(No Model.)

H. ELLIOTT.

ADJUSTABLE MOUTHPIECE.

No. 557,569. Patented Apr. 7, 1896.

Fig. 1.

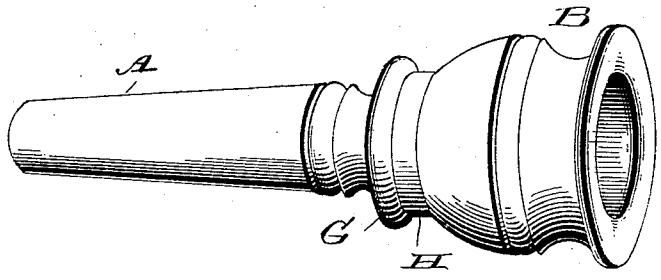


Fig. 2.

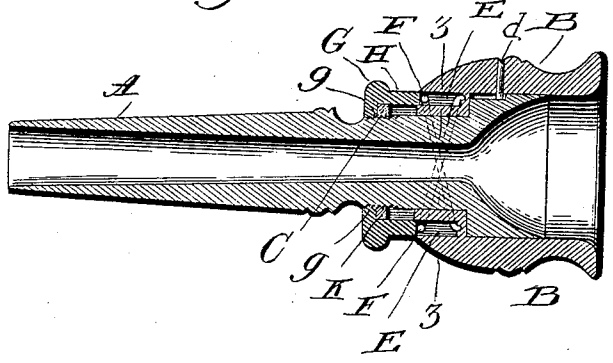
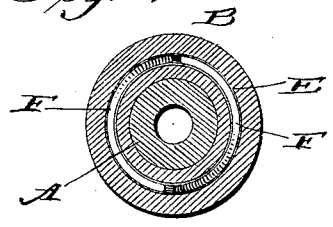


Fig. 3.



Witnesses:
L. C. Hills
A. L. Hough

Inventor:
Howard Elliott,
by Franklin H. Hough
Atty.

UNITED STATES PATENT OFFICE.

HOWARD ELLIOTT, OF ALTOONA, PENNSYLVANIA.

ADJUSTABLE MOUTHPIECE.

SPECIFICATION forming part of Letters Patent No. 557,569, dated April 7, 1896.

Application filed January 13, 1896. Serial No. 575,316. (No model.)

To all whom it may concern:

Be it known that I, HOWARD ELLIOTT, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Adjustable Mouthpieces; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in mouthpieces for musical instruments, and especially to an adjustable mouthpiece having means to regulate the tension of a spring designed to bear against the cup, and to regulate the length or movement of the cup and form a cushion against which the cup member of the mouthpiece may abut to prevent any jar to the lips of the operator.

A further object of the invention is to provide a mouthpiece having an adjustable bowl, which is slidingly held on a shank portion and prevented from turning on the said shank portion by means of a lug or screw passed through the bowl portion and working in a recess in the shank. By this construction either high or low tones may be readily made by causing the bowl of the mouthpiece to rest at different positions diminishing or increasing the size of the cavity therein.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described, and then specifically defined in the appended claim.

I clearly illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a perspective view of a mouthpiece embodying my invention. Fig. 2 is a central vertical section through the mouthpiece. Fig. 3 is a section upon the line 3 3 of Fig. 2.

Reference now being had to the details of the drawings by letter, A designates the shank portion of the mouthpiece having an enlarged head portion B, which is hollowed out in conical shape. A portion of the shank-piece is threaded, as seen at C. The bowl of the mouthpiece D, which is hollow, has the recess E about the smaller end of the said bowl to receive a coiled spring F, which has one end bearing against the bottom wall of the said recess, while its other end is adapted to bear against the inner end of the adjusting-nut G. This nut is provided with the threads *g*, which are designed to work on the threads C of the shank-piece. The inner end of the nut is provided with the annular projecting portion H, the wall of which is of such a diameter that it will register with the recess E in the cup B. Seated within a recess of the said nut is a gum washer K, which is provided to cushion the bowl and prevent any sudden jar in case the bowl should be suddenly pressed against the washer. The annular wall of the said recess E, between the said recess and the bore of the bowl, is of such a diameter as to readily pass within the recess of the nut and to abut against the gum washer when occasion requires.

From the foregoing description it will be seen that a mouthpiece constructed in accordance with my invention will admit of the tension of the springs being regulated, as well as limit the movement of the bowl on the shank-piece, when it is desired to make the cavity within the bowl smaller or larger to regulate the tones.

It will be seen that the bowl is prevented from turning as the lug *d*, carried in an aperture in the bowl, guides the latter, as the end of the lug travels in the elongated recess in the enlarged head portion on the shank-piece.

I am aware that it is common to construct adjustable mouthpieces by which the size of the cavity in the bowl may be changed by the pressure of the player's lips thereon, and I do not claim any such construction, broadly.

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

In a mouthpiece for musical instruments, the combination with the shank portion with bowl B working over a portion thereof, an

annular recess in the rear end of the said bowl inclosed on the bottom and sides, a screw-threaded nut G having an annular extension H designed to register in said recess and a spring seated in the recess against which the nut is adapted to bear, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

HOWARD ELLIOTT.

Witnesses:
E. W. EVERHART,
M. V. ORNER.