

No. 775,767.

PATENTED NOV. 22, 1904.

F. W. BECKER.

TUNING PEG FOR STRINGED INSTRUMENTS.

APPLICATION FILED MAR. 18, 1904.

NO MODEL.

Fig. 1.

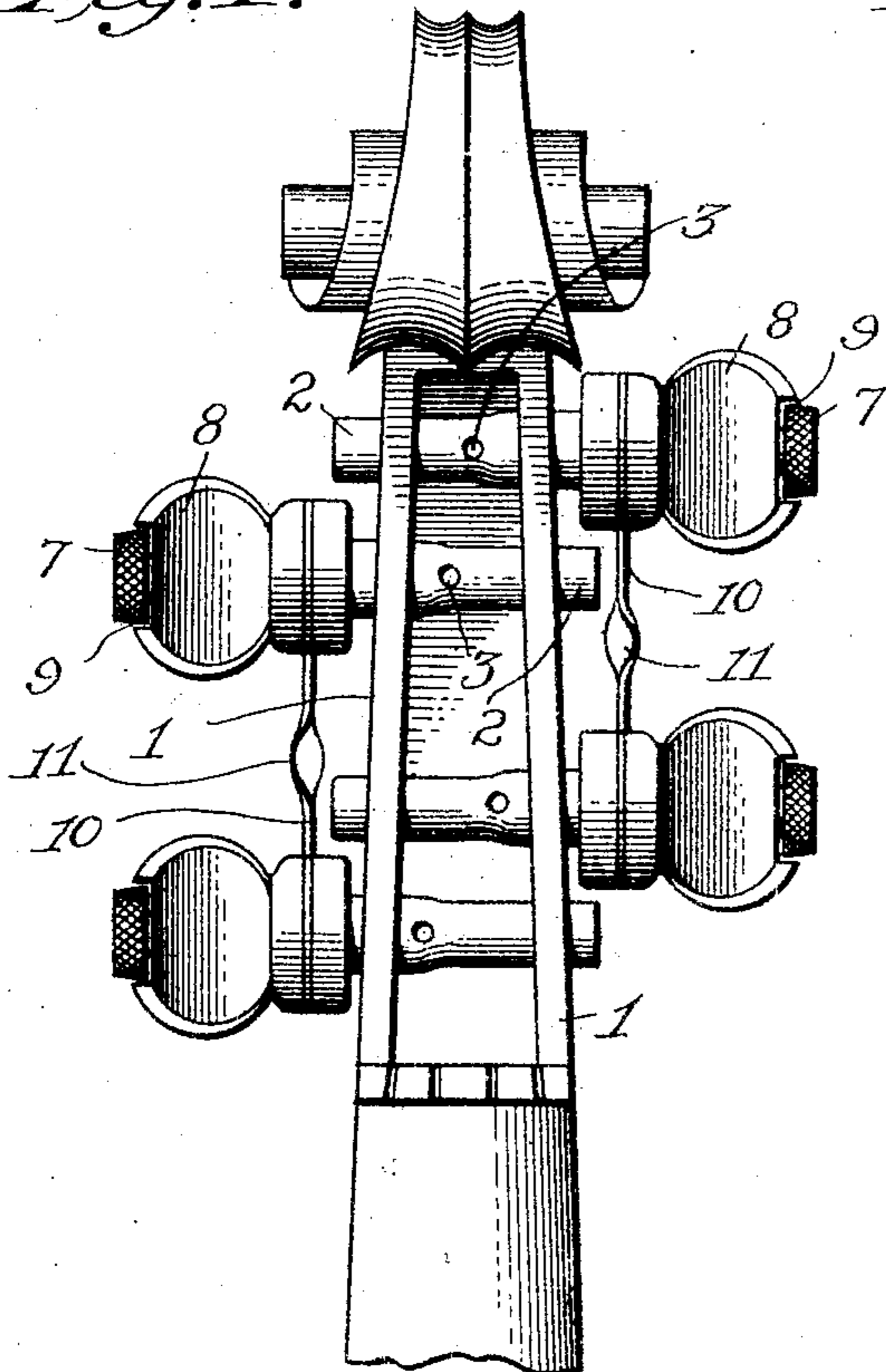


Fig. 2.

