Nov. 27, 1956 G. JENKINS, JR 2,771,808

BANJO TUNING DEVICE

Filed Dec. 6, 1955

Fig. 1.

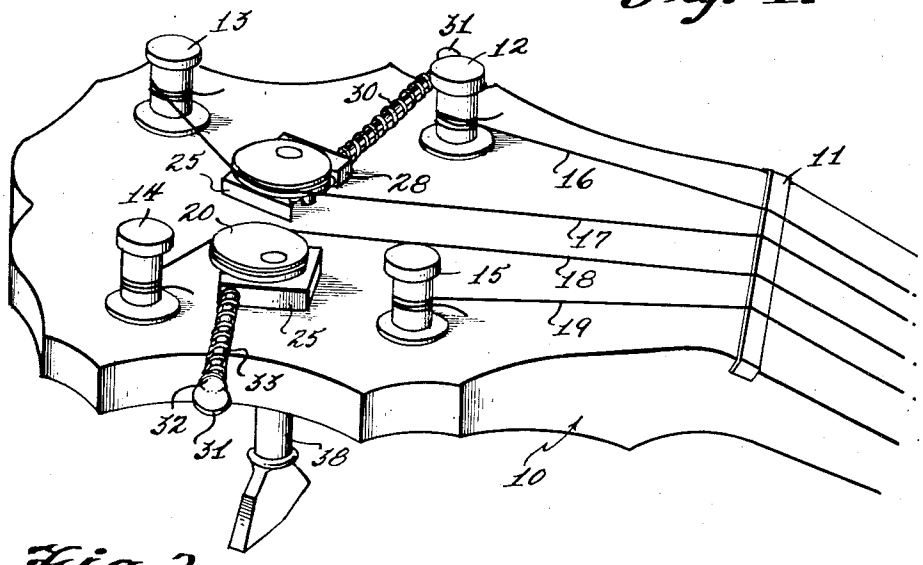


Fig. 2.

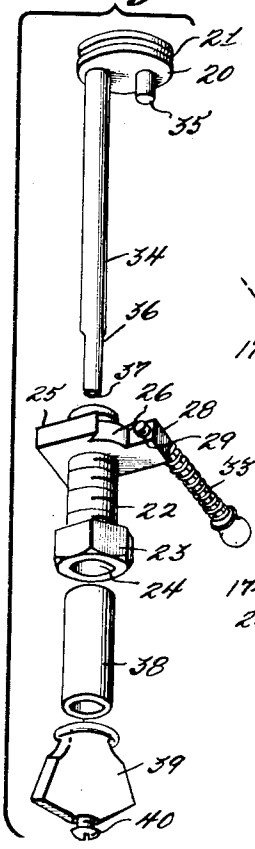


Fig. 3.

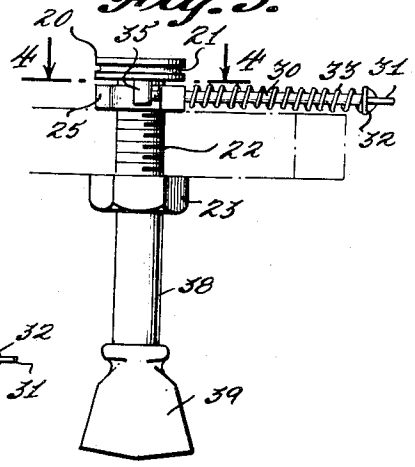


Fig. 4.

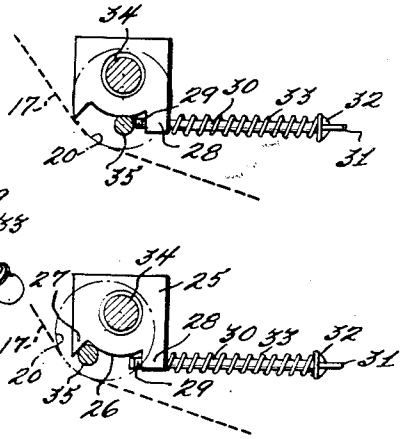


Fig. 5.

INVENTOR
GEORGE JENKINS JR.

BY Kimmel & Crowell

ATTORNEYS

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BANJO TUNING DEVICE

George Jenkins, Jr., Liberty, N. C.

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2 Claims. (Cl. 84—304)

The present invention relates to banjo tuning devices, and more particularly, to a banjo tuning device which can quickly change the tune of a banjo string during the playing of a melody.

A primary object of the invention is to provide a banjo tuning device of the class described above which will enable the player to change a string from standard setting to a different pitch during the playing of break-down tunes wherein such setting is required.

Another object of the invention is to provide a banjo tuning device of the class described which is adjustable to permit the limits to be preset so that the string can be moved from standard to a different pitch to give the same pitch each time the adjustment is made.

A further object of the invention is to provide a quick change pitch regulating mechanism which can be attached to a standard banjo without modifying the normal tuning peg construction.

