Oct. 13, 1931. V. S. TRUETT ET AL 1,826,969

ATTACHMENT FOR STRINGED MUSICAL INSTRUMENTS

Filed March 12, 1927

Fig. 1

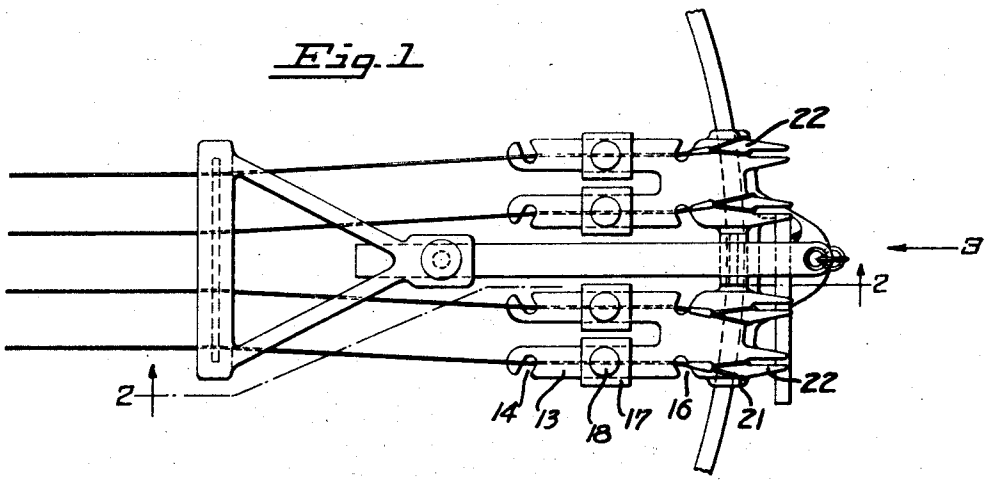


Fig. 2

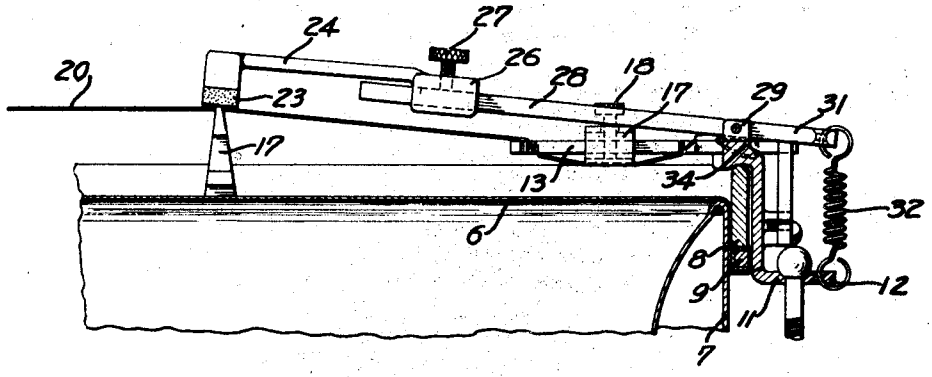
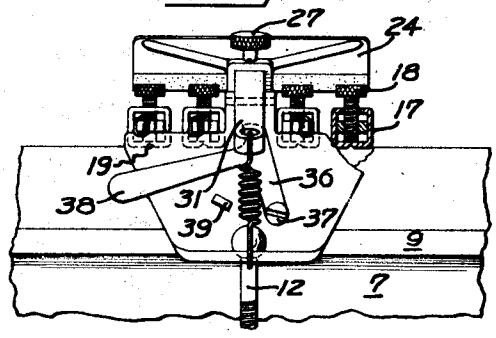


Fig. 3



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UNITED STATES PATENT OFFICE

VELMA S. TRUETT AND HARRY H. GEORGE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO TRUJO BANJO CO. LTD., OF SAN FRANCISCO, CALIFORNIA, A CORPORATION

ATTACHMENT FOR STRINGED MUSICAL INSTRUMENTS

Application filed March 12, 1927. Serial No. 174,763.

Our invention relates to stringed musical instruments, and has for an object the provision of a mute adapted to be secured to the instrument with which it is intended to be used so as to be instantly available.

