C. G. CONN.

BELL MUTE FOR CORNETS.

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911,940.

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Fig. 1.

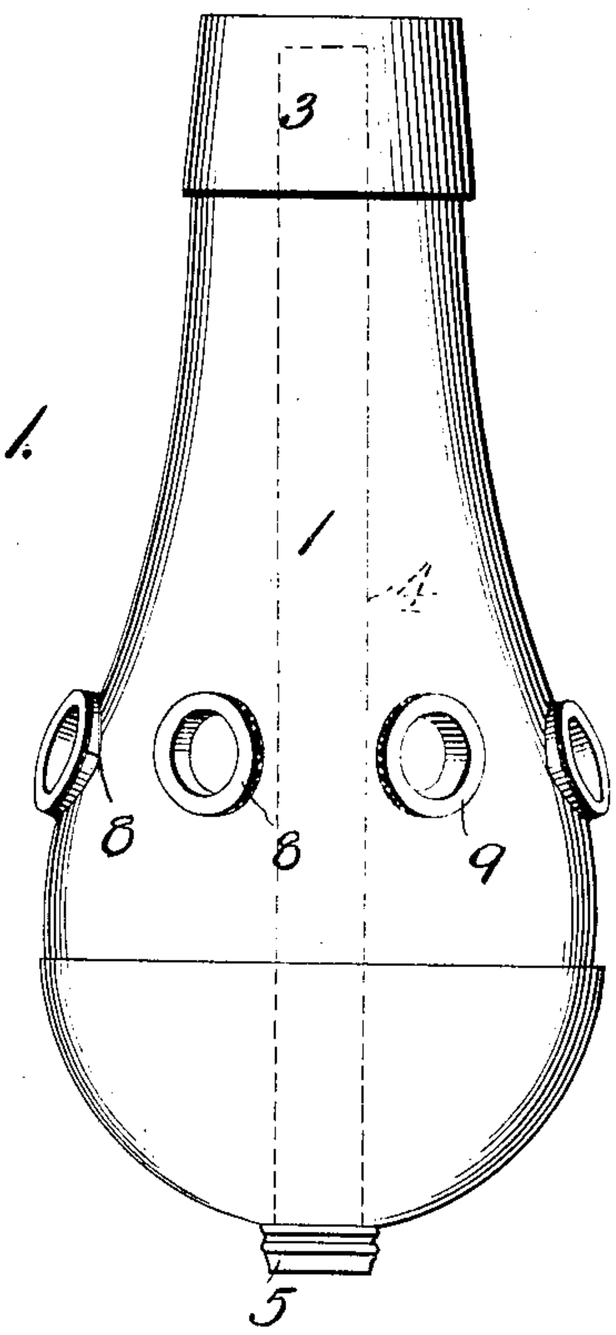
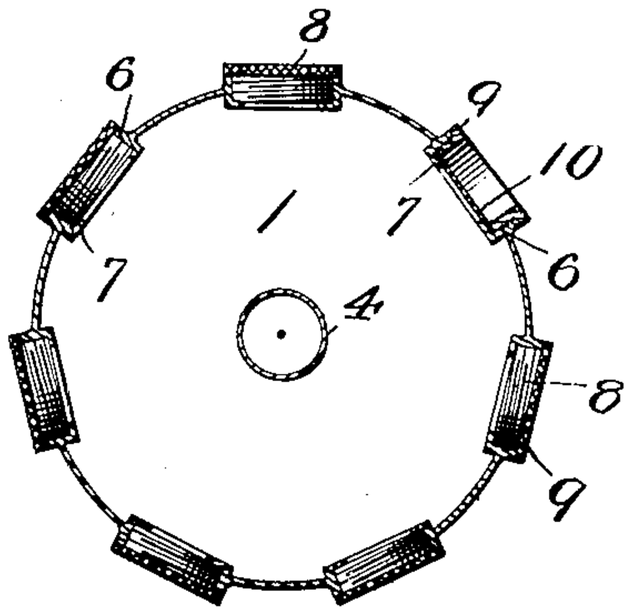


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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BELL-MUTE FOR CORNETS.

No. 911,940. Specification of Letters Patent. Patented Feb. 9, 1909.

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To all whom it may concern:

Be it known that I, CHARLES G. CONN, a citizen of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Bell-Mutes for Cornets, of which the following is a specification.

In the drawing, Figure 1 is a side elevation of a mute, embodying my invention; Fig. 2 is a longitudinal cross sectional view of the same.

1 represents the mute which is shown as substantially pear shaped. The smaller end of the mute is adapted to engage the walls of the bell tube of a cornet, and to provide a tight joint between the walls of the cornet and the mute, I secure a piece 3 of soft leather, felt, or similar material, whereby a strong frictional joint is secured.

4 is a tube open at both ends and of less diameter than the diameter of the body of the mute, which extends throughout the length of the mute and projects as at 5 slightly beyond the enlarged end of the mute wherein it is secured. The inner end 3 of the tube 4 extends inwardly to a point adjacent to the inner end of the mute and in consequence of its position, serves to give egress to a certain portion of the sound waves which enter the air chamber of the mute.

The mute is provided with a series of threaded tubular openings 6 near its larger end, said openings being provided with flat annular seats 7. The threaded portions of said openings are above the seats 7. 8 is a ring having exterior screw threads and an annular flange 9 adapted to engage the screw threads in the wall of the openings.

10 is a piece of membrane or silk secured to the bottom of the ring 8 and adapted to be clamped between the inner edge of the ring and the seat 7.

In order to give brass wind instruments a reedy tone, that they may be used as substitutes for reed instruments, I have devised the bell mute herein described, in which are inserted one or more pieces of membrane, which are vibrated by the sound waves as they emerge from the bell of the instrument when it is in use.

The effect of the use of this mute as described in this application is to practically change the voice of the instrument and give it a reedy or nasal quality of tone. This reedy quality of tone can be varied by using different kinds of material for the parts to be inserted in the mute. For instance, the use of silk gives a softer quality of tone than the gold beater skin or membrane. Any material or substance which can be vibrated as the sound waves pass over it will produce a different quality of tone than that of the natural instrument, even when muted.

While I have shown a particular construction of mute, I do not wish to be limited to the details of construction, inasmuch as I believe that my invention is of such scope as to cover the use of one or more pieces of membrane, skin, silk, or any other suitable material inserted in a bell mute for musical instruments for the purpose of changing the quality of tone.

What I claim is:

A bell mute comprising a pear-shaped body provided in the enlarged outer end thereof with threaded tubular openings having flat annular seats at the inner ends of said tubular openings; and threaded rings adapted to screw into said tubular openings to clamp various materials therein.

CHARLES G. CONN.

In presence of two witnesses—
W. J. GRONERT,
GERTRUDE STREGO.