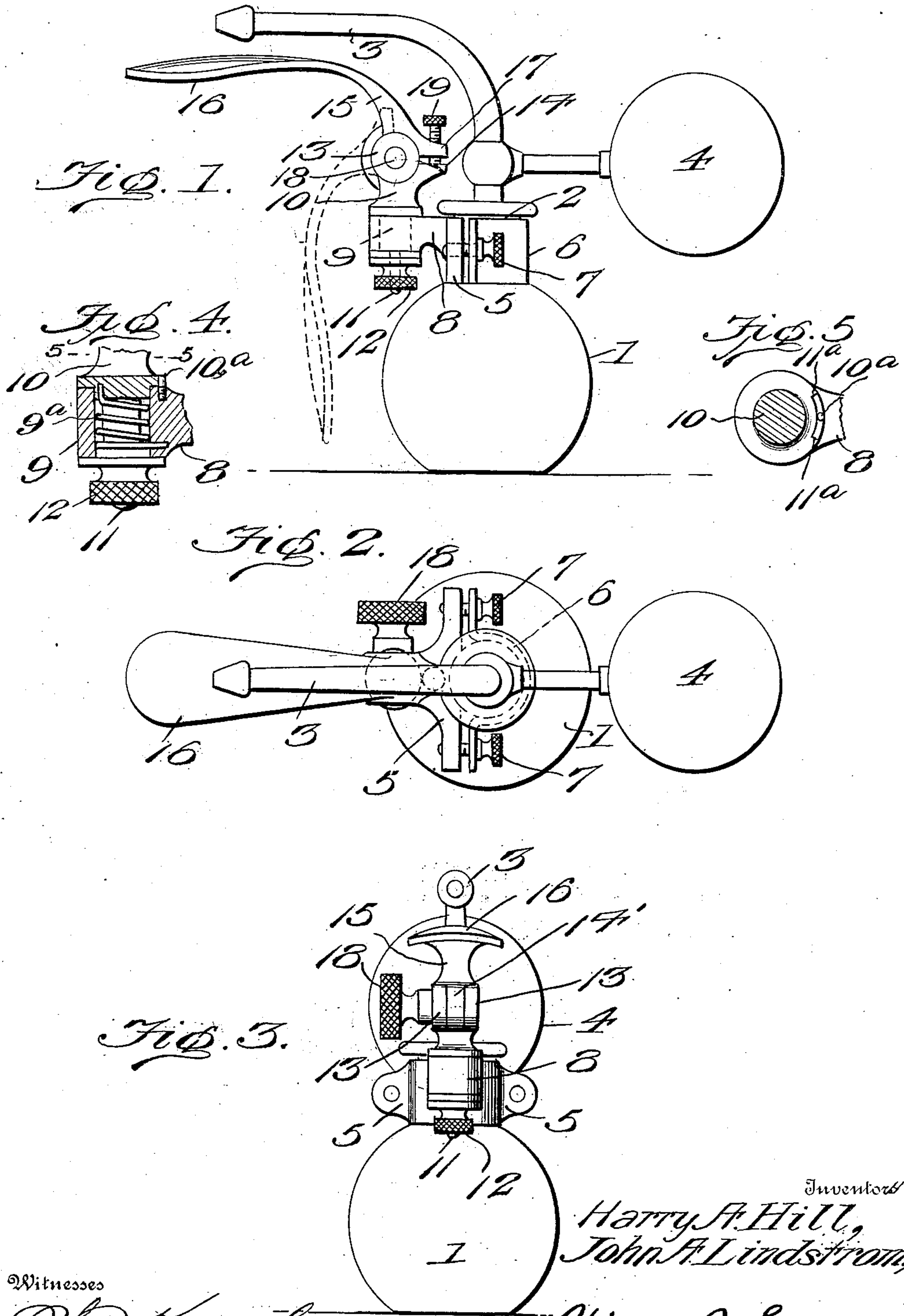
No. 862,737.

PATENTED AUG. 6, 1907.

H. A. HILL & J. A. LINDSTROM.

ATOMIZER.

APPLICATION FILED NOV. 24, 1906.



Witnesses

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# UNITED STATES PATENT OFFICE.

HARRY A. HILL AND JOHN A. LINDSTROM, OF NORTHAMPTON, PENNSYLVANIA.

## ATOMIZER.

No. 862,737.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed November 24, 1906. Serial No. 344,908.

*To all whom it may concern:*

Be it known that we, HARRY A. HILL and JOHN A. LINDSTROM, citizens of the United States of America, residing at Northampton, in the county of Northampton and State of Pennsylvania, have invented new and useful Improvements in Atomizers, of which the following is a specification.

This invention relates to improvements in atomizers of the type especially adapted for spraying the throat, the object of the invention being to provide an atomizer having a tongue depressing and holding attachment whereby the tongue of the patient or user may be held down for the more convenient and effective manipulation of the atomizer and direction of the spray.

