Feb. 25, 1958 C. H. SHULTZ 2,824,478

BASS GUITAR

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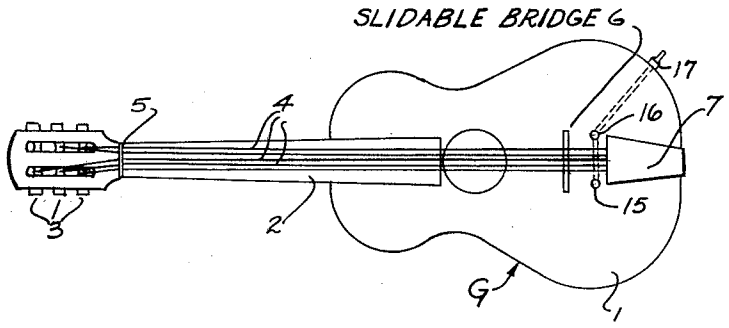


FIG 1

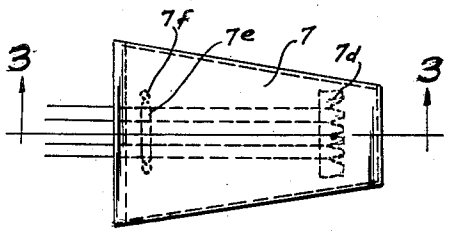


FIG 2

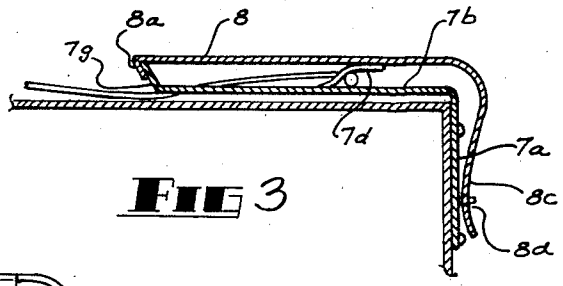


FIG 3

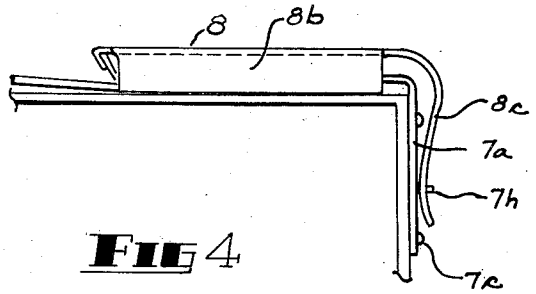


FIG 4

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FIG 5

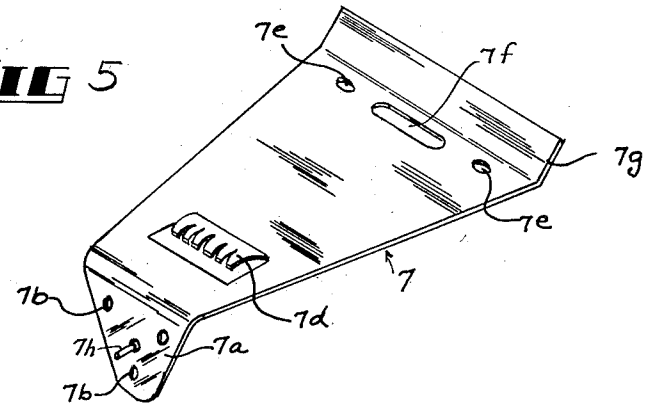
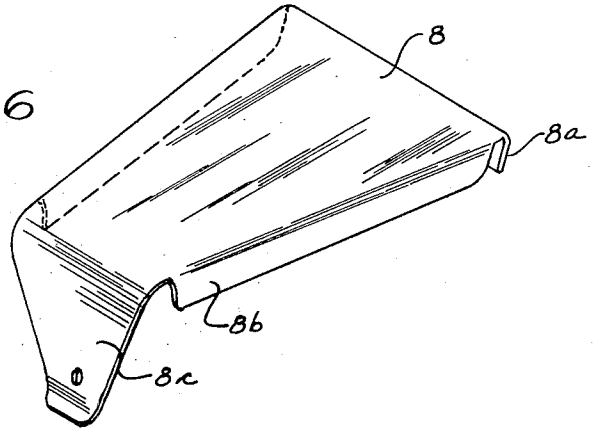


FIG 6



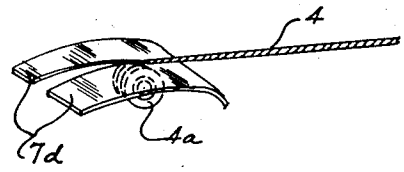


FIG 7

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BASS GUITAR

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2 Claims. (Cl. 84—267)

This invention relates generally to stringed musical instruments, and, more particularly, to a guitar. Briefly stated, the invention relates to a conversion assembly for converting a standard six-string guitar to what may be termed a bass guitar so that it will sound like a bass fiddle.

