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MUSICAL INSTRUMENT WITH MAGNETIC TYPE TAPE REPRODUCER

FIELD OF THE INVENTION

This invention relates to musical instruments, and more particularly to a manually-operated musical instrument having a battery-operated, magnetic-type tape reproducer adapted to receive and play a cartridge-type magnetic tape recording.

The term "manually operated" musical instrument is used in this invention in its broad sense to exclude automatically operated instruments, and includes percussion, wind and string instruments that require the use of the lips, lungs, as well as the hands of the player.

The invention finds use as an educational device in the instruction in the playing of musical instruments, in which the player can learn to accompany the music or singing of a desired selection played in the magnetic type tape reproducer. As an example, the magnetic type tape reproducer could be combined with a guitar, and the particular selection reproduced could be one or more musical instruments or a singer or group of singers.

As an amusement device, the particular selection would reproduce the music produced by the instrument employed, and the player of the musical instrument would go through the motions of playing the instrument, but without actually playing, while the recording is being reproduced in the magnetic type tape reproducer. As an example, with a trumpet as the musical instrument, the player could go through the motions of blowing into the mouthpiece of the instrument while fingering the valve keys.

SUMMARY OF THE INVENTION

It is an object of this invention to provide a novel educational device to assist a player in learning to accompany other musical instruments or singing voices.

It is a further object to provide a novel amusement device in which music is produced in a manually-operated musical instrument while the player goes through the motions of producing the music without actually doing so.

With the above objects and other objects and advantages appearing in the following detailed description, the invention comprises a manually operable musical instrument of the percussion, wind or string type having a battery-operated magnetic-type tape reproducer adapted to receive and play a cartridge-type magnetic tape recording. An extension from the volume control of the reproducer to a point adjacent a controlling element of the musical instrument enables the player to remotely control the operation of the reproducer.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 illustrates a first embodiment of the invention in which a battery-operated magnetic-type tape reproducer is associated with a guitar;

FIG. 2 shows an end view of the embodiment of FIG. 1;

FIG. 3 illustrates a second embodiment of the invention in which a battery-operated magnetic-type tape reproducer is associated with a trumpet; and

FIG. 4 illustrates a third embodiment of the invention, being similar to FIG. 3, except that the battery operated magnetic type tape reproducer is enclosed within a housing attached to a trumpet.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the accompanying drawings, in which corresponding elements are designated by the same reference numerals throughout the several FIGS. and especially to FIGS. 1 and 2, there is illustrated a first embodiment of the invention in which the educational or amusement device comprises a guitar as the manually operated musical instrument which houses a battery operated magnetic type tape reproducer.

The educational or amusement device in its entirety is designated by the numeral 10, and comprises a manually-

operated stringed musical instrument or guitar 12 having a hollow housing 16 within which is mounted a battery-operated, magnetic-type, tape reproducer 14 of a type well known in the art, adapted to receive and to play a cartridge-type magnetic tape recording.

The hollow housing 16 has attached thereto a hollow neck 18 carrying thereon a plurality of frets 20, and on the outer end of the neck 18 there are mounted six operating members 22 for sound producing members, also termed tension keys. The housing 16 also includes a bridge 24 to which six strings 26 are attached at 28 in a manner well known in the art. The other end of each of the strings 26 is attached to one of the six tension keys 22 in order to vary the tension and thereby the frequency of vibration of each string in a manner well known in the art. The hollow housing 16 includes an open end 30 for receiving the battery-operated reproducer 14, the reproducer being inserted through the open end 30 and secured within the housing 16 in any desired manner. The reproducer 14 includes a pocket 32 for receiving a cartridge-type tape recording, and the housing 14 includes an opening or slot 34 aligned with the pocket 32 whereby a cartridge-type tape recording may be inserted through the slot 34 and into the pocket 32 in an obvious manner.

The reproducer 14 carries a hinged door 36 aligned with the open end 30 to permit access to a receptacle for receiving one or more dry cell batteries in the interior of the reproducer, for the purpose of removing and installing batteries and the like, and a latch 38 in the hinged door 36 retains the door in closed position.

