

No. 774,446.

PATENTED NOV. 8, 1904.

S. A. MOULTON.  
DEVICE FOR PREVENTING SNORING.

APPLICATION FILED MAY 19, 1904.

NO MODEL.

Fig. 1.

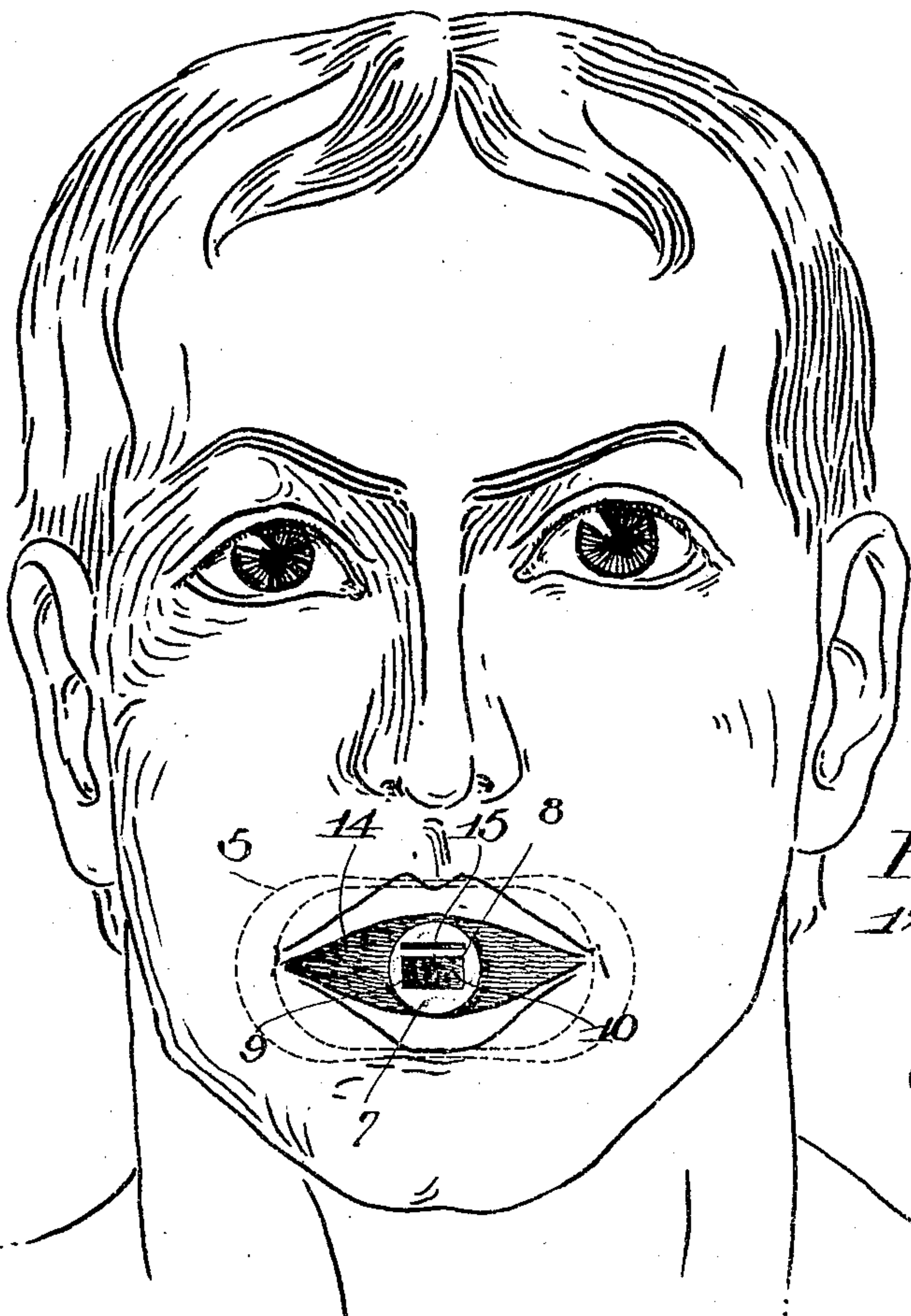


Fig. 5.

