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MOUTHPIECE FOR WIND INSTRUMENTS

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Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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This invention relates to improvements in wind instruments, and more particularly to mouthpieces for saxophones or the like.

It has been the usual practice in constructing such mouthpieces, to merge the tone chamber into a relatively smaller bore, and to insert the neck of the saxophone or the like, into such bore. Such a construction provides pockets or recesses which interfere with the passage of the sound from the tone chamber into the body of the instrument.

The primary object of the present invention is to furnish a mouthpiece having an internal tubular extension, the bore of which forms a clear unobstructed passageway that extends into the ordinary nipple which projects from the discharge end of the mouthpiece. As such tubular extension is spaced from the inner surface of the nipple, an annular recess is provided within the mouthpiece to receive the neck of the instrument, without forming cavities or pockets which will interfere with the tone of the instrument.

A further object is to provide a mouthpiece with an improved reed holder or ligature, which maintains an even pressure on the reed without marring the latter.

With the foregoing objects outlined and with other objects in view which will appear as the description proceeds, my invention consists in the novel features hereinafter described in detail, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims.

Referring to the drawing,

Fig. 1 is a bottom plan view of my improved mouthpiece.

Fig. 2 is a longitudinal vertical sectional view of the same, taken on line 2—2 of Fig. 1.

Fig. 3 is a side elevation.

Fig. 4 is a perspective view of the body of the reed holder or ligature.

Fig. 5 is a transverse vertical sectional view on the line 5—5 of Fig. 2.

In the drawing, 6 designates the tubular body of my improved mouthpiece, preferably provided at one side of its forward end portion with an inclined surface 7, in which on oval hard rubber pad 8 is inserted to relieve the teeth of contacting with the metal of which the mouthpiece is preferably formed.

The opposite face of the mouthpiece has a relatively flat inclined lay surface 9 which meets the surface 7 at the point 10 of the body. An ordinary reed 11 rests on the lay surface and is firmly held in position by a ligature 12 of special form. This ligature includes a body having forwardly and downwardly curved legs 13, a forwardly projecting tongue 14, and a screw threaded rear extremity 15. Pins 16 pass through apertures 17 in the arms 13, and pivotally connect the ligature to the exterior of the mouthpiece, and the tongue 12 is curved to conform to the outer surface of the reed, and acts to press the reed evenly against the lay surface. A hand screw 18 engages the threaded end 15 of the ligature, and bears upon a small leaf spring 19, which in turn bears upon the outer surface of the reed rearwardly of the portion engaged by the tongue. It may be readily seen from the drawing that when the screw is turned to cause its inner end to move toward the mouthpiece, the spring 19 will be constrained to force the rear end of the reed against the lay surface, and at the same time, the tongue will bear upon another portion of the reed and force that portion toward the lay surface. Consequently, the reed will be firmly held in position, and at the same time it may be instantaneously removed or adjusted by turning the screw 18 in the proper direction, and then manipulating the reed.

The forward end of the reed, as is usual, obstructs the mouth 20 of the tone chamber 21, and this mouth is flared forwardly from a bore 22 of substantially uniform diameter throughout its length, and formed in an auxiliary tube 23, which projects rearwardly into the main tube or nipple 24. As the tubes 23 and 24 are spaced apart, an annular recess 25 is thus provided, and this recess receives the forward end of the neck of the instrument (not shown), when the mouthpiece is placed on the instrument. Due to the auxiliary tube 23, an unobstructed passageway is provided from the tone chamber 21, directly into the instrument, and there are no pockets 26.

In using the mouthpiece, the ligature is inserted with its tongue 14 projecting forwardly, when the screw 18 is turned to fasten the ligature in position, the reed 11 is inserted through the tubing into the lay surface 9, and the tone chamber 21 is brought in position to the intended instrument.
or crevices present to interfere with the tonal qualities of the instrument.

From the foregoing description it is believed that the construction, operation and advantages of the invention may be readily understood, and it is manifest that changes may be made in the details disclosed, without departing from the spirit of the invention, as expressed in the claims.

What I claim is:

1. A mouthpiece for wind instruments, including a tubular body having a tone chamber and a main bore, and an auxiliary tubular part fixed to the tubular body and projecting from the tone chamber into the main bore, in spaced relation to the latter.

2. A mouthpiece for wind instruments, including a tubular body having a tone chamber and a main bore, an auxiliary tubular member fixed to the tubular body, arranged within the latter and projecting from the tone chamber into the main bore in spaced relation to the latter, said tone chamber being forwardly flared and the auxiliary tubular member having a bore of substantially uniform diameter throughout its length, which merges into the tone chamber and the main bore.

3. A mouthpiece for wind instruments, including a tubular body having an internal tone chamber in its forward portion, and a main bore in its rear portion, and an auxiliary tubular member arranged within the medial portion of the tubular body, and projecting from the tone chamber into the main bore in spaced relation to the latter.

4. A wind instrument including a tubular body having a tone chamber and a tubular extension projecting rearwardly from the tone chamber, said tone chamber being forwardly flared and the bore of the tubular extension being of substantially uniform diameter throughout its length and merging into the tone chamber, said tubular extension having a cylindrical external surface to be inserted in the neck of a wind instrument.

5. In a mouthpiece for wind instruments, a tubular body having a tone chamber, a lay surface on the exterior of the body, said lay surface being provided with an opening serving as a mouth for the tone chamber, a reed resting on the lay surface and a ligature pivotally mounted on the tubular body and bearing against said reed.

6. In a mouthpiece for wind instruments, including a tubular body having a tone chamber and a lay surface, the mouth of the tone chamber opening through said lay surface, a reed resting on the lay surface, and a ligature pivotally mounted on the mouthpiece and bearing at forward and rear points upon the reed.

7. A mouthpiece for wind instruments, including a tubular body having a tone cham-