

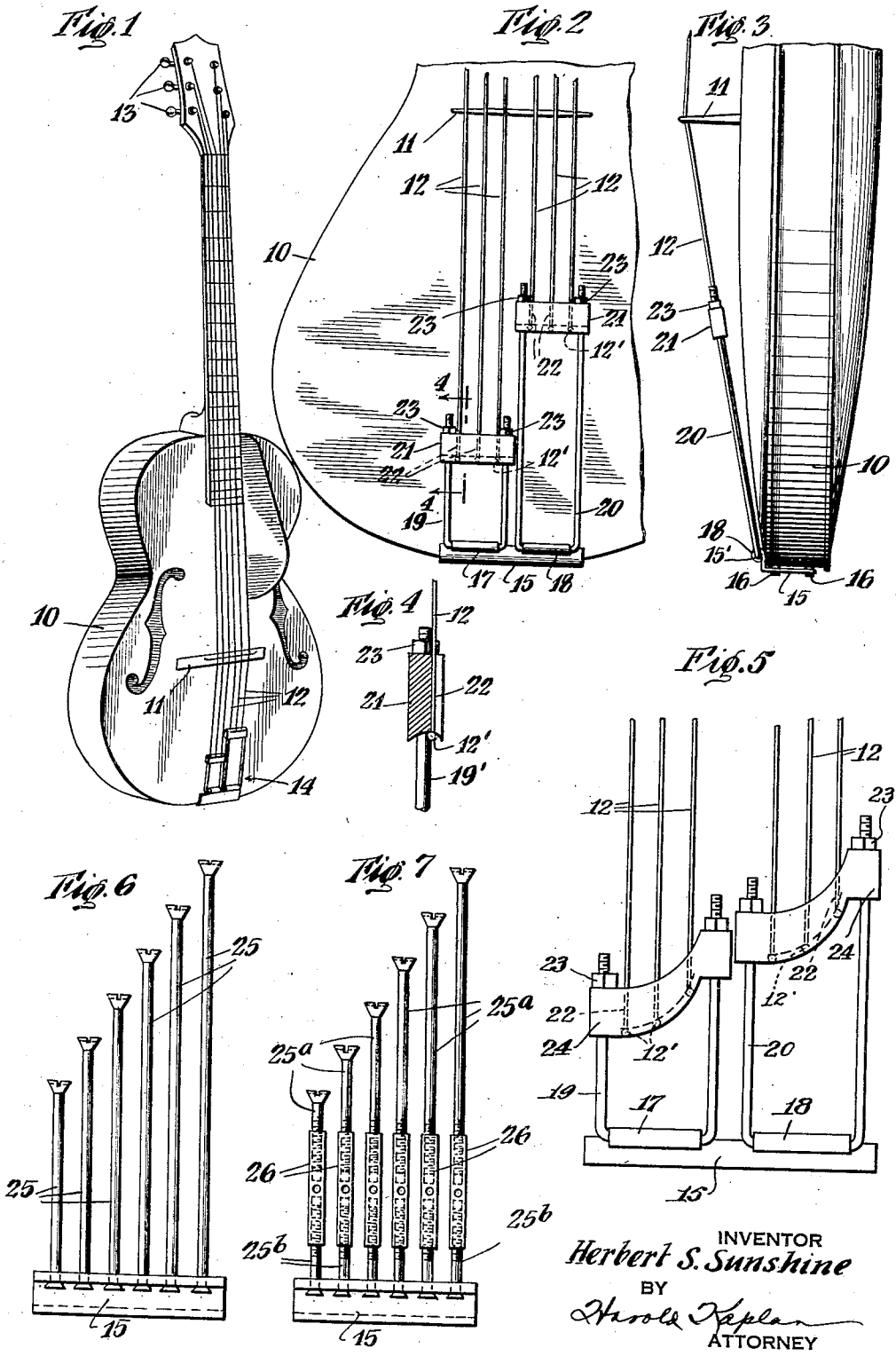
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TAILPIECE FOR STRINGED MUSICAL INSTRUMENTS

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TAILPIECE FOR STRINGED MUSICAL INSTRUMENTS

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The present invention relates to tailpieces for stringed musical instruments such as the guitar, banjo, mandolin, violin, cello and the like.