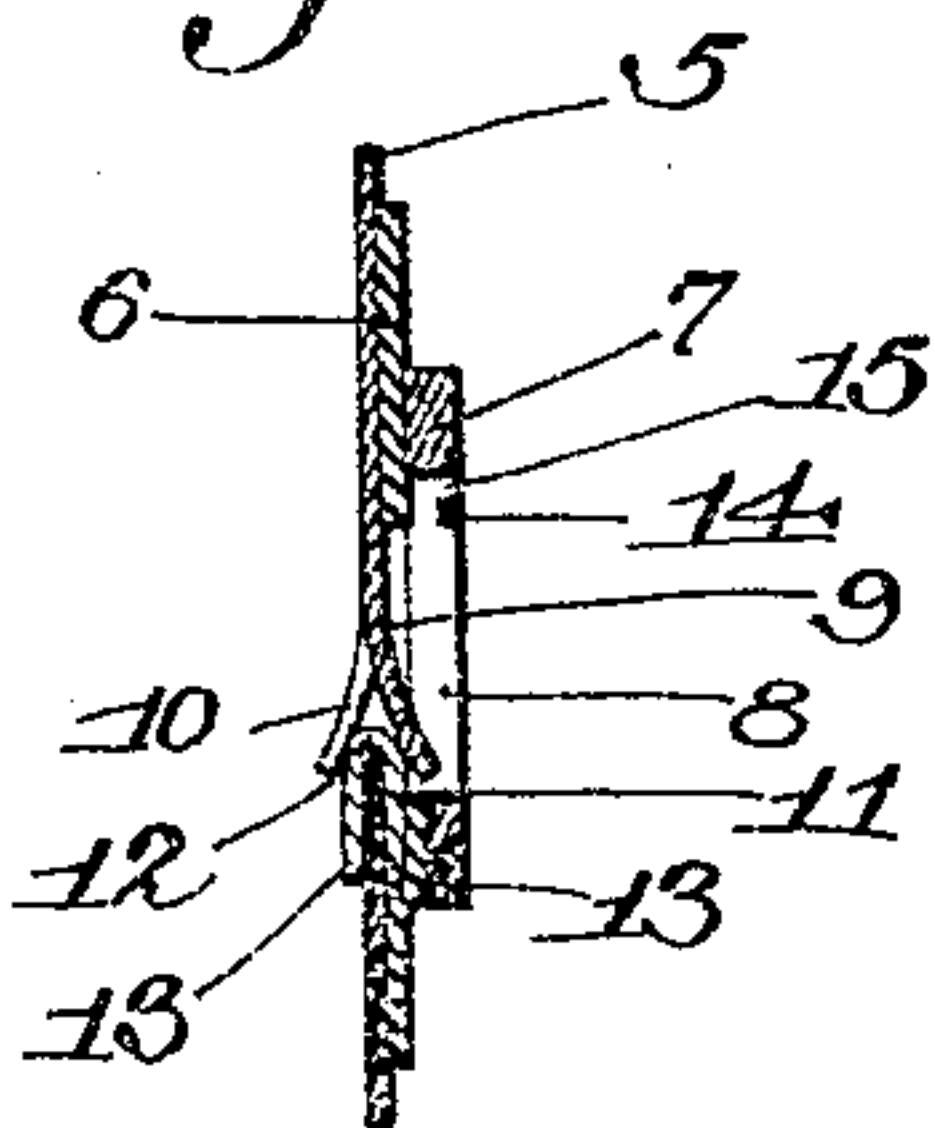


Fig. 4.

