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ADJUSTABLE SUPPORT FOR WIND INSTRUMENTS

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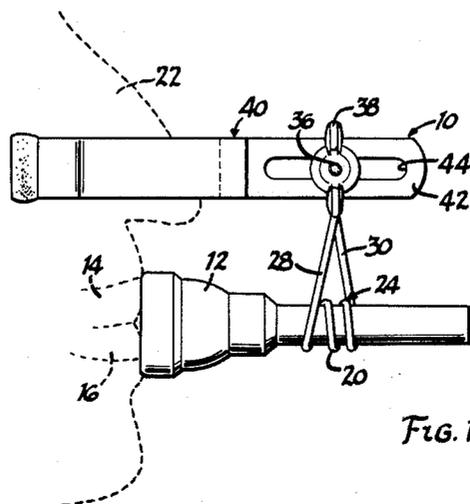


FIG. 1

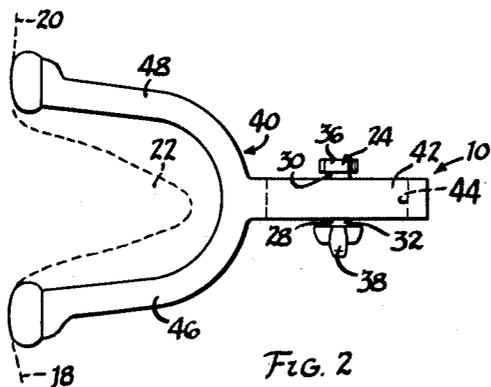


FIG. 2

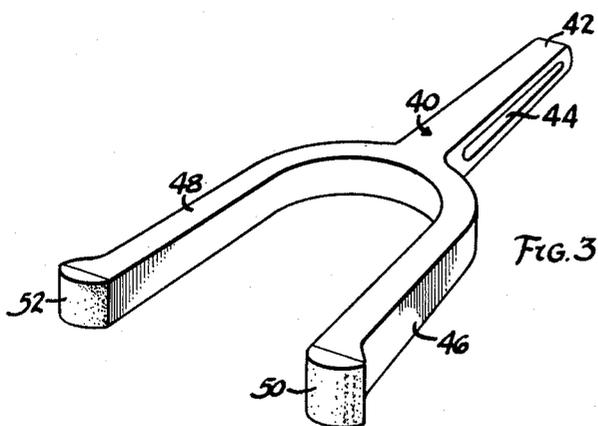


FIG. 3

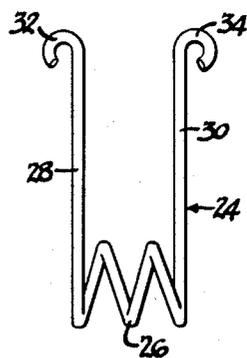


FIG. 4

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3,164,052
**ADJUSTABLE SUPPORT FOR WIND
 INSTRUMENTS**

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 7 Claims. (Cl. 84-398)

This invention relates generally to a musical instrument and more particularly to an improved rest or support member adjustably mountable on a wind instrument in the manner disclosed in my United States Patent No. 2,758,496 entitled "Adjustable Chin Rest for Wind Instruments."

In the chin rest disclosed in the above-cited patent, a padded chin engaging member is angularly and longitudinally adjustable with respect to a wire bracket embracing and depending from the mouthpiece of a brass instrument such as a cornet or trombone. Such chin rests have been found helpful in protecting the teeth and lips of the user from undesirable pressure or from accidental impacting by the lip engaged mouthpiece during marching band maneuvers. However, a degree of practice has been required for musicians to adjust to the proper use of such a chin rest. Since the lower jaw is hinged, the chin is often inclined to move to a limited extent during the playing of such brass instruments. This has proven disconcerting to some musicians although generally tending to protect and maintain firm muscular embouchure.

The instant invention contemplates an improved instrument supporting device having an adjustable bifurcated support member which straddles the lower portion of the nose and comfortably engages the bilateral cheek portions of the face. Stabilized lateral and vertical support of the wind instrument is thus provided relative to the relatively fixed suborbital facial bones and cheek muscles of the musician. The pivotal support thus obtained more adequately protects the lips and teeth of the musician from undue pressure and accidental impacting; helps the musician to develop and maintain proper playing posture and the firm muscular embouchure between the lips and mouthpiece; and permits the musician to enjoy better performance for substantially longer periods with greater clarity and less fatigue.

