June 18, 1940. W. GUSSAK 2,204,987

DRUM

Filed Oct. 5, 1938

Fig. 3.

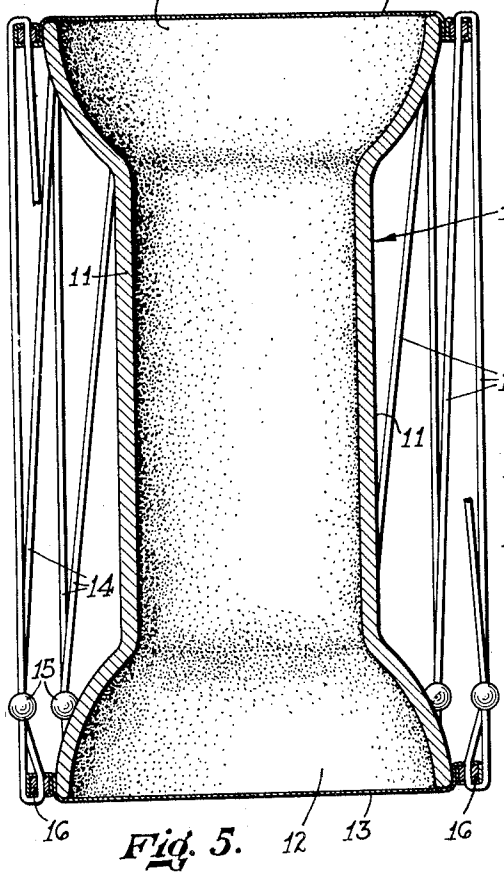


Fig. 1.

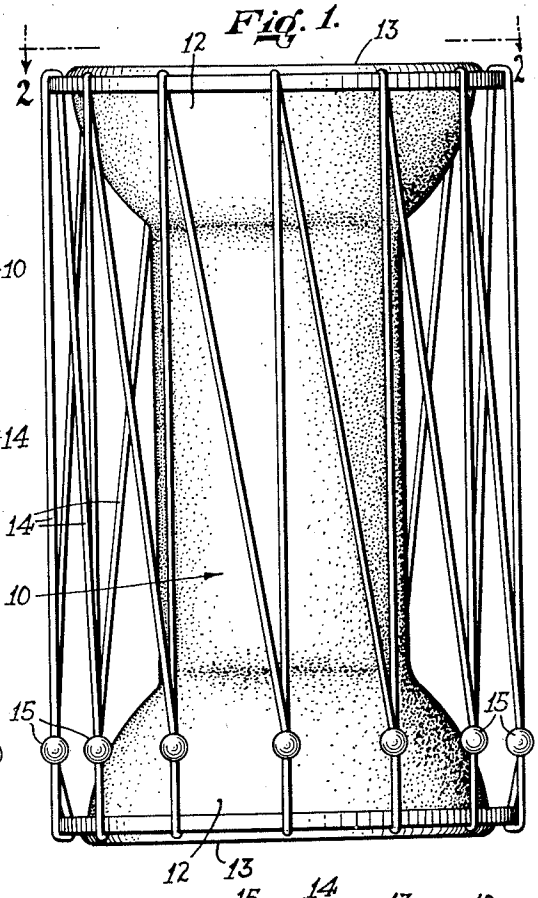


Fig. 5.



Fig. 6.

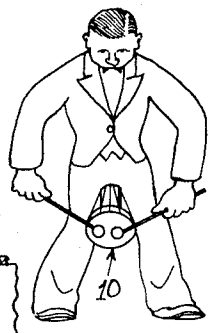


Fig. 4.

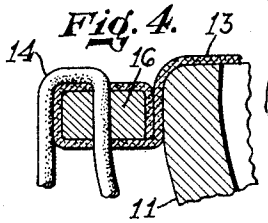
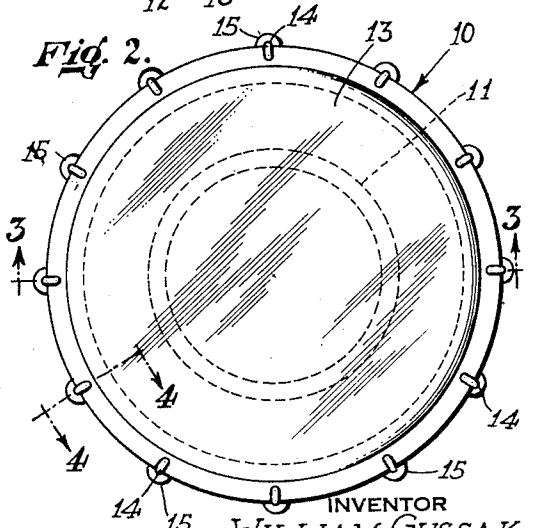


Fig. 2.