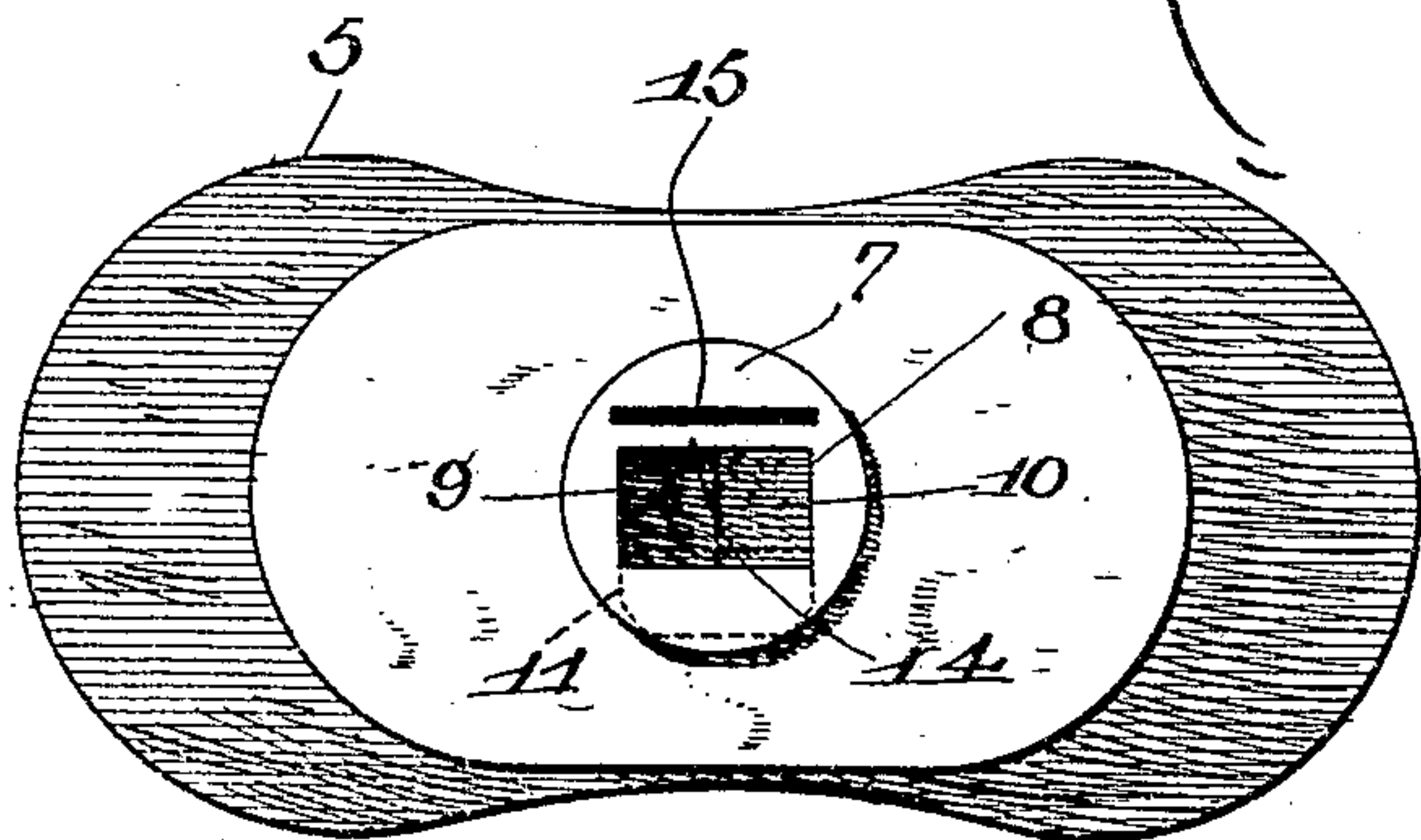
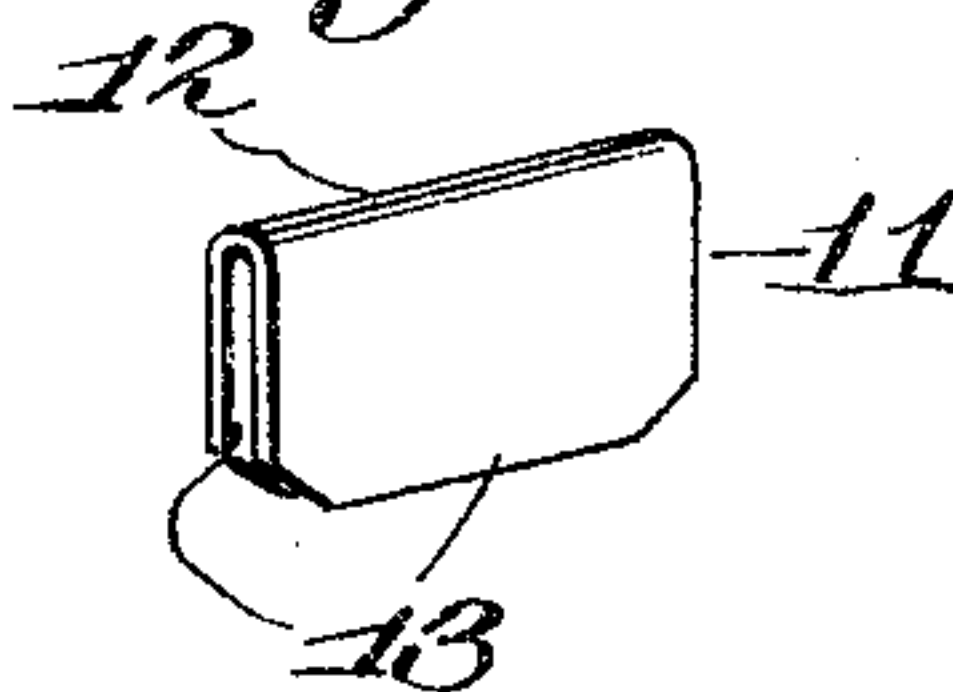


