C. G. STROMBERG.

TUNING DEVICE FOR STRINGED MUSICAL INSTRUMENTS.

APPLICATION FILED OCT. 13, 1919.

1,367,105. Patented Feb. 1, 1921.

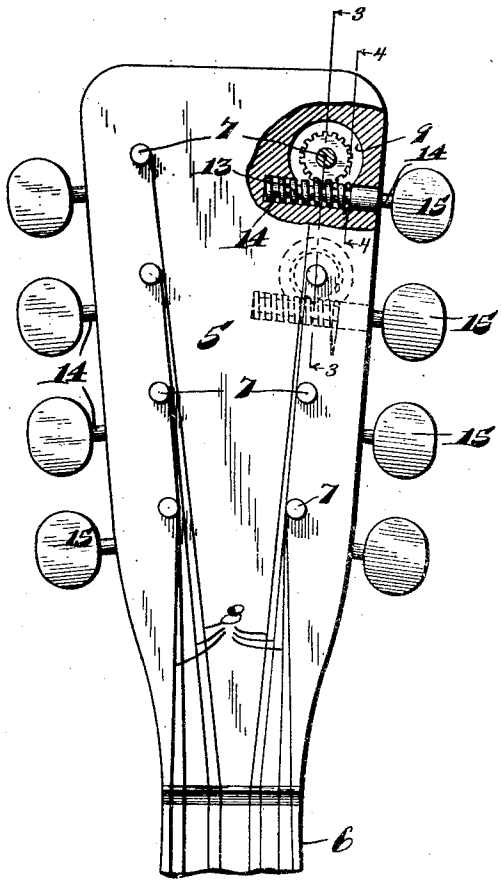


Fig. 1.

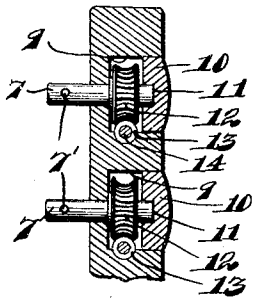


Fig. 3.

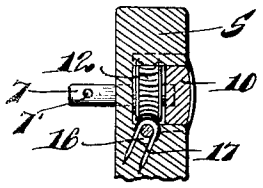


Fig. 4.

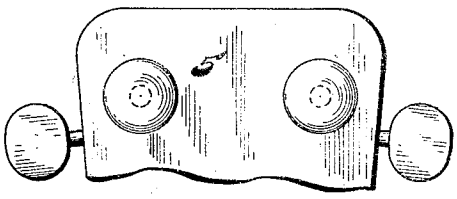


Fig. 2.

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UNITED STATES PATENT OFFICE.

CHARLES G. STROMBERG, OF CHICAGO, ILLINOIS.

TUNING DEVICE FOR STRINGED MUSICAL INSTRUMENTS.

1,367,105. Specification of Letters Patent. Patented Feb. 1, 1921.

Application filed October 13, 1919. Serial No. 330,228.

To all whom it may concern:

Be it known that I, CHARLES G. STROMBERG, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Tuning Devices for Stringed Musical Instruments, of which the following is a specification.

My invention relates to improvements in tuning devices for stringed musical instruments, and more particularly to the construction of the string-keys thereof, the object of the invention being to provide a simple and efficient construction of this character which is capable of economical manufacture and application to the instrument, and is durable and efficient in use.

Other objects will appear hereinafter.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a plan view of the head of a musical instrument embodying the invention.

Fig. 2, a reverse view of a portion of said head.

Fig. 3, a section taken on line 3—3 of Fig. 1, and

Fig. 4, a section taken on line 4—4 of Fig. 1.

The preferred form of construction as illustrated in the drawings comprises the usual head 5 at the end of the neck 6 of a mandolin, banjo, or guitar, or other similar musical instrument. The head 5 is equipped with winding stems 7 for securing and adjusting the tension in the strings 8 of the instrument, the usual perforations 7′ being provided in said winding stems for this purpose. Each of the pegs 7 is mounted directly in the head 5 in a bearing extending vertically therethrough, the inner portion of said bearing being enlarged to form a socket 9 closed at its under side by a plug 10 having a central bearing recess 11 therein adapted to receive the lower end of the corresponding peg 7 and thus conceal and inclose and protect the parts and provide a suitable mounting for said peg. A worm wheel 12 is mounted on each of the pegs 7 within the corresponding socket 9 and meshes with a worm 13 formed on a key stem 14 mounted in a suitable bearing socket traversing one side of the corresponding socket 9, each of said stems 14 being provided with the usual thumb piece 15. Each of the stems 14 is provided with a locking groove 16 and a staple 17 is driven into the head to engage the locking groove 16 in each of the stems 14, thus securely locking the parts in place in the head 5. When the corresponding plugs 10 have been secured in place the operating parts of the string keys are completely concealed, inclosed and protected and a highly efficient mounting for these parts provided.

While I have illustrated and described the preferred form of construction for carrying my invention into effect this is capable of variation and modification without departing from the spirit of invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself to such variations and modifications as come within the scope of the appended claims.

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

1. A tuning device for stringed musical instruments comprising a head having a tuning peg bearing extending therethrough, there being an enlarged socket formed in said head at one end of said bearing; a tuning peg mounted in said bearing and projecting into said socket; means operating in said socket for rotating said peg; and a plug tightly fitting and closing said socket and having a bearing receiving said peg, substantially as described.

2. A tuning device for stringed instruments comprising a head having a tuning peg bearing extending therethrough; there being an enlarged socket formed in said head at one end of said bearing; a tuning peg mounted in said bearing and projecting into said socket; a worm wheel on said peg in said socket; a key stem rotatably mounted in said head and traversing said socket; a worm on said key stem meshing with said worm wheel; and a plug tightly fitting and closing said socket and having a bearing receiving said peg, substantially as described.

3. A tuning device for stringed musical instruments comprising a head having a tuning peg bearing extending therethrough, there being an enlarged socket formed in

said head at one end of said bearing; a tuning peg mounted in said bearing and projecting into said socket; a worm wheel on said peg in said socket; a key stem rotatably mounted in said head and traversing said socket, said key stem being provided with a locking groove; a staple driven into said head and engaging said groove; a worm on said key stem meshing with said worm wheel; and a plug tightly fitting and closing said socket and having a bearing receiving said tuning peg, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES G. STROMBERG.

Witnesses:

LAURA J. ERICKSON,

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