A still further object of the invention is to provide a tuning mechanism of the class described above which is inexpensive to manufacture, easy to install, and simple in use.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a fragmentary perspective view of the neck of a banjo showing the invention installed therein.

Figure 2 is an exploded perspective view of the invention.

Figure 3 is a side elevation of the invention with the banjo neck shown in dotted lines.

Figure 4 is a horizontal cross-section taken along the line 4—4 of Figure 3, looking in the direction of the arrows illustrating the device in one adjusted position.

Figure 5 is a view similar to Figure 4 showing a different adjusted position.

Referring now to the drawings in detail wherein like reference numerals indicate like parts throughout the several figures, the reference numeral **10** indicates generally the neck of a banjo having a fret **11** extending transversely thereacross and being provided with upstanding tuning pegs **12**, **13**, **14** and **15** to which are attached for tuning purposes strings **16**, **17**, **18** and **19**. The strings **16**, **17**, **18** and **19** extend from a sounding member (not shown) and are trained across the fret **11** as illustrated in Figure 1.

It should be understood, of course, that the strings **16**, **17**, **18** and **19** are anchored at their ends adjacent the sounding board and are normally tuned by tightening of the tuning pegs **12**, **13**, **14** and **15**. In certain break-down tunes the quick changing of the pitch of a string has been found to provide a much more pleasing rendition of the melody, and hence, many banjo players have attempted to provide this effect by loosening the tuning pegs **12**, **13**, **14** and **15**, and then retightening them to return to a standard pitch. Obviously, the moving of the tuning pegs **12**, **13**, **14** and **15** in this manner can not accurately set the pitch of the string nor can it accurately reset the pitch of the string.

In the present invention, a cam **20** is positioned so that the string **18** will engage a circumferential groove **21** formed in the edge of the cam **20** and will be tightened and loosened by rotary movement of the cam **20** with respect to the neck **10**. A bolt **22** extends through the neck **10** and has a head **23** on its lower end. An axial bore **24** extends completely through the bolt **22**. A nut **25** is mounted on the bolt **22** above the neck **10** so that upon turning of the bolt **22**, the nut **25** will be locked to the neck **10**.

The nut **25** is provided with an arcuate recess **26** having a stop shoulder **27** at one end and a lug **28** on the opposite end. Adjustable stop **29** is threaded through the lug **28** projecting into the recess **26** so that the end of the stop **29** can be positioned a variable amount from the lug **28**. A threaded shaft **30** extends inwardly from the stop **29** and is provided at its outer end with a handle **31** and an outer flange **32**. A coil spring **33** is positioned over the shaft **30** in engagement with the lug **28** at one end and the flange **32** at the other end.

A shaft **34** is secured to the cam **20** in offset relation to the axial center of the cam **20** and is provided with a pin **35** extending parallel to the shaft **34** beneath the cam **20**. The shaft **34** is provided at its lower end with a squared socket forming member **36** which is screw threaded at **37** internally. A tubular collar **38** is engaged over the shaft **34** and has its upper end in engagement with the head **23**. A key **39** encompasses the squared end **36** of the shaft **34** and has a bolt **40** extending therethrough and into the threaded bore **37** of the shaft **34**. The top of the key **39** is in engagement with the bottom of the collar **38**. The nut **25** is positioned on the neck **10** in such a manner that the handle **31** of the shaft **30** projects outwardly over the side edge of the neck **10** for ready adjustment of the stop **29**.

It should be noted that in this position of standard tuning that the high point of the cam **20** is in engagement with the string **18** as illustrated in Figure 4, and by turning the key **39** the string can be loosened by moving the cam **20** away from its position as illustrated in Figure 4 into its position as illustrated in Figure 5. String **18** can be loosened to change the pitch thereof. By adjusting the stop **29** by rotating the handle **31** the amount of change from standard can be adjusted to any extent desired.

It should be noted that the spring **33** acts to prevent the setting of the stop **29**.

Having thus described the preferred embodiment of the invention, it should be understood that numerous modifications and structural adaptations may be resorted to without departing from the scope of the appended claims.

What is claimed is:

1. A banjo of the type including playable strings, a tuning mechanism comprising a rotatable shaft mounted in the neck of said banjo, a cam engaging one of said strings and mounted on an end of said shaft, a stop mounted on said banjo engaging said cam limiting the movement of said cam in one direction, an adjustable stop on said banjo limiting the movement of said cam in the opposite direction, means for oscillating said cam between said stops, said bolt extending vertically through said banjo neck and has an axial bore through which said shaft projects, a nut threaded on said bolt with said stop being formed in said nut and said adjustable stop being threadedly carried by said nut.

2. A device as claimed in claim 1 wherein said cam is provided with a pin extending therefrom parallel to said shaft with said pin being adapted to engage said stops.

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