

No. 694,392.

Patented Mar. 4, 1902.

E. C. LANE.

TUNING DEVICE FOR STRINGED INSTRUMENTS.

(Application filed Mar. 21, 1901.)

(No Model.)

Fig.1

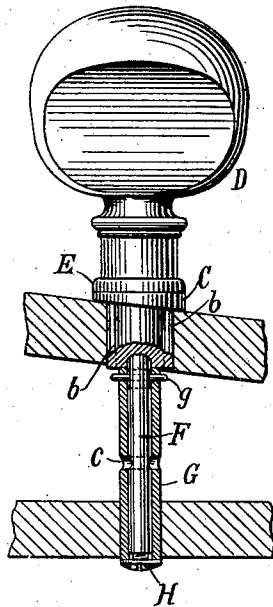


Fig.2

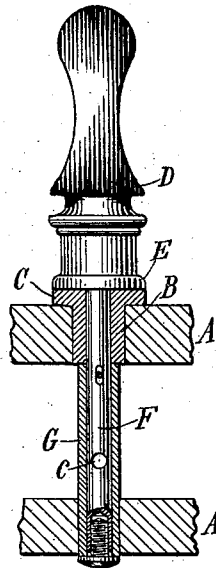
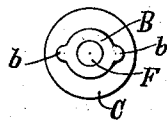


Fig.3



Witnesses:
Raphael Ketter
John H. Kullbackekey.

Inventor
Edwin C. Lane
by Clarkson A. Collins Atty

UNITED STATES PATENT OFFICE.

EDWIN C. LANE, OF BROOKLYN, NEW YORK.

TUNING DEVICE FOR STRINGED INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 694,392, dated March 4, 1902.

Application filed March 21, 1901. Serial No. 52,131. (No model.)

To all whom it may concern:

Be it known that I, EDWIN C. LANE, a citizen of the United States, residing in the borough of Brooklyn, city of New York, county of Kings, and State of New York, have invented a certain new and Improved Tuning Device for Stringed Instruments, of which the following is a specification.

My invention relates to the keys or pegs by which the tension of the strings of such instruments is adjusted. Heretofore such pegs have consisted simply of a conical piece of wood set in a hole of the same shape in the scroll of the instrument, the friction being between the peg and the hole in which it is set and being adjusted by the extent to which the peg or key is forced into the hole, from which there is a constant tendency for the peg to work out.

The object of my improvements is to provide a peg so constructed that it may be more firmly held in position and the tension of the strings may be more accurately adjusted than has heretofore been possible. To this end I provide the peg with a shaft which passes through a collar set in one side of the scroll of the instrument, and the peg and collar are provided with approximated bearing-surfaces. The shaft of the peg is surrounded by a sleeve secured against rotary motion thereon, one end of which bears against the inner end of the collar and the other against the head of a screw set into the end of the peg-shaft. By adjusting the screw the friction between the bearing-surfaces of the peg and collar may be adjusted and kept at a point where the tension upon the strings will not readily vary.

The invention will be best understood by reference to the accompanying drawings, in which—

Figure 1 shows a view of the peg with the sleeve around the peg-shaft in section and the collar partly broken away. Fig. 2 shows a view in a plane at right angles to Fig. 1 with the sleeve and collar in section, and Fig. 3 is a bottom plan view of the collar.

A A' indicate the two sides of the scroll of an instrument.

B is a collar, of brass or other suitable material, set in one side A of the scroll and kept from rotation therein by wings *b b*. The col-

lar B is provided with a shoulder C, abutting against the side of the scroll and made thicker on one side than the other, so that the peg-shaft will stand at right angles to the instrument-string.

D is the handle or thumb-piece of the peg, provided with a shoulder E, the face of which bears against the face of the shoulder C. Other forms of bearing-surfaces than the faces of the shoulders C and E might be used; but I prefer the construction here shown.

F is the peg-shaft, made of any suitable material, preferably brass, which extends through the collar B and through the opposite side A' of the scroll. Around the shaft F is a sleeve G, rotation of which on the shaft is prevented by a pin *g*. One end of the sleeve G bears against the collar B and the other against the head of a screw H, which is screwed into the end of the shaft F. The shaft F and sleeve G are perforated at *c* to permit the insertion of a string of the instrument, which by revolution of the key is wound around the sleeve G. The friction between the shoulders C E may be regulated to any desired point by means of the screw H, whereby wear may be compensated for, and a very exact adjustment of the strings of the instrument may be had.

It is to be noted that the collar B is secured only to one side of the scroll and that the shoulder E of the peg bears against one end of the collar while the sleeve G bears against the other end of the collar, the sleeve G turning in an aperture in the other side of the scroll. Thus the tension exerted by tightening the screw H is exerted solely upon the opposite ends of the collar and does not tend to draw the two sides of the scroll together. Hence there is no danger of straining, cracking, or breaking the scroll by the use of these pegs.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with the scroll of a musical instrument, of a collar secured to one side thereof, a peg extending through said collar, and provided with a shoulder engaging the outer end of said collar, a sleeve on said peg having one end engaging the inner end of said collar and its other end engaging an aperture in the opposite side of said scroll

and means for clamping said collar between the shoulder of said peg and the end of said sleeve, substantially as described.

2. The combination with the scroll of a
5 musical instrument, of a collar secured to one side thereof, and provided with a shoulder, a peg passing through said collar and provided with a shoulder engaging the shoulder of said
10 collar, a sleeve on said peg, having one end engaging the end of said collar opposite its shoulder, said sleeve engaging a bearing-aperture in the other side of the scroll, and a screw-threaded adjusting device engaging said peg
15 and adapted to engage the end of said sleeve to force said sleeve into contact with said collar and draw the shoulders of said peg and collar into frictional engagement, substantially as described.

3. A stringed-instrument peg comprising
20 among its members, a collar, provided with

means for securing it to one side of the scroll of an instrument, so as to prevent it from turning, the peg proper having a part revolvably mounted in said collar, and having a shoulder frictionally engaging one end of said
25 collar, a sleeve on said peg having one end engaging the other end of said collar, and a threaded adjusting device, engaging said peg and having a part engaging said sleeve to clamp the said collar, between said shoulder
30 and said sleeve, without straining the sides of the scroll toward each other, substantially as described.

In testimony whereof I have hereunto subscribed my name this 20th day of March, 35
A. D. 1901.

EDWIN C. LANE.

Witnesses:

CLARKSON A. COLLINS,
CHAS. METZ.