Another object of the invention is the provision of a pivotal mounting for a mute on a stringed instrument by which the mute is normally resiliently held above the bridge, and which permits the mute to be readily positioned upon the bridge to soften the tone of the instrument by a single, rapid movement.

Another object of the invention is the provision of a catch whereby the mute can be locked in position upon the bridge until released.

Another object is the provision of means for readily removing the mute from the instrument.

A further object of the invention is the provision of individual string tuning means which permit a much nicer degree of accuracy of tuning than previously produced devices and which are more readily accessible.

The invention possesses other objects and valuable features, some of which will be set forth in the following description of our invention which is illustrated in the drawings forming part of the specification. It is to be understood that we do not limit ourselves to the showing made by the said description and drawings, as we may adopt varying forms of our invention within the scope of the claims.

Referring to the drawings:

Figure 1 is a plan view of the attachment of our invention and parts of a banjo upon which it is mounted.

Figure 2 is a longitudinal compound sectional view of the parts shown in Figure 1. The planes of section are indicated by the line 2—2 of Figure 1.

Figure 3 is an end elevation, the direction of view being indicated by the arrow 3 of Figure 1.

Broadly, the invention comprises an attachment for musical instruments which provides a mute positioned over the strings and bridge of a stringed musical instrument by means of a demountable arm pivoted to the device. Normally the mute is resiliently held above the bridge, but when the player desires to soften the tone of his instrument, the mute may be brought into engagement with the bridge by simply pressing it down. This may be accomplished almost instantaneously either by the wrist of the user bearing upon mute supporting means or by the use of a latch also mounted on the instrument. This latch is adapted to lock the mute in its position of engagement with the bridge until released. In the case of instruments played by picking the strings, such as banjos and mandolins, the player's wrist is positioned directly over the arm supporting the mute. With this class of instrument, then, in order to bring the mute into engagement with the bridge, the player has only to lower his wrist a little to press the mute into the desired position. The mute supporting means is adapted to be mounted in combination with an auxiliary individual tuning means which enables the player to secure a more accurate tuning of his instrument than can be obtained by the use of the customary tuning pegs or keys. This means of tuning is mounted upon the instrument so as to be readily accessible from the upper side, with the result that each string can be quickly and easily tuned.

The preferred embodiment of our invention is shown as applied to a banjo comprising a head 6 stretched over the upper edge of a shell or rim 7 by a top-hoop 8 which forces the flesh-hoop 9 down over the outside of the shell. A tail piece 11 having an outwardly extending flange 12 is suitably retained in position on the instrument and provides a mounting for the tuning and muting device of our invention. Mounted on the tail piece 11 are a plurality of arms 13, each provided with a slot 14 adjacent the outer end and an alined slot 16 adjacent the inner end, and disposed on each arm between the slots 14 and 16 is a sleeve 17. A thumb-screw 18 passes thru the top side of each sleeve, and is threaded thru the arm to bear upon the lower side of the sleeve. Extending longitudinally across the bottom of the sleeve is a groove 19 thru which the string 20 passes

after being threaded downwards thru the groove 14 and upwards thru the groove 16. The loop 21 at the end of the string is suitably retained by the anchor 22 provided at the end of the arm. When it is desired to raise the tone of a string, the thumb screw 18 may be screwed downwards to increase the distance between the bottom of the sleeve and the arm, thus imposing greater tension on the string to raise its pitch. The turning of the thumb screw in the opposite direction will of course decrease the distance between the bottom of the sleeve and the arm, with the result that the pitch of the string will be lowered.

The mute portion of our invention may be used to advantage on any stringed instrument but it is especially applicable to banjos because of the fact that heretofore the only mute that could be used to soften a banjo's tones was a rather cumbersome device applied inside the shell 7 from below. This mute was not only inconvenient to secure to the instrument, but after it was attached, it projected from the open bottom of the shell so as to make the instrument awkward to hold; and in order to use the device the player was forced to assume such an awkward posture that it interfered with his playing.

