Oct. 25, 1932. W. W. WEHMANN 1,884,434

TAILPIECE FOR STRINGED MUSICAL INSTRUMENTS

Filed Feb. 27, 1931

Fig. 1.

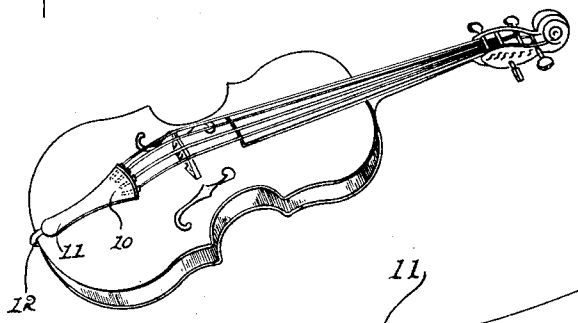


Fig. 2.

Fig. 3.

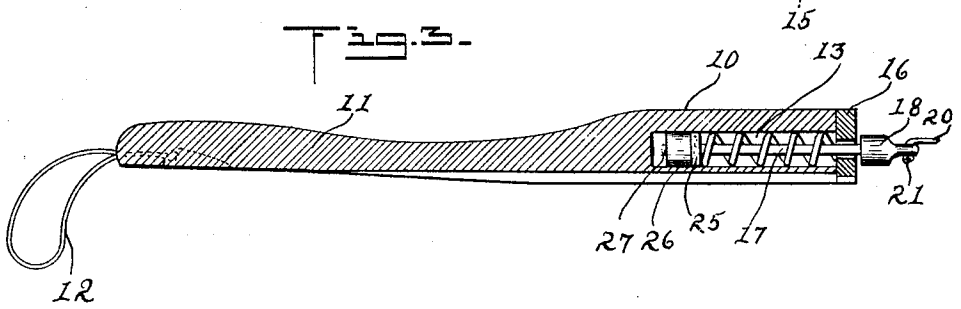


Fig. 4.

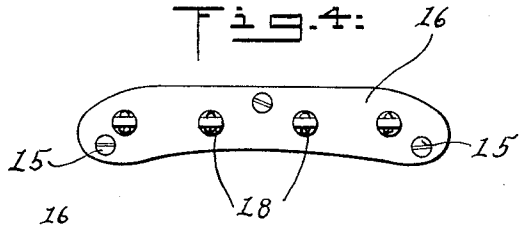
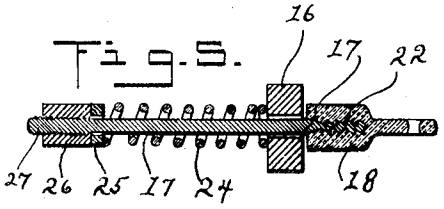


Fig. 5.



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UNITED STATES PATENT OFFICE

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TAILPIECE FOR STRINGED MUSICAL INSTRUMENTS

Application filed February 27, 1931. Serial No. 518,353.

This invention relates to new and useful improvements in musical instruments, and more particularly it pertains to a new and improved tail piece for stringed musical instruments.

It is one of the objects of the present invention to provide novel means for yieldingly attaching one end of the strings of a musical instrument to the body of the instrument.

A further object of the invention resides in the provision of a novel construction whereby all mechanical vibrations will be absorbed, thus producing musical notes of a high tonal quality.

It is a still further object of the invention, so to construct the tail piece that the tension of the yielding connection of the several strings may be adjusted to suit various sizes of strings.

It is a still further object of the invention so to construct the device, that the several string attaching devices may be renewed or replaced as occasion may require.

Other objects of the invention relate to certain novel and improved constructions and combinations of parts hereinafter described and particularly pointed out in the claims, the advantages of which will be readily understood and appreciated by those skilled in the art.

The invention will be clearly understood from the accompanying drawing illustrating the invention in its preferred form, and the following detailed description of the constructions therein shown.

In the drawing;

Figure 1 is a perspective view of a violin showing the instrument equipped with a tail piece constructed in accordance with the present invention,

Figure 2 is a top plan view on an enlarged scale of a tail piece constructed in accordance with the present invention,

Figure 3 is a longitudinal sectional view thereof,

Figure 4 is a view in end elevation illustrating the forward end of the tail piece, and;

Figure 5 is a detail longitudinal sectional view of one of the string attaching means.