Other objects of this invention will appear in the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

In the drawings:

FIGURE 1 is a side elevational view showing the assembled mounting of an adjustable instrument support illustrative of the present invention on the removable mouthpiece of a wind instrument partially shown in phantom lines, the instrument and support engaging facial portions of the user also being shown in phantom lines;

FIGURE 2 is a plan elevational view further showing the laterally stabilized, cheek engaging instrument support provided by illustrative device;

FIGURE 3 is a view of a mouthpiece embracing, self clamping spring member shown prior to deflection permitting parallel spring arms to be adjustably attached to the bifurcated cheek engaging support member, and

FIGURE 4 is a perspective view of the bifurcated support member.

Before explaining the present invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also, it is to be understood that the phraseology or terminology

employed herein is for the purpose of description and not of limitation.

Referring now more particularly to FIGURES 1 and 2, an instrument supporting device embodying the invention is indicated generally by the reference numeral 10. This instrument support is secured to the tapered shank of a mouthpiece 12 insertable in a cooperating tubular inlet opening of the musical instrument. After assembly on the mouthpiece, the supporting device may be angularly and longitudinally adjusted to provide proper mouthpiece position for firm muscular embouchure by the upper and lower lips 14 and 16. When properly adjusted the rearwardly extending arms of an upper Y-shaped support member 40 comfortably engage the right and left cheeks 18 and 20 of the musician to support the instrument vertically and laterally of the cheek supporting facial bones adjacent the lower or intermediate portion of his nose.

In the illustrative support, a wire formed resilient member or spring 24 is mounted on and connects the mouthpiece 12 with the cheek engaging support member 40. The spring 24 is somewhat similar to that disclosed in the above-cited patent, but has a helically wound intermediate portion 26 provided with a taper cooperating with the tapered shank of the mouthpiece. As shown in FIGURE 4, the opposite end portions of the spring 24 form two upstanding arms 28 and 30 of equal length. These two spring arms may be formed to extend parallel to each other as shown or they may be inclined slightly outwardly of each other. The upper free ends of these spring arms terminate in end loops 32 and 34.

After the helical portion of the spring member has been forced into snug engagement with the tapered shank of the mouthpiece, the end loops are deflected into axial alignment on opposite sides of a forwardly extending leg or arm 42 of the Y-shaped support member. Such deflection causes the spring to clamp itself on the tapered shank of the mouthpiece. The support arm 42 has a longitudinal slot 44. This slotted arm is adapted to receive a clamping bolt or screw member 36 insertable through the transversely aligned end loops of the spring and secured thereto by a wing nut 38. The bolt 36 and the wing nut 38 thus cooperate to provide angular and longitudinal adjustment of the resilient mouthpiece mounted member 24 relative to the Y-shaped support member 40.

As indicated above, the two rearwardly extending arms 46 and 48 of the upper support member straddle the nose of the musician. The rear end surfaces of these arms have resilient compressive pads 50 and 52 suitably secured thereto and thus comfortably engage the cheek forming portions of the face. The support member is preferably adjusted relative to the mouthpiece supported member so that such cheek engagement occurs inwardly of and toward the underside of the malar bones which support the cheek forming risorius and masseter facial muscles of the musician.

The stabilized lateral and vertical support provided by the illustrative device relative to the cheek engaging pads 50 and 52 normally maintains the mouthpiece of the instrument in proper position for firm muscular embouchure with user's lips. During band marching maneuvers, any accidental striking of the instrument will tend to rotate the mouthpiece about one or both of the compressive shock absorbing pads. Any resultant lateral or upward swinging movement of the instrument tends to carry the mouthpiece away from the lips. Where downward pivotal movement of the instrument occurs, the mouthpiece will be swung downwardly toward the chin and gum line of the lower jaw without damage to the lower lips due to the recessed bite and flexural movement of the lower jaw.