The outer end of the neck 18 also carries an additional operating member 40 regulating the volume control of the reproducer 14, the member 40 being in the form of a key and disposed adjacent the tension keys 22. The key 40 operates the volume control of the reproducer through an extension 42 interconnecting the key 40 and volume control of the reproducer 14, the extension 42 passing through the hollow neck 18 and the hollow housing 16, as appearing in broken lines in FIG. 1.

As an educational device, the student can insert within the reproducer pocket 32 a recording of the musical composition that he wishes to accompany on the guitar, operate the member or key 40 to initiate the operation of the reproducer and to regulate the volume thereof, and, while the reproducer plays the desired selection, pluck on the strings 26 and finger the frets 20 to accompany the music of the selection.

As an amusement device, the player can insert within the reproducer pocket 32 a recording of a guitar selection, initiate operation thereof by means of the key 40 and, while the reproducer 12 is playing, go through the motions of plucking the strings 26 and fingering the frets 20 without actually playing the musical instrument 12.

FIG. 3 illustrates a second embodiment of the invention in which the educational or amusement device is designated by the numeral 50 and comprises a manually-operated musical instrument 51 in the form of a trumpet, and an attached battery operated, magnetic type, tape reproducer 58. The trumpet 51 includes the usual mouthpiece 52, horn 54, and three operating members 56 for controlling sound producing members or valves, also termed keys.

The reproducer 58 includes the usual pocket 60 for receiving and playing a magnetic tape recording, and also an operating member for the volume control in the form of a key 62, disposed adjacent the keys 56 which control the valves (not shown) of the trumpet in a well known manner.

The operation of this embodiment is similar to the operation of the guitar embodiment shown in FIGS. 1 and 2 and described in detail above.

A third embodiment of the invention, illustrated in FIG. 4, is similar to the embodiment of FIG. 3, in which the educational or amusement device is designated in its entirety by the reference numeral 70 and comprises a manually-operated musical instrument in the form of a trumpet 72 having a mouthpiece 74, a horn 76, and three operating members or

keys 78 for controlling sound producing members by controlling the valves in the trumpet in a manner well known in the art. A hollow housing 80 is attached to the trumpet in any desired manner, and a battery-operated, magnetic-type, tape reproducer 82 is disposed within said housing. The reproducer 82 includes the usual pocket 84 for receiving and playing a tape recording, and the housing 80 has an opening or slot 86 aligned with said pocket 84, permitting the insertion of a cartridge-type tape recording which passes through the slot 86 and into the pocket 84. An operating member for controlling volume of the reproducer, in the form of a key 88 and similar in appearance to the keys 78, extends through the housing 80 and is disposed adjacent to and in line with said keys 78.

This embodiment operates in the same manner as the first embodiment illustrated in FIGS. 1 and 2 and described in detail above.

While, in the above description, the embodiments include only two manually-operated musical instruments, viz., a guitar and a trumpet, it is evident that the invention can be applied to any form of manually-operated musical instrument, wind, string, or percussion type, and is not intended to be limited to the particular forms of musical instruments shown and described.

I claim:

1. An educational or amusement device, comprising: a

manually-operated, stringed, musical instrument having walls defining a hollow housing, and a neck attached to said housing; a magnetic-type tape reproducer within said hollow housing and secured to a wall thereof; said tape reproducer having an open ended pocket to receive a tape recording, and said housing having a slot aligned with the open end of said pocket; said reproducer including a volume control; said stringed instrument neck carrying a plurality of tension keys adjacent the outer end thereof, a connecting member between one of said keys and said reproducer volume control, and a plurality of strings connected between the other tension keys and said hollow housing.

2. An educational or amusement device as defined in claim 1, in which said reproducer is of the battery-operated type and includes a receptacle for receiving one or more dry cell batteries, an opening in said hollow housing to receive said reproducer, said receiver having a door aligned with said opening, whereby said door can be operated externally of the housing to facilitate the insertion and removal of batteries from the reproducer.

3. An educational or amusement device as defined in claim 1, in which said neck is of hollow construction, and in which said connecting member extends through said hollow neck and said hollow body.

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