Nov. 7, 1933. M. ESCALANTE 1,933,721

MOUTH HARP

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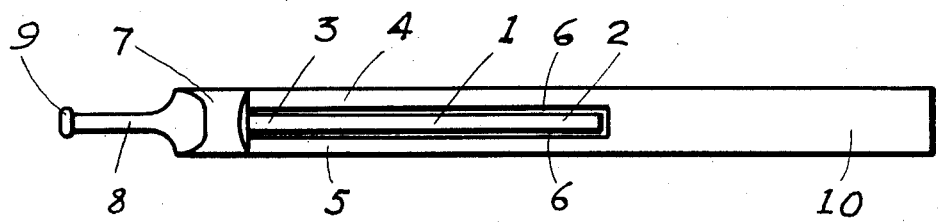

Fig. 1.

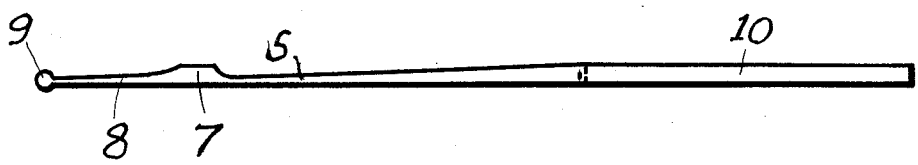

Fig. 2.

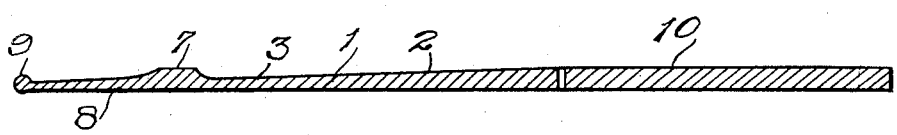

Fig. 3.

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6 Claims. (Cl. 84—375)

This invention relates to musical instruments and more particularly to those adapted to be played with the mouth.

Generically speaking this invention may be categoried with the Jew's harp. The inventive concepts comprise vibrating the air with a tongue formed of spring material having air spaces on either side separating this tongue from two adjacent side portions between which and in a plane at right angles to the plane through which, this tongue vibrates, simultaneously blowing or sucking air across this tongue with the aforesaid side portions in engagement with the lips, a handle at one end, and an extension for striking to cause the tongue to vibrate at the other end, all of said parts extending along the same general line and formed of a single unitary piece of spring material.

The objects of the invention, among others, are: first, to provide a mouth harp having well-defined and strong tonal qualities; second, to provide in such a device an improved vibrating means; third, to provide in such a device improved means for vibrating the aforesaid vibrating means; fourth, to provide such a device all of which extends longitudinally along one general line so that the instrument is easily placed in the vest pocket; fifth, to provide such a device in one single unitary piece of elastic material; and sixth, to provide in such a device simple construction and low manufacturing cost. Other objects will appear as the description proceeds.

In so far as the applicant is aware all of the existing mouth harps have a vibrating tongue to the end of which is attached a right-angled arm adapted to be struck by the finger and projecting from the free end of the tongue. This invention however contemplates having an arm or extension in the same longitudinal direction as the vibrating tongue and supported on a more rigid separating element which supports the vibrating tongue on one side and the arm or extension on the other. Moreover the vibrating tongue is not of the same thickness throughout but is thinner towards the rigid element thereby providing a construction that gives a rich full tone.

Reference is made to the drawing for an illustration of one embodiment of the invention, in which

Fig. 1 is a plan view,

Fig. 2 is a side view, and

Fig. 3 is a section on the line 3—3 of Fig. 1.

