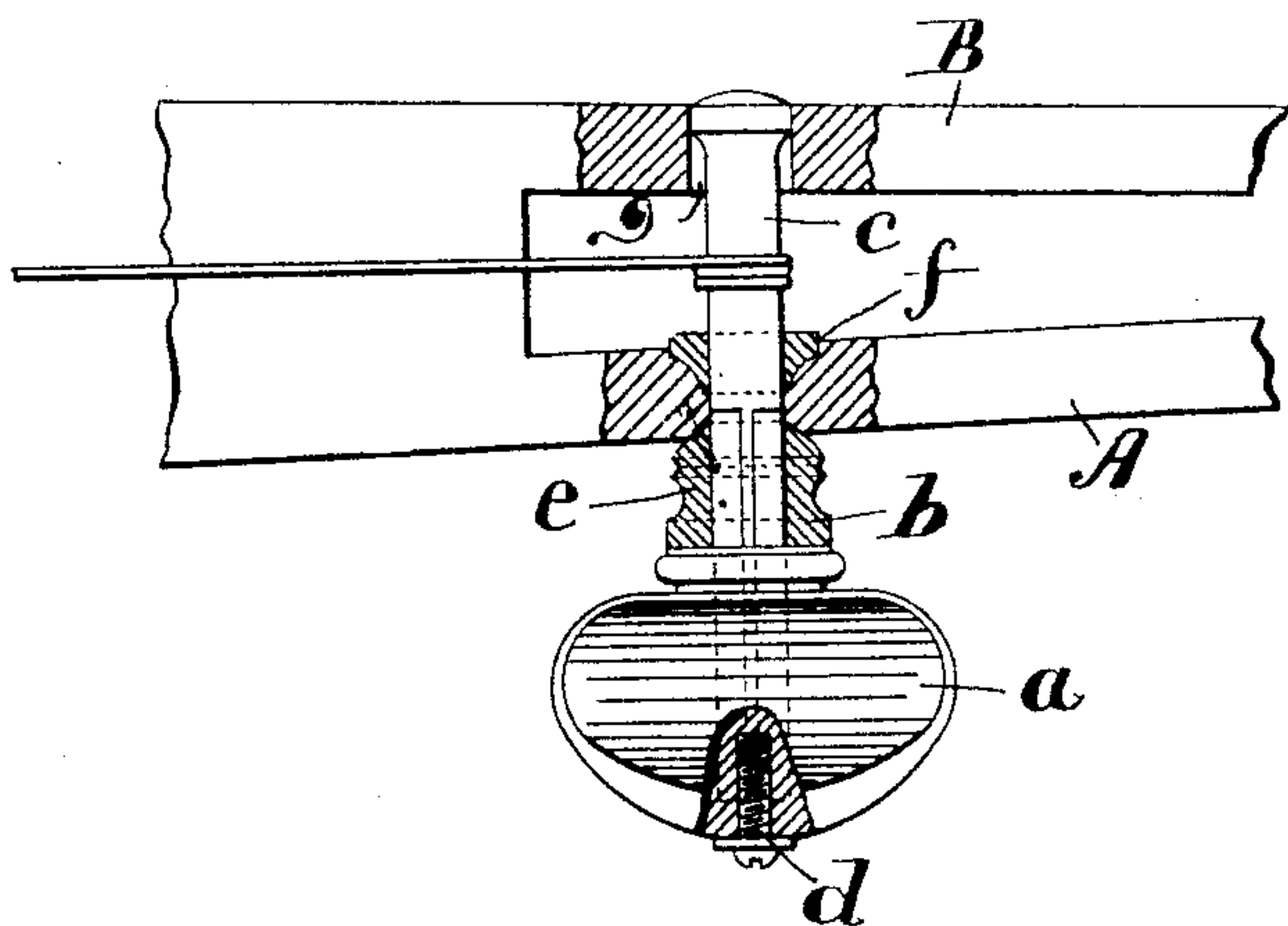


(No Model.)

R. KUENSTLER.  
TUNING PEG.

No. 538,424.

Patented Apr. 30, 1895.



WITNESSES:

*Stevenson H. Walsh.*  
*Wm R. Webster.*

INVENTOR

*Richard Kuenster*  
*by his attorney*  
*Chas A. Rutter.*

# UNITED STATES PATENT OFFICE.

RICHARD KUENSTLER, OF PHILADELPHIA, PENNSYLVANIA.

## TUNING-PEG.

**SPECIFICATION** forming part of Letters Patent No. 538,424, dated April 30, 1895.

Application filed May 3, 1894. Serial No. 509,892. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD KUENSTLER, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Tuning-Pegs, of which the following is a specification.

My invention relates to improvements in tuning pegs for violins or other stringed instruments, and the object of my invention is to furnish an efficient, inexpensive, and simple tuning peg which cannot be unwound by the tension of the strings, and which, when turned by the fingers, will move perfectly evenly.

My tuning peg, shown in the drawing applied to a violin neck, carries on its end the usual finger piece or knob *a* longitudinally movable on an angular support *b*, which forms part of the shaft *c*, and adjusted in position by a set screw *d* passing through the finger piece and into the end of the shaft in the ordinary manner.

*e* is a sleeve on the shaft *c* which bears against the outer side of one of the walls or sides of the stem of the instrument, as *A*; *f*, a bearing carried by the shaft *c*, and which may be secured to this shaft in any suitable manner, which enters a recess in the inner side of the stem and which, together with the sleeve *e*, prevents endwise movement of the shaft *c* and furnishes the frictional bearing to prevent this shaft from being turned by the string when tightly stretched. In order to keep the shaft *c* in line its inner end, or that opposite to that end which carries the finger piece, enters or passes through a hole *g* in the side wall *B* of the stem of the instrument.

The friction between the side wall *A* of the neck of the instrument and the key is adjusted by setting the screw *d* in or out. If the screw is set in, it forces the finger piece against the outer end of sleeve *e* and the inner end of this sleeve against the outer side of the neck *A* and draws the bearing *f* into the recess on the other side of the stem or neck *A*. If the screw be loosened this action is reversed.

In the drawing my key is shown applied to a violin but it will be seen that it may also be applied to guitars or other similar stringed instruments.

I claim—

An instrument stem having an opening through both of its walls or sides, combined with the shaft having its inner end to fit loosely in the opening in one of the sides or walls, and having its other end to project through and beyond the opposite side, and made angular and provided with a threaded recess in its end; a bearing *f* secured to the shaft and recessed in the inner side of the stem to prevent endwise movement of the shaft, the sleeve applied to the shaft on the opposite side of the wall from the bearing, the finger piece *a* applied to the outer end of the shaft, and the screw *d* passing through the finger piece into the shaft: the opening in the side or wall that receives the inner end of the shaft serving merely to keep the shaft in line, substantially as shown.

RICHARD KUENSTLER.

Witnesses:

STEVENSON W. WALSH,  
CHAS. A. RUTTER.