The standard bass fiddle has four strings and is a relatively huge instrument having an extremely long neck, therefore making it very cumbersome to transport and carry, as well as making the instrument very costly to manufacture. However, bass fiddles provide a very desirable bass accompaniment for orchestras and bands since they provide a bass tone an octave lower than the strings of a guitar. However, because of their large, unwieldly construction and expense they have not been used as much as desired. Furthermore since the neck is perhaps twice as long as that of a guitar, the spanning or fingering is somewhat different than that of a guitar so as to present some difficulty to the regular guitar player who wishes to play a bass fiddle.

An object of the present invention is to convert a conventional guitar in a manner so that it will sound like a bass fiddle, therefore providing an instrument which is exceedingly smaller than a bass fiddle and much less expensive to make, thereby overcoming the above disadvantages of bass fiddles.

A more specific object of the present invention is to provide, in a conventional standard six-string guitar, a novel tailpiece providing a greater span than conventional tailpieces and providing heavier, that is, electric bass strings, as distinguished from ordinary guitar strings, so as to give sounds which are an octave lower than those of conventional guitars, thus sounding like a bass fiddle, particularly when an electrical pickup is used in the body of the guitar.

A further and more specific object of the present invention is to provide a novel tailpiece providing longer span for the strings and to provide a novel cover embodying a positive spring clip action so as to be securely and yieldably held in engagement with the tailpiece and so as to provide not only a finished appearance to the tailpiece but reliable protection against interference with the sleeve or hands of the performer while playing.

Other objects and advantages of the present invention will become more apparent from a study of the following description taken with the accompanying drawings, wherein:

Figure 1 is a plan view of a standard guitar but which is equipped with non-conventional strings and with a novel tailpiece embodying the present invention for converting the guitar into what might be termed a bass guitar, that is, a guitar sounding like a bass fiddle;

Figure 2 is an enlarged fragmentary plan view of the tailpiece shown in Figure 1;

Figure 3 is a longitudinal cross-sectional view taken along line 3—3 of Figure 2;

Figure 4 is a side view of a tailpiece and cover assembly with the cover in place;

Figure 5 is a perspective view of the tailpiece with the cover removed;

Figure 6 is a perspective view of the tailpiece cover;

Figure 7 is a fragmentary perspective view, with a portion cut away, showing how the strings are anchored to the upstanding tongue or hook portions of the tailpiece.

Referring more particularly to Figure 1 of the drawing, G denotes a standard or conventional guitar (which normally has six strings) comprising a hollow body **1** having attached to the upper portion thereof a neck **2**, at the end of which are disposed a plurality of tuning heads **3** in the nature of thumb nuts onto which is wrapped one end of the strings **4**. Strings **4** are guided and supported on a notched extension nut **5** and on a bridge **6** of the slidable type. The other ends of the strings are anchored to a tailpiece **7**. It will be noted that only four strings are used, that is, the same number as in a bass fiddle, however if desired, an additional string may be added to make a total of five as distinguished from the conventional six-string guitar. Strings **4** are not the conventional guitar strings but are electric bass strings, that it to say, heavier strings that will play an octave lower than conventional guitar strings. It is necessary not only to use heavier strings, but strings having a longer span than in conventional guitars in order to give a bass fiddle sound to the instrument.

The tailpiece **7** is so constructed as to provide a longer length of suspension for the strings as well as a reliable guide and anchor for the strings, and is provided with a reliable type of cover.

More specifically, the tailpiece **7** is in the form of a single piece of sheet metal such as steel having a downwardly bent portion *7a*, substantially at right angles to the main portion and provided with a plurality of holes *7b* through which screws *7c* may be screwed onto the base portion of the guitar. A plurality of tongues or hooks *7d* are struck out in an upward direction from the lower portion of the sheet metal tailpiece so as to provide suitable anchors for the lower ends of the strings. By disposing the tongues at the lower portion of the tailpiece instead of at the upper portion as is conventionally done, the span of the strings is increased by at least 4 inches, which is highly important for the purposes of the present invention. As shown more clearly in Figure 7, at the lower end of each string is integrally attached a spool *4a* which engages underneath the tongues or hooks *7d* and between the respective tongues so as to anchor the ends of the strings to slot portions intermediate the tongues or hooks *7d*.

The lower portions of the strings are passed through guide holes *7e* and a central guide slot *7f* before passing over the bridge **6**. The guide slot *7f* accommodates two of the strings, in the case of a four stringed instrument. The upper part of the tailpiece is provided with an upwardly bent portion *7g* which adds strength and rigidity to the unit as well as providing an edge portion onto which the upper part of the tailpiece cover **8** may be secured.