Like numerals of reference refer to like parts throughout the drawing in which the vibrating element or tongue 1 is of long, narrow formation with the sides parallel to each other. In thickness however the end 2 of the vibrating element 1 is thicker than the end 3. This general relationship endures although variations may be made in the thickness of the tongue 1 to vary the pitch or tone of the mouth harp. The side supports 4 and 5 are of the same size and form as the tongue 1 and are separated therefrom by an air space 6 which also extends around the end 2 and is of the same size throughout. As seen in Fig. 2 in the quiescent position the top and the bottom of the tongue 1 are coextensive geometrically with the top and bottom of the supports 4 and 5. The end 3 of the tongue 1 and the side supports 4 and 5 are joined to and are integral with the heavy piece or block 7 which has joined thereto and formed integrally therewith an extension or arm 8 diametrically opposed to the tongue 1 and tapered inwardly on both sides toward the end 9 which is round in form to prevent scratching of the striking finger thereon. As seen in Fig. 2 the lower surface of the arm 8 is in substantially the same plane as the corresponding surface of the tongue 1, but the upper surface from the edge of the block 7 is inclined towards the rounded end 9. At the opposite ends the side supports 4 and 5 are integral with the handle portion 10 which is preferably of the same width and thickness as the block 7. The pitch or tone can be varied in manufacture by varying the thickness of the ends 2 and 3 of the vibrating tongue 1, and also by increasing or decreasing the length of the tongue 1, and of course of the adjacent supports 4 and 5. It is obvious that all of the parts extend along one general line so that the article like a pencil may be easily placed in the vest pocket. The construction is in a single integral unit formed of elastic or vibrating material such as spring metal.

The operation of this mouth harp is as follows: The instrument is held by the handle 10 in one hand, with the lips against the side supports 4 and 5 but free from contact with the vibrating tongue 1. Air is blown from the mouth through the lips across the tongue 1 or is sucked in. The force in blowing or in sucking air determines the loudness of the tone, while rhythm or beat is produced by striking the end 9 with the finger of the other hand. The quality and quantity of tone produced is rich and full.

Having now disclosed one embodiment of my invention, and realizing that in view of this dis-

closure many changes in detail of form or of structure within the scope of my invention may readily be made, I do not choose to limit myself except as in the appended claims.

I claim:

1. A mouth harp formed of spring material from one continuous piece comprising in combination, a long narrow vibrating element mounted between two resilient side supports with air spaces on three sides thereof, a heavier portion, said element and said supports being mounted on and extending in one direction from said heavier portion, and an extension mounted on and extending from said heavier portion in the opposite direction and adapted to be struck with the finger.

2. A mouth harp formed of spring material from one continuous piece comprising in combination, a long narrow vibrating element mounted between two resilient side supports with air spaces on three sides thereof, a heavier portion, said element and said supports being mounted on and extending in one direction from said heavier portion, and an extension mounted on and extending from said heavier portion in the opposite direction and having an enlarged portion on the end thereof adapted to be struck with the finger.

3. A mouth harp formed of spring material from one continuous piece comprising in combination, a long narrow vibrating element mounted between two resilient side supports with air spaces on three sides thereof, a heavier portion, said element and said supports being mounted on and extending in one direction from said heavier portion, and an extension mounted on and extending from said heavier portion in the opposite direction, said element being thinner adjacent the heavier portion and said extension being tapered toward the end.

4. A mouth harp formed of spring material from one continuous piece comprising in combination a long narrow vibrating element mounted between two resilient side supports and with air space on three sides thereof, a heavier portion, all three extending in the same direction from said heavier portion, all three being thinner adjacent said heavier portion, and an extension in the opposite direction from said heavier portion adapted to be struck with the finger.

5. A mouth harp formed of spring material from one continuous piece comprising in combination a long narrow vibrating element mounted between two resilient side supports and with air space on three sides thereof, a heavier portion, all three extending in the same direction from said heavier portion, all three being thinner adjacent said heavier portion, the surfaces of the top and bottom of all three in the quiescent position of the vibrating element lying in the same planes respectively, and an extension from the opposite direction integral with said heavier portion.

6. A mouth harp formed of spring material from one continuous piece comprising in combination a long narrow vibrating element mounted between two resilient side supports and with air spaces on three sides thereof, a heavier portion, all three extending in the same direction from said heavier portion, all three being thinner adjacent the heavier portion, all three being of the same width, the surfaces of the top and bottom of all three in the quiescent position of the vibrating element lying in the same planes respectively, and an extension from the opposite direction integral with said heavier portion.

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