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ELASTIC MUTE FOR WIND INSTRUMENTS

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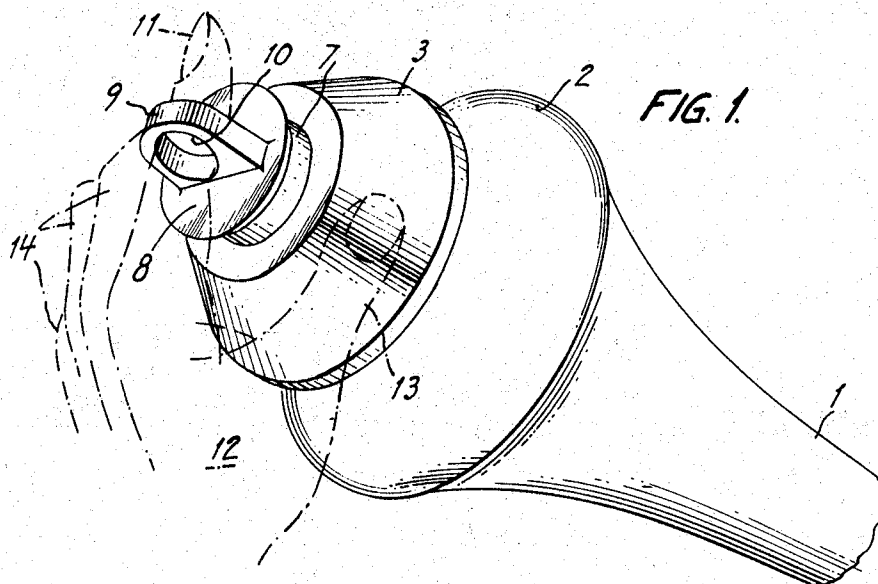


FIG. 1.

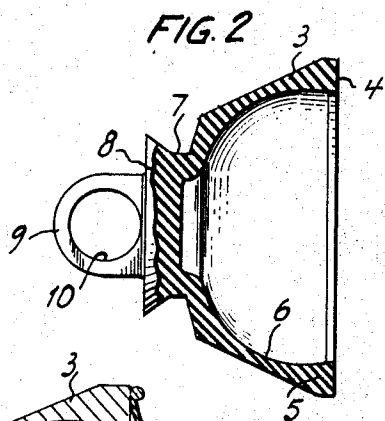


FIG. 2.

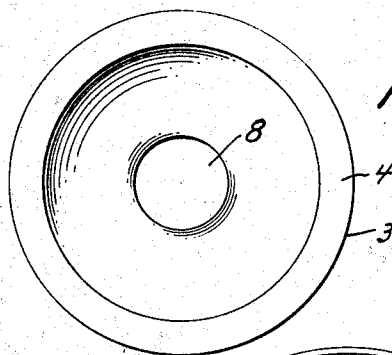


FIG. 3.

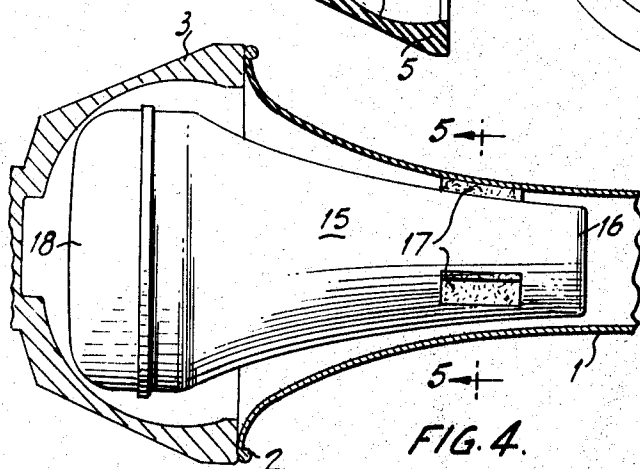


FIG. 4.

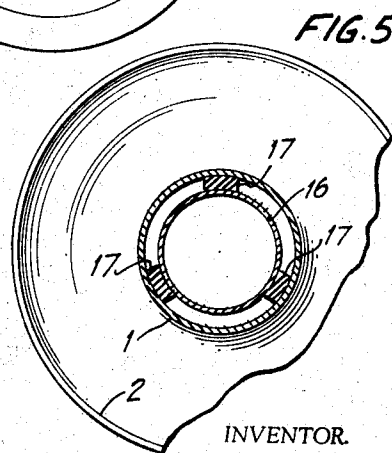


FIG. 5.

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1

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ELASTIC MUTE FOR WIND INSTRUMENTS

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6 Claims. (Cl. 84-400)

The present invention is directed to musical instruments, and more particularly to a new type of mute to be associated with wind instruments in order to alter and vary the character of the sounds emanating therefrom.