In stringed musical instruments, such as are presently in use, the string portions between the bridge and the tailpiece are substantially of uniform length. In instruments so constructed it is often difficult to obtain the proper tone quality. This condition is due to the fact that the fundamental and harmonic tone content of the strings is influenced by the vibratory frequencies of the string portions rearwardly of the bridge. I have found that by varying the lengths of the string portions rearwardly of the bridge so as to increase the lengths on the bass side of the instrument and decrease the lengths on the treble side, the vibratory frequencies of said string portions are so varied that the fundamental tone content of the strings is thereby increased and the harmonic tone content is thereby decreased, thus producing tones of greater clarity and improved quality.

I have also found that by providing the tailpiece of a stringed musical instrument with separate elements for engaging the ends of the strings, the vibration of each string is prevented from being transmitted to the other strings through the tailpiece, and there is thus eliminated the discordant sounds that are common in stringed musical instruments.

It is therefore one of the objects of the present invention to provide an improved tailpiece for a stringed musical instrument which will provide means for varying the lengths of the string portions rearwardly of the bridge. Another object of the present invention is to provide an improved tailpiece for stringed musical instruments which is constructed with separate elements for engaging the ends of the strings. A further object of the invention is to provide a tailpiece of the character described and for the aforesaid purposes, which is simple in structure, economical to manufacture and efficient in use. Other objects and advantages of the present invention will be apparent to those skilled in the art to which the present invention relates.

With the above and other objects in view, the present invention consists of the novel features of construction and arrangement of elements hereinafter set forth and illustrated in the accompanying drawing, wherein I have shown the preferred embodiments of my invention.

In the accompanying drawing, which forms an integral part of this disclosure,

Fig. 1 is a perspective view of a guitar showing

the instrument equipped with a tailpiece constructed in accordance with the present invention;

Fig. 2 is a partial top plan view on an enlarged scale of the instrument embodying the said tailpiece;

Fig. 3 is a side elevational view of the instrument shown in Fig. 2;

Fig. 4 is a detail sectional view of the said tailpiece on the line 4—4 of Fig. 2;

Fig. 5 is a top plan view of a modified form of tailpiece constructed in accordance with the present invention;

Fig. 6 is a top plan view of another modified form of tailpiece constructed in accordance with the present invention; and

Fig. 7 is a top plan view of a modified form of the tailpiece shown in Fig. 6.

Referring now to the drawing, wherein like reference characters indicate corresponding parts throughout the several views, 10 represents the body of a stringed musical instrument, such as a guitar, 11 represents the bridge which rests upon the belly of the instrument, and 12 represents the strings which are tensioned over the bridge and are attached at one end to the pegs 13 and at the other end to the tailpiece, which in Fig. 1 is designated in general by numeral 14. The preferred form of my improved tailpiece is illustrated in Figs. 1, 2 and 3 and comprises a bracket member 15 which is preferably secured to the rear end portion of the instrument by suitable means such as the studs 16. The inturned portion 15' of the bracket member is preferably provided with overturned lips 17 and 18 which are spaced apart and hingedly engage the U-shaped members 19 and 20 respectively. Slidably mounted over the end portions of each of the U-shaped members 19 and 20 is a cross-bar 21 the underside of which is preferably provided with longitudinal grooves 22 for receiving the strings 12 therein, which are retained by means of the knotted ends 12'. The end portions of each of the U-shaped members 19 and 20 are preferably threaded and have applied thereto adjusting nuts 23 for adjustment of the cross-bar 21 so as to obtain the proper lengths of the string portions rearwardly of the bridge. The sides of the U-shaped member 19 are preferably of lesser length than the sides of the U-shaped members 20 and the two cross-bars 21 are consequently positioned at unequal distances from the bridge 11. There is thus provided a differential in length rearwardly of the bridge between the bass strings which are attached to one of the

cross-bars and the treble strings which are attached to the other cross-bar.

In the modified form of my improved tailpiece shown in Fig. 5 there are provided cross-bars 24 each of which is diagonally disposed relative to the sides of the U-shaped members 19 and 20 respectively of the tailpiece. The cross-bars 24 will accordingly be disposed at an angle in relation to the bridge of the instrument and there is thus provided a differential in length rearwardly of the bridge, between the strings attached to each cross-bar of the tailpiece. This form of my invention may be employed to provide for a single U-shaped member on the tailpiece, to the cross-bar of which may be attached all of the strings of the instrument.