A further object of the invention is to provide an attachment of the stated character which is adjustable vertically or laterally so that the discharge nozzle of the instrument may be positioned to direct the spray in any direction while the tongue is being held.

In the accompanying drawing,—Figure 1 is a side elevation of an atomizer embodying the invention. Fig. 2 is a top plan view thereof. Fig. 3 is a front elevation. Fig. 4 is a detail view of the bearing and bracket, the latter appearing in vertical section to show the spring confined therein. Fig. 5 is a sectional plan view on line 5—5 of Fig. 4.

Referring to the drawing, 1 designates the bowl or receptacle, 2 the neck, 3 the discharge nozzle and 4 the expressing bulb of an atomizer of ordinary construction.

The device constituting the present invention comprises a clamp or attaching member embodying sections 5 and 6 suitably shaped to embrace the neck 2 and provided with flanges or extensions perforated for the reception of coupling screws 7, whereby the members are drawn into clamping engagement with the neck. Extending from the clamp section 5 is a horizontal arm 8 having a bearing opening to receive a journal 9 depending from a supporting bracket 10, the journal 9 being provided with a reduced depending stem 11 threaded to receive a clamping nut 12. The bracket 10 rests upon the arm 8 and by the construction described is adapted to swing horizontally thereon and to be clamped in adjusted position by the nut 12, as will be readily understood. A coiled spring 9<sup>a</sup> is arranged within the bearing 9 and surrounds the stem 11, the ends of said spring being seated in sockets in the bearing and bracket or otherwise connected with the bearing and bracket, so that the spring will give a slight resistance to the swinging movement of the bracket and serve to return the same to normal position. The rear portion of the base of the bracket is recessed to receive a stop pin 10<sup>a</sup> on the bracket and provide shoulders or stop members 11<sup>a</sup> adapted to engage the pin to limit the movement of the bracket in either direction.

The bracket is provided at its upper end with spaced parallel ears 13 and a rearwardly extending lug 14, the space between the ears being adapted to receive an ear or eye 14' formed upon the shank 15 of the tongue depressing blade or plate 16, which shank is further provided in rear of the ear with a lug 17 adapted to overhang the lug 14 of the bracket. The ear 14' is pivotally mounted upon the smooth surfaced portion of the stem of a clamping bolt 18, which has a threaded engagement with the ears 13, so that when said bolt is tightened it will draw the ears sufficiently together to clamp the blade from movement. The blade 16 is preferably concavo-convex or spoon-shaped, with its concave side facing downwardly to engage and conform to the contour of the upper surface of the tongue, and by the construction described it will be understood that said blade is vertically adjustable relatively to the discharge end of the nozzle 3 on the pivot bolt 18 as an axis, so that the nozzle may be arranged to discharge the spray at different elevations while the tongue is in holding position. A screw 19 is adjustably mounted upon the lug 17 and adapted to abut against the lug 14 of the bracket to limit the upward pivotal movement of the plate. It will accordingly be understood that the plate is also mounted for lateral or transverse adjustment relative to the discharge nozzle through the swinging movement of bracket 10 on the arm 8, so that the plate may be disposed to bear upon the tongue and the nozzle disposed at any desired vertical or horizontal angle thereto to spray any portion of the mouth or throat. By loosening the screw 18 the plate may be depressed to the inoperative position shown in dotted lines in Fig. 1 when its use is not desired, or moved to a greater or less distance from the nozzle, while upon loosening the nut 12 the blade through the movement of the bracket 10 may be adjusted laterally with relation to the nozzle, the bolt and nut when tightened serving to hold the blade securely in the position to which it has been adjusted. By means of the screw 19 the maximum range of upward movement or adjustment of the blade to suit different conditions of service may be conveniently regulated.

It will be observed that the construction of the attachment is such as to render it readily applicable to atomizers of ordinary construction and readily removable when the use of the same is not required.

Having thus described the invention, what is claimed as new, is:—

1. An atomizer provided with a tongue depressor arranged below and adjustable vertically and laterally with relation to its discharge nozzle.

2. An atomizer provided with a tongue depressor pivotally mounted thereon for vertical and lateral adjustment with relation to its discharge nozzle and having means for securing it in adjusted position.

3. In combination with an atomizer, an attaching member connected with the atomizer, and a tongue depressing plate carried by said attaching member and adjustable thereon with relation to the discharge nozzle of the atomizer.
4. In combination with an atomizer, an attaching member connected therewith, a bracket laterally adjustable on said attaching member, and a tongue depressing plate arranged below the discharge nozzle of the atomizer and vertically adjustable on the bracket.
- 10 5. In combination with an atomizer, an attaching mem-

ber connected with the atomizer, a tongue depressing plate vertically and laterally adjustable on the attaching member, and means for regulating the extent of upward vertical adjustment of the plate.

In testimony whereof, we affix our signatures in presence of two witnesses.

HARRY A. HILL.  
JOHN A. LINDSTROM.

Witnesses:

H. J. SCHEIRER,  
JOHN DEPPE.