A tail piece constructed in accordance with the present invention comprises a main body portion 10 having a rearwardly extending reduced portion 11 provided with suitable means for attachment to the instrument the means being herein illustrated as a gut string or the like 12. The main body portion 10 is provided with a plurality of recesses 13 which extend longitudinally of the body portion from the forward end 14 thereof. Secured by means of screws or the like 15, there is a plate 16 and as best illustrated in Figures 2 and 3, this plate 16 closes the forward ends of the recesses 13.

The means for attaching the strings of the instrument to the tail piece consists of a plunger or the like 17 of which there is one mounted in each of the recesses 13. The plungers 17 each carry a head or the like 18 which is provided with an opening 19 for the reception of the string 20 the string being mounted as at 21 to form the means of attachment of the string to the head 18. The head 18 is preferably formed of some sound deadening material such as hard rubber, or other suitable composition and is, as illustrated in Figure 5 molded directly on the forward end of the plunger 17 the latter being provided with ribs or ridges such as 22 to form an anchor for the head 18.

Surrounding each plunger 17, there is a coil spring 24 and the rear end of this coil spring 24 engages a washer 25 which is formed of soft material such as rubber, felt or the like, and said washer 25 is backed up by a nut 26 which has threaded engagement with the screw threaded end 27 of the plunger 17.

The spring 24 in each instance is adapted to be placed under compression between the closing plate 16 and the nut 26 of its respective plunger and by this means the tension to which the springs are set may be varied at will merely by an adjustment of the nut 26.

Thus it will be apparent that as the springs are placed under tension in the tuning thereof, the springs 24 of the several strings will likewise be placed under tension.

By reason of the fact that the head 18, the tail piece 10, and the closing plate 16, are

made of hard rubber, and that no metallic parts are used in the construction of the tail piece except the plunger and the spring and the spring compressing nut, metallic vibrations are practically eliminated since the spring abuts at one end the closing plate 16 and at its other end the soft washer 25.

From the foregoing it will be apparent that the present invention provides a tail piece for stringed musical instruments in which the tonal quality of the instrument is greatly enhanced and while the invention has been herein illustrated in a preferred form, it is to be understood that the invention is not to be limited to the specific construction shown, and that it may be practiced in other forms without departing from the spirit thereof.

Having thus described the invention, what is claimed as new and what it is desired to secure by United States Letters-Patent, is:

1. A tail piece for stringed musical instruments comprising a main body portion having a plurality of recesses, a plunger slidably mounted in each of said recesses, a coil spring surrounding each plunger, and resisting the reciprocating movement of its respective plunger, and means for attachment of a string to each plunger.

2. A tail piece for stringed musical instruments comprising a main body portion having a plurality of recesses, a plunger mounted for reciprocal movement in each recess, and a coil spring surrounding each plunger, each coil spring being compressible between one end of its respective plunger and an end wall of its respective recess upon movement of the plunger in one direction in the recess.

3. A tail piece for stringed musical instruments comprising a main body portion having a plurality of recesses therein, an end plate for closing said recesses, a plunger mounted in each of said recesses and each movable through said end plate, and a coil spring within each recess and abutting said plunger, and one end wall of its respective recess adapted to be placed under tension by movement of each plunger through the end plate.

4. A tail piece for stringed musical instruments comprising a main body portion having a plurality of longitudinally extending recesses, a plate for closing one end of each of said recesses, a headed plunger slidably mounted in each of said recesses, a coil spring surrounding each of said plungers and compressible between the head of the plunger and said plate and string attaching means carried by each of said plungers.

5. A tail piece for stringed musical instruments comprising a main body portion having a plurality of recesses extending longitudinally thereof from the forward end of the tail piece, a plate for closing the open ends of said recesses, a plunger slidably mounted in each of said recesses and having one end extended through said plate, an adjustable head upon the inner end of each plunger, a coil spring interposed between the head of each plunger and the closing plate, and string attaching means upon the projecting end of each plunger.

6. A tail piece for stringed instruments comprising a main body portion having a plurality of recesses extending longitudinally thereof from the forward end of the tail piece, a plate for closing the open ends of said recesses, a plunger mounted in each of said recesses and having one end extended through said plate, an adjustable head upon the inner end of each plunger, a coil spring interposed between the head of each plunger and the closing plate, a resilient vibration dampening washer interposed between the head of each plunger and the inner end of its respective coil spring, and string attaching means upon the projecting end of each plunger.

In testimony whereof I affix my signature.

WALTER W. WEHMANN.