The mute of our invention comprises a block 23 of suitable non-vibratile material, preferably cork, mounted on a bracket 24. The bracket is provided with a sleeve 26, preferably formed integral therewith, and a locking screw 27 to removably secure it to an arm 28, and also to permit the proper positioning of the mute over the bridge. The arm is pivotally mounted on the tail-piece 11 between the upwardly extending lugs 29. This mounting of the mute positions it above the bridge and permits its movement to optionally bear upon or release the bridge; and it also permits the mute to be entirely removed from the banjo if desired. When the block of non-vibratile material is pressed down upon the bridge, it does not dampen the full vibration of the strings, because the notches in the edge of the bridge are so deep that the mute does not touch the strings. The mute dampens the vibrations of the bridge which is thus prevented from transmitting as much vibration to the head as it does normally, with the result that the tones of the instrument are softened and rendered more mellow.

Means are provided to normally retain the mute clear of the bridge to permit the banjo to develop its full natural tone. The end 31 of the arm 28 extends beyond the pivotal mounting, and has a spring 32 interposed between it and the flange 12 of the tail-piece. The spring urges the end 31 downwards, causing the arm to swing on its pivotal mounting and raise the mute from the bridge. This pivotal motion of the arm and mute is limited, however, by the shoulder 34 on the tail-piece, which is so spaced from the arm that the mute is normally retained at a suitable distance above the bridge.

In playing the banjo, the player's wrist is substantially motionless just above the arm 28. When he desires to soften the tones of his instrument, a slight pressure of the wrist upon the arm 28 causes the mute to bear upon the bridge, a motion requiring only a fraction of a second. This new position of the wrist does not hamper the picking of the strings and can be maintained as long as desired. Means are further provided, however, for locking the mute on the bridge if the player wishes. A catch 36 is pivoted to the tail-piece by a screw 37, and is provided with a handle 38 by which it may be rotated to force the end 31 of the arm upwards so that the mute is brought into contact with the bridge. The friction between the catch and the arm will retain these parts in the locked position until the catch is released. A stop 39 is provided on the tail-piece to restrict the distance that the catch can move when released.

We claim:

1. In a musical instrument comprising strings stretched from a tail-piece across a bridge, lugs on said tail-piece, an arm pivotally mounted intermediate its ends on said lugs, a mute secured to the end of said arm adjacent said bridge, a spring interposed between the other end of the arm and the tail-piece to normally hold the mute clear of the bridge, and a latch mounted on the tail-piece for locking the mute in position upon the bridge.

2. In a musical instrument having strings stretched across a bridge, a tail-piece mounted on said instrument, anchorages for the strings on said tail-piece, arms on said tail-piece provided with tensioning means for tuning the strings, and a mute pivotally mounted on said arms and tail-piece and adapted to contact with the bridge.

3. An attachment for a musical instrument having strings stretched over a bridge, comprising a tailpiece secured to the head of the instrument, an arm pivotally mounted intermediate its ends on said tailpiece and overhanging the head of the instrument, a mute mounted on said arm and adapted to contact with the bridge, and a tension spring connecting the overhanging end of the arm and the tailpiece for raising the mute from the bridge.

4. An attachment for a musical instrument having strings stretched over a bridge, comprising a tailpiece secured to the head of the instrument, an arm pivotally mounted intermediate its ends on said tailpiece and overhanging the head of the instrument, a mute mounted on said arm and adapted to contact with the bridge, a tension spring connecting the overhanging end of the arm and the tailpiece for raising the mute from the bridge,

and a stop on the tailpiece for limiting the motion of the arm.

5. An attachment for a musical instrument having strings stretched over a bridge, comprising a tailpiece having a depending portion and secured to the head of the instrument, an arm pivotally mounted intermediate its ends on said tailpiece and overhanging the head of the instrument, a mute mounted on said arm and adapted to contact with the bridge, a tension spring connecting the overhanging end of the arm and the tailpiece for raising the mute from the bridge, and a latch pivotally mounted to the depending portion of said tailpiece and adapted to bear against the overhanging end of the arm to retain it in contact with the bridge against the action of said spring.

In testimony whereof, we have hereunto set our hands.

VELMA S. TRUETT.
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