In the modified form of my invention illustrated in Fig. 6 there is provided a tailpiece which comprises the bracket member 15 to which are hingedly connected the longitudinally extending members 25. The members 25 are preferably constructed in progressively, increasing lengths from the bass side to the treble side of the instrument and the free end of each member is adapted to engage the end of one of the strings. It will thus be obvious that in this manner there is also provided a variation in the lengths of the string portions between the bridge and the tailpiece.

The members 25 may be unitary in construction and fixed in length as shown in Fig. 6 or they may be constructed of parts to provide for extension or contraction of the members. In Fig. 7 I have shown the members 25 of Fig. 6 constructed of parts 25a and 25b which are joined together by a coupling 26. The coupling 26 is preferably threaded internally and the inner portions of the parts 25a and 25b are adapted to screw into the coupling. The members are thus rendered adjustable as to length so as to provide for the required lengths of the string portions rearwardly of the bridge.

In the embodiments of my invention hereinabove disclosed and illustrated in the drawing the members for engaging the strings of the instrument are shown as connected to a common bracket member 15. However, in accordance with the spirit of my invention, I may also provide for a plurality of spaced bracket members each carrying one or a plurality of members for engaging the strings.

I have thus described and illustrated my invention in various embodiments thereof. I desire it to be understood, however, that the present invention is not limited to the specific embodiments herein described and illustrated in the drawing for I am aware that variations may be resorted to, which will nevertheless fall within the scope and spirit of the present invention as defined in the appended claims.

Having described and illustrated my invention, what I claim as new and desire to secure by Letters Patent is:

1. A tailpiece for stringed musical instruments comprising a base-plate, a plurality of spaced longitudinally extending members of unequal lengths carried thereby, and means on each of said members for attachment of a plurality of strings.

2. In a stringed musical instrument having the usual complement of bass and treble strings, of a tailpiece comprising a base-plate, a pair of spaced longitudinally extending members of unequal lengths carried thereby, means on one of said members for attachment of the bass strings and means on the other member for attachment of the treble strings.

3. A tailpiece for stringed musical instruments comprising a base-plate, a plurality of spaced longitudinally extending members carried thereby, cross-bars each engaging two adjacent members and having string attaching means thereon, and means for adjusting the cross-bars.

4. A tailpiece for stringed musical instruments comprising a U-shaped frame, a cross-bar engaging the legs of the frame, and having string attaching means thereon, means for adjusting the cross-bar on the frame, and means for attachment of the frame to the instrument.

5. A tailpiece for stringed musical instruments comprising a base-plate, a plurality of spaced longitudinally extending U-shaped frames of unequal lengths hingedly connected thereto, adjustable cross-bars engaging the legs of each of said U-shaped frames, and means on said cross-bars for attachment of a plurality of strings.

6. In a stringed musical instrument having the usual complement of bass and treble strings, of a tailpiece comprising a base-plate, a pair of spaced longitudinally extending U-shaped frames of unequal lengths hingedly connected thereto, adjustable cross-bars engaging the legs of each of said U-shaped frames, one of said cross-bars being adapted for attachment of the bass strings and the other cross-bar being adapted for attachment of the treble strings.

7. A tailpiece for stringed musical instruments comprising a U-shaped frame, a cross-bar engaging the legs of the frame and being diagonally disposed thereto, string attaching means on the cross-bar, means for adjusting the cross-bar on the frame, and means for attachment of the frame to the instrument.

8. A tailpiece for stringed musical instruments comprising a base plate, a plurality of spaced longitudinally extending U-shaped frames connected thereto, cross-bars respectively engaging the legs of each frame and being diagonally disposed thereto, string attaching means on the cross-bars, and means for adjusting the cross-bars on the frame.

9. In a stringed musical instrument, a plurality of parallel spaced tailpieces each comprising a base-plate carrying a longitudinally extending member, the said members being of unequal lengths, and means on said members for attachment of the strings.

10. In a stringed musical instrument, a plurality of parallel spaced tailpieces each comprising a base-plate carrying a longitudinally extending U-shaped frame, the said U-shaped frames being unequal in lengths, adjustable cross-bars engaging the legs of each of said U-shaped frames, and means on each of said cross-bars for attachment of a plurality of strings.

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