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DRUM

William Gussak, Jackson Heights, N. Y.

Application October 5, 1938, Serial No. 233,351

2 Claims. (Cl. 84—412)

This invention relates to musical instruments and the like and more particularly to instruments employing a vibratory head or heads, such as a drum, tom-tom or the like.

One of the objects of the invention is to provide a musical instrument of the type indicated, the tone pitch of which can be controlled at will while it is being played or beaten.

Another object of the invention is to provide an instrument of the type in which the tension of the vibratory head or heads can be controlled during the playing operation to produce a tone range which will include at least an entire chromatic scale.

Still a further object is to provide a drum, tom-tom or similar instrument, the tone pitch of which may be varied at will to produce a glissando note without the tonal qualities thereof being affected.

Still another object is to provide an instrument of the type indicated which is exceedingly simple in construction and cheap to manufacture and which may be used as a band or orchestral instrument as well as a toy.

Further objects and advantages inherent in the invention will become apparent as the specification proceeds and when taken in conjunction with the accompanying drawing, which illustrates a preferred embodiment, and in which:

Figure 1 is a front elevation of a drum or tom-tom according to the invention.

Figure 2 is a top plan view taken along the line 2—2 of Figure 1.

Figure 3 is a longitudinal section taken along the line 3—3 of Figure 2.

Figure 4 is an enlarged fragmentary sectional view taken along the line 4—4 of Figure 2.

Figure 5 is a view showing how the instrument may be played, and

Figure 6 is a view showing another method of operation.

Referring more specifically to the drawing, the reference character 10 indicates generally the sound box or drum shell, the walls 11 of which may be made of gourd, cardboard or the like.

The drum shell or sound box 10 terminates at either end in two open-ended cup-shaped or kettle-shaped bowls 12.

The drum heads 13 consisting of skin, vellum or similar material cover the open ends of the bowls 12 and the peripheral edges theerof are folded about the hoops or retaining rings 16.

The hoops 16 as well as the peripheral edge of the drum head are perforated at regular intervals to accommodate the tension cords 14 which interconnect the retaining rings and the two opposite drum heads. These tension cords surround the entire drum head.

It will be noted that the tension cords are free of contact with the sound box and because of the particular cup-shaped bowls and the reduced intermediate cylindrical portion, the tension cords can be tensioned simply by pressing or squeezing them towards said cylindrical portion. The tension of the tension cords will naturally also tension the drum heads which will result in a change of tone pitch.

The instrument may be played by beating the drum head with the fingers or with one or two drum sticks, as shown in Figures 5 and 6, respectively. The tone variation may be effected by placing the drum under the arm and applying different degrees of pressure to the tension cords 14, as shown in Figure 5, or it may be held between the legs, as shown in Figure 6. The latter position is used particularly for "rhumba" music.

In terms of broad inclusion, therefore, the invention contemplates a drum which can be played or operated in a manner similar to a conventional stringed instrument simply by tensioning the tension cords according to the note to be produced.

In the drum construction heretofore employed, the drum head is tensioned by means of bolts along the periphery. It will be understood that this arrangement does not permit of a selective tone variation. It has also been proposed to tension the drum heads by means of a foot pedal and spring arrangement, but it will be understood that such an arrangement does not give the player the "feel" of the instrument to enable him to produce the great variety of tones that can be produced by the instant invention.

Additional adjustment of the drum head 13 may be accomplished by means of the clamps 15 which are slideably adjusted on the tension cords. It will be understood that a displacement of the clamps in an upward direction, looking at Figure 1, will bring the two tension cords engaged by the clamps together to increase the tension.

It will be understood that various modifications may be made without departing from the spirit of the invention which contemplates a drum or similar instrument, the drum head of which can be tensioned at will by means of a compressible member by the player without the necessity of any particular mechanical mechanism.

What is claimed is:

1. A percussion instrument comprising an elongated cylindrical body having enlarged and outwardly curved cup-shaped open end portions,

a vibratory head covering said open end portions, means for maintaining said vibratory heads in a stretched condition over said open end portions, a plurality of tension cords interconnecting said opposing stretching means, said cords normally extending in a straight line between said vibratory heads and being free of contact with said cylindrical body whereby melodic intervals may be produced by varying the degree of pressure on said tension cords during the playing operation.

2. A percussion instrument comprising an elongated cylindrical body having enlarged and outwardly curved cup-shaped open end portions, a vibratory head covering said open end portions, hoop members for maintaining said vibratory heads in stretched condition over each of said open ends, a plurality of tension cords interconnecting said hoop members, said cords normally extending in a straight line between said vibratory heads and being free of contact with said cylindrical body whereby melodic intervals may be produced by varying the degree of pressure on said tension cords during the playing operation.

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