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REED FOR MUSICAL WIND INSTRUMENTS

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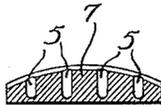
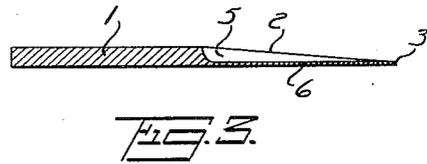
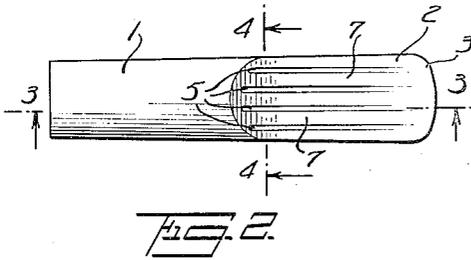
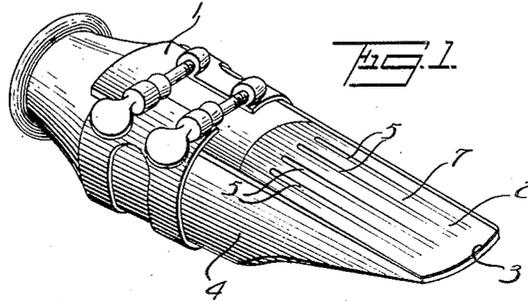


FIG. 4.

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REED FOR MUSICAL WIND INSTRUMENTS.

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My invention is for a new and improved reed for musical instruments of the clarinet or saxophone type. The reeds heretofore used consist of a thick bass portion from which extends a smooth tapering tongue adapted to vibrate in the playing of the instrument. In my new reed, the rounded upper surface of the tapering vibratory tongue is provided with longitudinal grooves of varying depth, so that the material of the reed below the grooves is substantially uniform in thickness. This construction improves the operation of the reed by increasing its elasticity without sacrificing the required rigidity.

A preferred form of my invention is shown in the accompanying drawings, in which—

Fig. 1 is a perspective view of a clarinet or saxophone mouthpiece provided with my new form of reed;

Fig. 2 is a plan view of the reed;

Fig. 3 represents a longitudinal section on line 3—3 of Fig. 2; and

Fig. 4 is an enlarged transverse section on line 4—4 of Fig. 2.

The reed is made of suitable material, such as wood, metal, rubber and the like, and it consists of a rigid base portion 1 and an elastic vibratory portion or tongue 2, which gradually tapers from the base to a thin free edge 3. Fig. 1 shows how the reed is clamped in playing position on a mouthpiece 4. The tapering tongue 2 is provided with a series of longitudinal grooves 5, cut substantially parallel. In the present instance I have shown four of these grooves, but the number may vary. The depth of grooves

5 is such that the material below the grooves is substantially uniform in thickness, as clearly shown at 6 in Fig. 3.

I have found by repeated tests that by cutting longitudinal grooves in the tapering tongue, the reed vibrates more freely and easily. The removal of the material to form the grooves makes the reed more elastic, while the tapering or wedge-shape ridges between the grooves impart to the reed the necessary rigidity. This increased elasticity of the reed due to grooves 5 makes it easier to play the instrument, particularly on low tones. At the same time, the reed need not be scraped so very thin at the free edge 3, as is necessary in prior reeds where the tip is shaved down to a knife-edge. By making the edge 3 of appreciable thickness, the reed is kept from losing its elasticity when becoming soaked with moisture in playing.

I claim as my invention:

A reed for the mouthpiece of musical wind instruments consisting of a rigid base portion and an elastic vibratory portion tapering from the base to a thin free edge, said vibratory tapering portion having a rounded upper surface provided with a series of spaced longitudinal grooves parallel with the edge of the reed and terminating close to the free edge of the reed, said longitudinal grooves being of gradually decreasing depth from said base portion to said free edge so that the material of the reed below said grooves is substantially uniform in thickness, the flat bottom of the reed being smooth and unbroken.

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