From the foregoing description, it will be seen that the illustrative embodiment provides a relatively simple, easily

adjusted, light weight rest or supporting device for a wind instrument which is capable of satisfying or providing the several contemplated objectives, advantages and features discussed above. It will be further apparent that various changes might be made in the illustrative support and its several elements without departing from the spirit and scope of the invention as defined in the following claims:

I claim:

1. An adjustable support for a musical wind instrument having a mouthpiece comprising a first support member connectable to the instrument adjacent the mouthpiece and extending upwardly therefrom, a second support member having a forwardly extending arm and two laterally spaced rearwardly extending arms, the rear ends of said spaced arms mounting compressive resilient pads engageable with the bilateral bone supported cheek portions of the person playing the instrument, and means securing the first support member for angular and linear adjustment longitudinally of the forward arm of said second support member.

2. An adjustable embouchure maintaining device for a musical wind instrument having a mouthpiece, said device comprising a support member spaced above the mouthpiece and bifurcated rearwardly to form two laterally spaced arms adapted to straddle the nose of the person playing the instrument, compressive resilient pads mounted on the rear end surfaces of each of said laterally spaced arms, said arm mounted pads being pivotally engageable with the bilateral bone supported cheeks of the person playing the instrument, and means for securing the cheek engageable support member to the instrument adjacent the mouthpiece for angular and linear adjustment to provide firm muscular embouchure between the mouthpiece and the lips.

3. In an embouchure maintaining safety support for a musical wind instrument having a lip engageable mouthpiece, a first support member resiliently connectable to the instrument adjacent the mouthpiece and having laterally spaced end portions extending upwardly therefrom, a second support member spaced above the mouthpiece and having a forwardly extending arm and bifurcated rearwardly to form two laterally spaced arms adapted to straddle the nose and rearwardly engageable with the bilateral bone support cheeks of the person playing the instrument, and means for adjustably connecting the laterally spaced upper end portions of the first support member for angular and linear adjustment longitudinally of the forward arm of said second support member to provide and maintain proper embouchure between the mouthpiece and the lips.

4. In a safety support for a wind instrument as set forth in claim 3, a resilient pad secured to each of the laterally spaced rear end surfaces of the nose straddling arms of the second support member, said pads being compressively and pivotally engageable with the bone supported cheeks of the person playing the instrument and co-

operative therewith to swing the instrument mouthpiece away from lip engagement upon unintentional instrument movement relative to the lips thereby preventing undue lip fatiguing pressure and lip damaging impacts from such instrument movement after the support members have been adjusted to provide desired embouchure.

5. An adjustable support for a musical wind instrument having a mouthpiece with a tapered shank insertable into the musical instrument, said support comprising a resilient support member connectable to the shank portion of the mouthpiece and extending upwardly therefrom, a second support member having a forwardly extending arm spaced above the mouthpiece and bifurcated rearwardly to form two horizontally disposed arms adapted to straddle the nose laterally and rearwardly engageable with the bilateral bone support cheeks of the person playing the instrument, said forward arm of the second support member having a slot extending longitudinally and transversely there-through, and means for releasably securing the upper end of said resilient support member for angular and linear adjustment longitudinally of the slot provided in the forward arm of said second support member.

6. In an adjustable musical wind instrument support as set forth in claim 5, said resilient support member having an intermediate helical spring portion tapered and slidable on the tapered shank of the instrument mouthpiece and two upstanding spring arm end portions extending tangentially from opposite ends of the helical portion, said spring arm portions terminating in end loops spaced laterally and longitudinally of the helical spring portion and being deflected to align said end loops transversely for adjustable attachment to the slotted forward arm of the second support member, and the deflection of said spring arms causing corresponding deflection tending to secure the helical spring portion on the tapered shank of the mouthpiece.

7. In an adjustable support as set forth in claim 5, a resilient pad mounted on the rear end of each of the nose straddling arms of the second support member, said pads being compressively and pivotally engageable with the bone support cheeks of the person playing the instrument and cooperative therewith to swing the instrument mouthpiece away from lip engagement upon unintentional instrument movement relative to the lips thereby preventing undue lip fatiguing pressure and lip damaging impacts from such instrument movement after the support members have been adjusted to provide desired embouchure.

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LEO SMILOW, Primary Examiner,