Fig. 2.

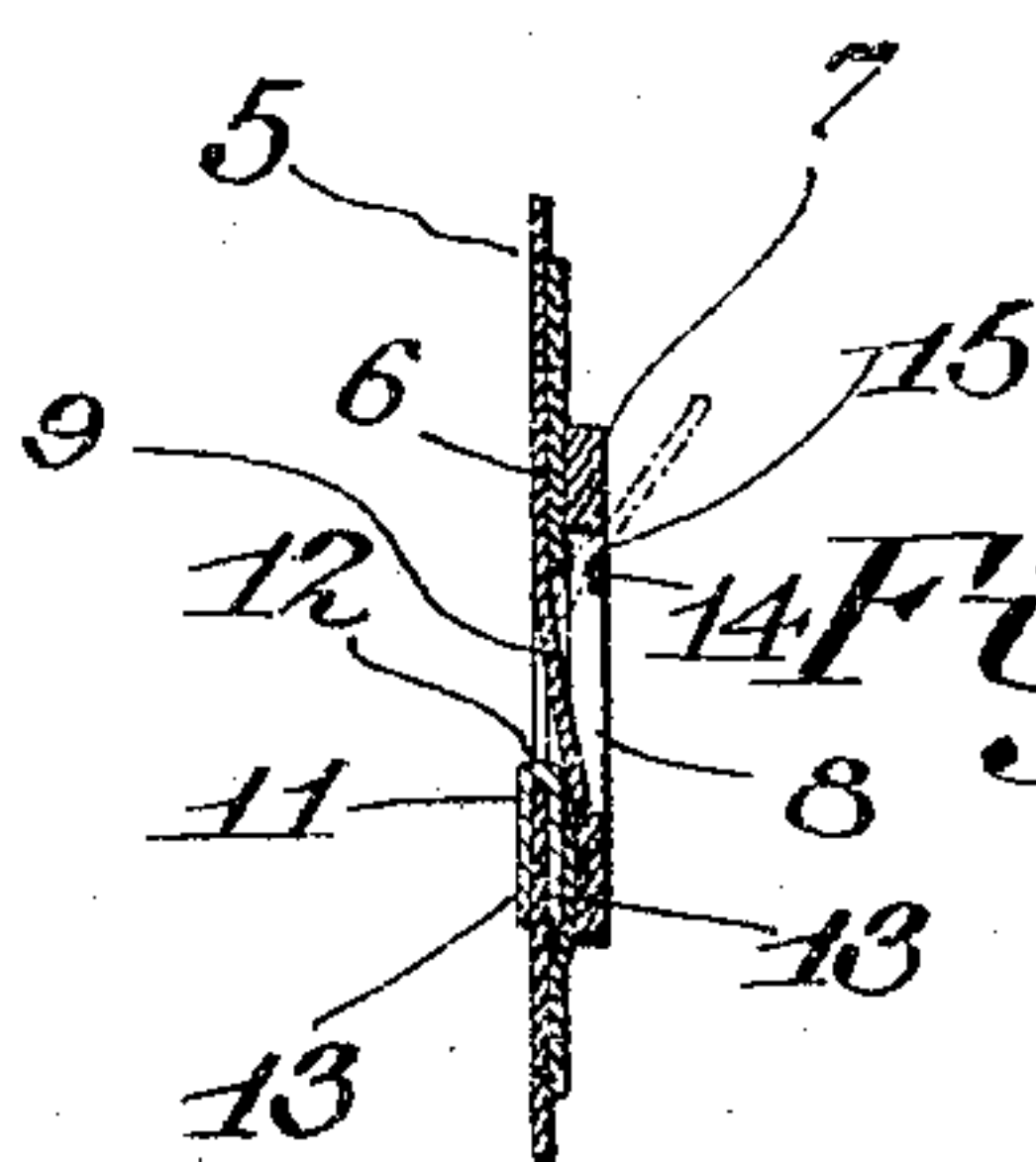


Fig. 3.

Witnesses

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# UNITED STATES PATENT OFFICE.

STILLMAN AUGUSTUS MOULTON, OF CAMPBELL, CALIFORNIA.

## DEVICE FOR PREVENTING SNORING.

SPECIFICATION forming part of Letters Patent No. 774,446, dated November 8, 1904.

Application filed May 19, 1904. Serial No. 208,744. (No model.)

*To all whom it may concern:*

Be it known that I, STILLMAN AUGUSTUS MOULTON, a citizen of the United States, residing at Campbell, in the county of Santa Clara and State of California, have invented a new and useful Breath-Controller, of which the following is a specification.

This invention relates to certain improvements in antisnoring devices of that general class shown in the United States Letters Patent granted to me on the 15th day of December, 1903, under No. 746,869.

The object of the invention is to improve, simplify, and cheapen the construction of the device by providing the flexible mouthpiece with a plurality of valves for controlling the volume of air expelled from the lungs through the mouth and for controlling the admission of air through the opening in said mouthpiece when the latter is reversed.

A further object of the invention is to provide means for locking one or more of said valves in open position to thereby increase or diminish the size of the intake-opening.

A still further object of the invention is to reinforce and strengthen the flexible mouthpiece by forming the latter with a centrally-disposed annular ring or enlargement, which also acts as a guard or housing for the valves.

The invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