The tailpiece cover **8** has an upper hooked end portion *8a* adapted to be hooked over the top edge of the tailpiece and has downwardly extending side flanges *8b* adapted to be held against the side edges of the tailpiece, also it has a downwardly projecting lower end portion *8c* provided with a hole *8d* through which there may be projected a pin *7h* extending from the tailpiece portion *7a*. The cover **8** is preferably made of stainless spring steel to provide strength and springiness. It will be noted from Figure 3 that the tailpiece cover **8** when in place will have an intermediate portion resting directly on the tongues or hooks *7d* so as to provide a resilient support which will considerably aid in holding the tailpiece cover

securely in place in a yieldable manner. If the tailpiece cover were spaced from the hooks *7d* instead of engaging them as shown there would be a great tendency of the parts to rattle and to become loosened.

Although not shown, it will be understood that the bass guitar of the present invention may be equipped with conventional or standard electric pickups which may either be built in or attached, both types being well known in the art. A typical pick up, as shown in Gillenwater Patent No. 2,500,172 comprises an electric tone control **15** and an electric volume control **16** connected by wiring (shown in dotted lines) to plug **17** which is connected to an electrical sound wave amplifier (not shown).

The guitar embodying the present invention, which may be termed a bass guitar, makes it possible for the ordinary guitar player to play an instrument sounding exactly like a bass fiddle, particularly if provided with an electric pickup, without the necessity of playing the instrument any differently than playing an ordinary guitar. That is, the finger spanning on the neck portion is exactly the same as in a guitar. Thus, a guitar player may easily and quickly convert his conventional guitar into a base guitar merely by substituting heavier strings and by substituting the tailpiece embodying the present invention for the conventional tailpiece. Also since only four or five strings are used, instead of six, he would preferably, also substitute a slidable type of bridge of any well known construction, having four notches therein, in which case two of the center strings will be guided by the guide slot *7f* of the tailpiece. Furthermore the tailpiece is of exceedingly strong construction so as to withstand the great stresses and forces attendant suspension of heavier strings, that is, electric bass strings which play notes an octave lower than ordinary guitar strings. Moreover by considerably reducing the size of the instrument needed to play sounds simulating that of a bass fiddle, the overall cost of the present instrument is made less than half the cost of an electric bass or of a bass fiddle, and yet the quality and tone are exactly the same.

Thus it will be seen that I have provided a highly efficient guitar instrument which may be referred to as a bass guitar, since it provides sounds which are an octave lower than those of the conventional guitar, and which embodies a novel tailpiece and cover assembly, which tailpiece provides a greater than normal span for the strings and stronger anchorage than conventional tailpieces so as to withstand the enormous stresses of heavier strings under tension; furthermore I have provided a very simple, economical way of converting a standard six string guitar to a four or five string bass guitar to make it sound like a bass fiddle merely by substituting different strings and a different tailpiece than those conventionally used in a standard six string guitar.

While I have illustrated and described one embodiment of my invention, it will be understood that this is by way of illustration only, and that various changes and modifications may be made within the contemplation of my invention and within the scope of the following claims.

I claim:

1. A guitar of the standard six string type, having conventional tuning heads, neck and body, said guitar being provided with only four electric bass strings, namely strings which are sufficiently heavier than ordinary guitar strings so as to play an octave lower, said guitar being provided with a tailpiece having up-struck tongues extending from the lower portion thereof, a central guide hole in the upper portion thereof for guiding two of said strings and a pair of side guide holes for guiding the remaining two, and an upwardly projecting top edge of greater than 90° with respect to said tailpiece as well as a downwardly projecting lower portion disposed at 90° relative thereto and including a pin, a tailpiece cover of spring material having a hooked top portion for engaging said top edge of the tailpiece, and having a downwardly extending lower portion having a hole engageable with said pin for yieldably engaging said downwardly projecting portion of the tailpiece, the central portion of said tailpiece cover resting directly on top of said tongues when said cover is clamped into engagement with said tailpiece.

2. In combination with a guitar having a standard body, neck, fingerboard, nut and tuning heads, said guitar having a total of four electric bass strings corresponding to the four lower strings of a standard guitar which are heavier than ordinary guitar strings to an extent so as to play an octave lower, a tail piece having anchoring points at the lower end thereof for the lower ends of said strings so as to increase the distance thereof from said nut by several inches as compared to the distance between the anchoring points and nut in a standard guitar, a slidable type of bridge for adjustabtly varying the distance between the nut and bridge, and an electric pickup mounted on said body, whereby sounds simulating those of a bass fiddle are produced when said four strings are played in the manner of a bass fiddle.

References Cited in the file of this patent

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