The invention is particularly directed to a mute which consists essentially of a hollow body of elastic material which is frusto-conical in shape or approximately hemispherical. The diameter at the widest portion is approximately the diameter of the flare of the horn of the instrument in order that it may fit onto the flare. Furthermore, the material of the hollow body is elastic and flexible.

At the closed end of the hollow body there is provided a projecting portion which has an opening therein for the accommodation of a finger of the musician and preferably, the forefinger. Because of this construction, the musician inserts his finger into the opening and is enabled to grasp the outer surface of the body on one side with his thumb and on the other side with the remaining three fingers. Thereby he is able to press and distort the body with certainty and such distortions are completely and accurately controlled. In so doing, the musician may at will change the character of the sound which is produced.

In a modification of the invention there is provided in addition to said body a substantially conical mute such as has previously been used and which fits into the horn with the larger end of the conical mute extending somewhat beyond the flare of the horn. The hollow body may then be used as previously with the larger end of the conical mute projecting into the hollow portion. By such a combination, still further modifications of the sound can be made depending upon the desires and skill of the musician.

The invention is more fully described in connection with the accompanying drawing constituting a part hereof, and in which like reference characters indicate like parts and in which:

FIG. 1 is a perspective view of the horn of a wind instrument showing the manner in which the hollow body is used in conjunction therewith;

FIG. 2 is a transverse cross-sectional view of the elastic body;

FIG. 3 is an end view thereof looking into the hollow portion;

FIG. 4 is a transverse cross-sectional view of the horn of a wind instrument showing the combination of mutes as applied thereto; and

FIG. 5 is a transverse cross-sectional view taken along line 5-5 of FIG. 4.

Referring to FIGS. 1, 2 and 3, there is shown the free end 1 of the horn of an instrument such as a trumpet, trombone, or the like. It has a flared end 2 into which body 3 of the elastic member is adapted to fit with the rim 4 thereof usually in position at or near flare 2. As shown in FIG. 2, the rim 5 is relatively thick and the central portion 6 of the body is substantially thicker than the remainder thereof. By this means greater flexibility in manipulating the mute is obtained.

Extending from body 3 is a projecting portion having a neck 7 and a flat top 8. A ring 9 integral with portion 8 has an opening 10 centrally thereof. As indicated in FIG. 1, the forefinger is inserted through opening 10 with hand 12 adjacent to the body 3 and thumb 13 in contact with the outer face thereof. Fingers 14 are placed in con-

2

tact with body 3 at a point approximately diametrically opposite from thumb 13. Thus, the musician has complete control of the mute and can vary the pressure thereon as well as the contact thereof with the flare of the horn.

In FIGS. 4 and 5 there is shown the horn 1 in which a mute 15 of conical shape is inserted. The small end 16 of the mute is closed and is inserted a considerable distance within the horn itself. Pads 17 on the outer periphery of mute 15 contact the walls of the horn and frictionally hold the mute in position. The outer larger end of mute 15 projects beyond the free end of horn 1 and is held within the hollow of body 3. By this means, mute 15 alters the nature of the sound emanating from the horn and hollow mute 3 extending thereover can be used to still further alter and vary the nature of the sound produced in the instrument.

Although the invention has been described setting forth two specific embodiments thereof, the invention is not limited thereto. For instance, when a mute 15 is used it need not be of the same character as that shown, but other known mutes of similar character may be substituted therefor. The hollow mute 3 can be made of various materials having elasticity, such as rubber, synthetic plastics and the like. The mutes of the present invention may be adapted to instruments other than those specifically described herein. These and other changes in the details may be made within the spirit of the invention which is to be broadly construed and not to be limited except by the character of the claims appended hereto.

What is claimed is:

1. A mute for wind instruments having a flaring mouth comprising a frusto-conical hollow body of flexible elastic material adapted to be distorted by external pressure of the fingers on the sides of said body and to return to its original form upon release of said pressure, the large end of said body adapted to fit into the flare of said instrument, the small end of said body being closed, and a finger hold projecting from said small end.

2. A mute according to claim 1 characterized in that said finger hold has an opening of sufficient diameter to permit the insertion of a forefinger.

3. A mute according to claim 1 characterized in that a neck is interposed between the small end and the finger hold.

4. A mute according to claim 1 characterized in that there is inserted a substantially conical mute having a plurality of external spacers adapted to fit into the mouth of said instrument, the larger end of said conical mute being adjacent to the large end of said frusto-conical mute.

5. A mute according to claim 3 characterized in that said neck portion is substantially rigid.

6. A mute according to claim 2 characterized in that the open end of said body is of greater thickness than the intermediate portion thereof.

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