In the accompanying drawings, forming a part of this invention, Figure 1 is a perspective front view of an antisnoring device constructed in accordance with my invention, illustrating the manner in which the device is applied. Fig. 2 is a front elevation of the mouthpiece detached. Fig. 3 is a vertical sectional view of the mouthpiece, showing one of the valves locked in open position. Fig. 4 is a detail perspective view of the clip detached. Fig. 5 is a vertical sectional view

showing the position of the valves reversed, so as to open in opposite directions.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The device consists of a plate or mouthpiece 5, formed of rubber, canvas, cloth, or other flexible and preferably imperforate material, said mouthpiece being of approximately panduriform shape, as shown, and adapted to be placed between the lips and held in contact with the teeth and gums, as clearly illustrated in Fig. 1 of the drawings. The mouthpiece 5 is provided with a thickened portion 6 and a centrally-disposed annular ring or enlargement 7, in which is formed a substantially rectangular opening 8, through which air is expelled in the act of exhaling. The opening 8 is normally closed by a pair of valves 9 and 10, preferably formed by slitting the rubber or other material of which the mouthpiece is made, as clearly shown in Fig. 3 of the drawings, thus preventing ingress of air through the mouth when inhaling and permitting a relatively small volume thereof to be expelled in the act of exhaling. Projecting a short distance above the lower wall of the opening 8 is a metal clip 11, which forms a seat for the valves 9 and 10 and limits the inward movement of said valves when the device is used in the manner illustrated in Fig. 1. The clip 11 is preferably stamped from a single piece of metal bent on itself, as indicated at 12, to form a pair of parallel arms 13, one of said arms being interposed between the front wall of the mouthpiece and the annular enlargement 7 and the opposite arm thereof engaging the back of the mouthpiece, as shown.

Extending transversely across the rectangular opening 8 and preferably formed integral with the enlargement 7 is a strip of rubber or other flexible material 14, said strip being spaced a short distance from the top of said opening to form a horizontally-disposed slot 15, adapted to receive the free ends of the valves 9 and 10 and lock the same in elevated position when for any reason it is desired to increase the volume of air admitted or expelled through the opening 8.



When the device is used in the manner shown in Fig. 1 of the drawings, with the valves closing inwardly, the air is prevented from entering the mouth through the opening 8, being compelled to enter the lungs through the nasal passages, thereby preventing vibration of the uvula and the consequent harsh rasping sound commonly called "snoring." When the nasal passages are partly obstructed from various causes—such as catarrh, inflammation, and the like—rendering it difficult to admit air through the nose, the plate may be reversed and placed in the mouth with the valves opening inwardly, in which event the air will be forcibly expelled through the nostrils at each expiration. The volume of air admitted through the opening in the mouthpiece in the act of inhaling or expelled through said opening in the act of exhaling may be controlled at will by inserting the free end of one or both of the valves in the slot 15, as illustrated in Fig. 5, thereby locking the valve or valves in open position, and consequently increasing or diminishing the size of the intake-opening.

The position of the valves may be reversed when desired without reversing the mouthpiece by placing the free end of one valve in engagement with the front face of the clip and the free end of the adjacent valve in engagement with the rear face of said clip, as clearly shown in Fig. 5 of the drawings. When the valves are arranged in this manner, one of said valves will open inwardly and the other outwardly, while the resistance offered by said valves will tend to check the passage of air through the opening in the mouthpiece.

The annular enlargement not only effectively reinforces and strengthens the mouthpiece, but also forms a guard or housing for the valves.

It is obvious that the mouthpiece may be made in various sizes and provided with as many valves as desired and that the guard or housing may be placed on one or both sides of said mouthpiece.

Having thus described the invention, what is claimed is—

1. An antisnoring device comprising a flexible mouthpiece having an opening formed therein, a valve for normally closing said opening, and means for locking the valve in open position.

2. An antisnoring device comprising a flexible mouthpiece having an opening formed therein, a plurality of valves for normally closing said opening, and means for locking said valves in open position.

3. An antisnoring device comprising a flexible mouthpiece having an opening formed therein, a pair of valves for normally closing said opening, a guard or housing for said valves, and means for locking the latter in open position.

4. An antisnoring device comprising a flexible mouthpiece having an opening formed therein, a pair of valves for normally closing said opening, there being a slot formed in the mouthpiece adapted to receive the free ends of the valves for locking the latter in open position.

5. An antisnoring device comprising a flexible mouthpiece, having an opening formed therein, a pair of valves for normally closing the opening in the mouthpiece and formed by slitting the mouthpiece at said opening, a guard or housing for said valves, and means for locking the latter in open position.

6. An antisnoring device comprising a flexible mouthpiece having an opening formed therein, a pair of valves adapted to normally close said opening, a guard or housing for the valves, there being a slot formed in said housing adapted to receive the ends of the valve for locking the latter in open position.

7. An antisnoring device comprising a reversible mouthpiece formed of rubber and provided with a thickened portion having a centrally-disposed opening therein, a pair of valves for normally closing said opening, a guard or housing for said valves, and means for locking said valves in open position.

8. An antisnoring device comprising a flexible mouthpiece of approximately panduriform shape and provided with a centrally-disposed opening, a pair of valves for normally closing said openings, a guard or housing surrounding said valves and having a slot formed therein adapted to receive the free ends of the valves for locking the latter in open position, and a clip forming a seat for said valves and having its parallel arms engaging the housing and mouthpiece, respectively.

9. An antisnoring device comprising a flexible mouthpiece having an opening formed therein, and a pair of valves movable in opposite directions to open and closed positions disposed at said opening and normally closing the same.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

STILLMAN AUGUSTUS MOULTON.

Witnesses:

JAMES M. SHILNE,  
W. DENKER.