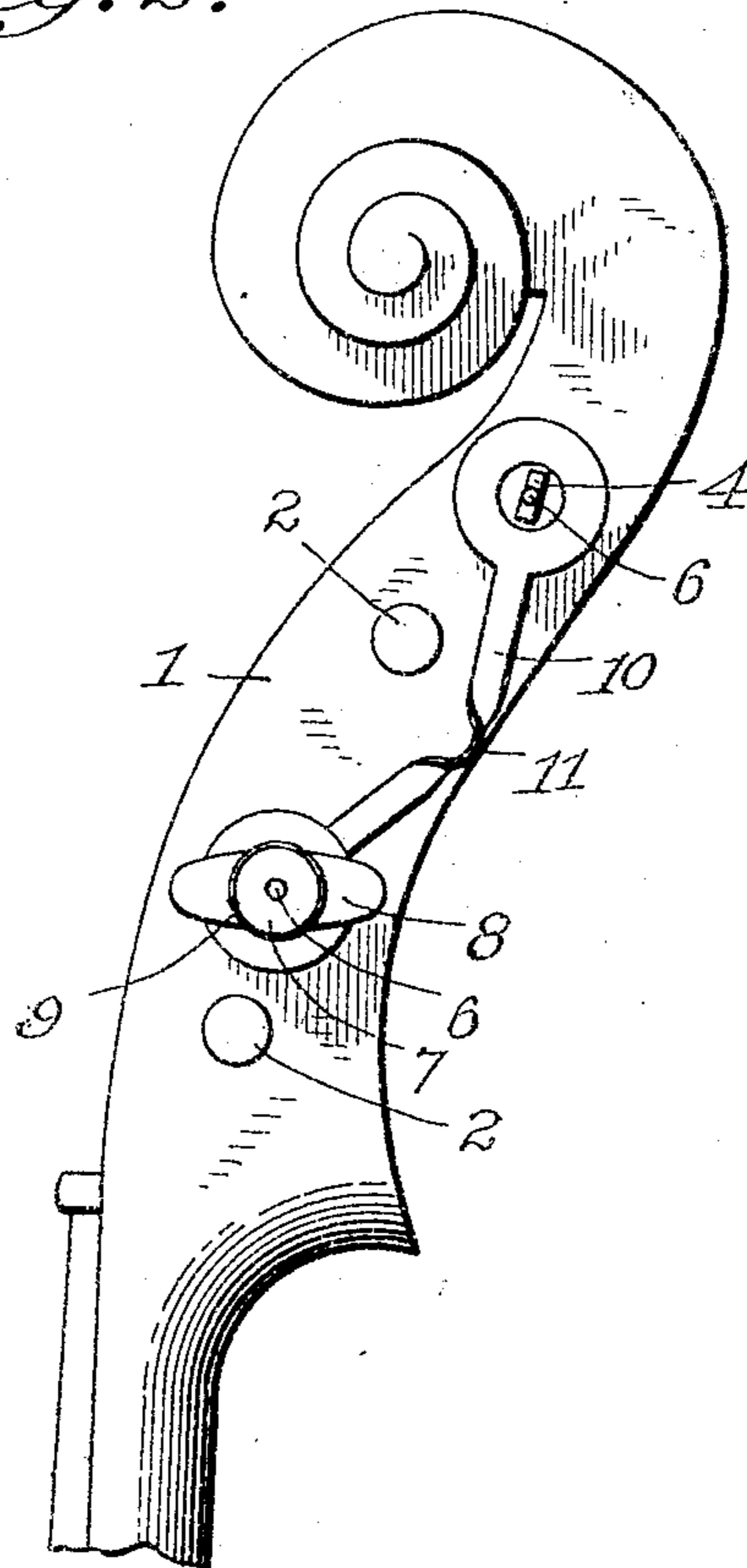


Fig. 3.

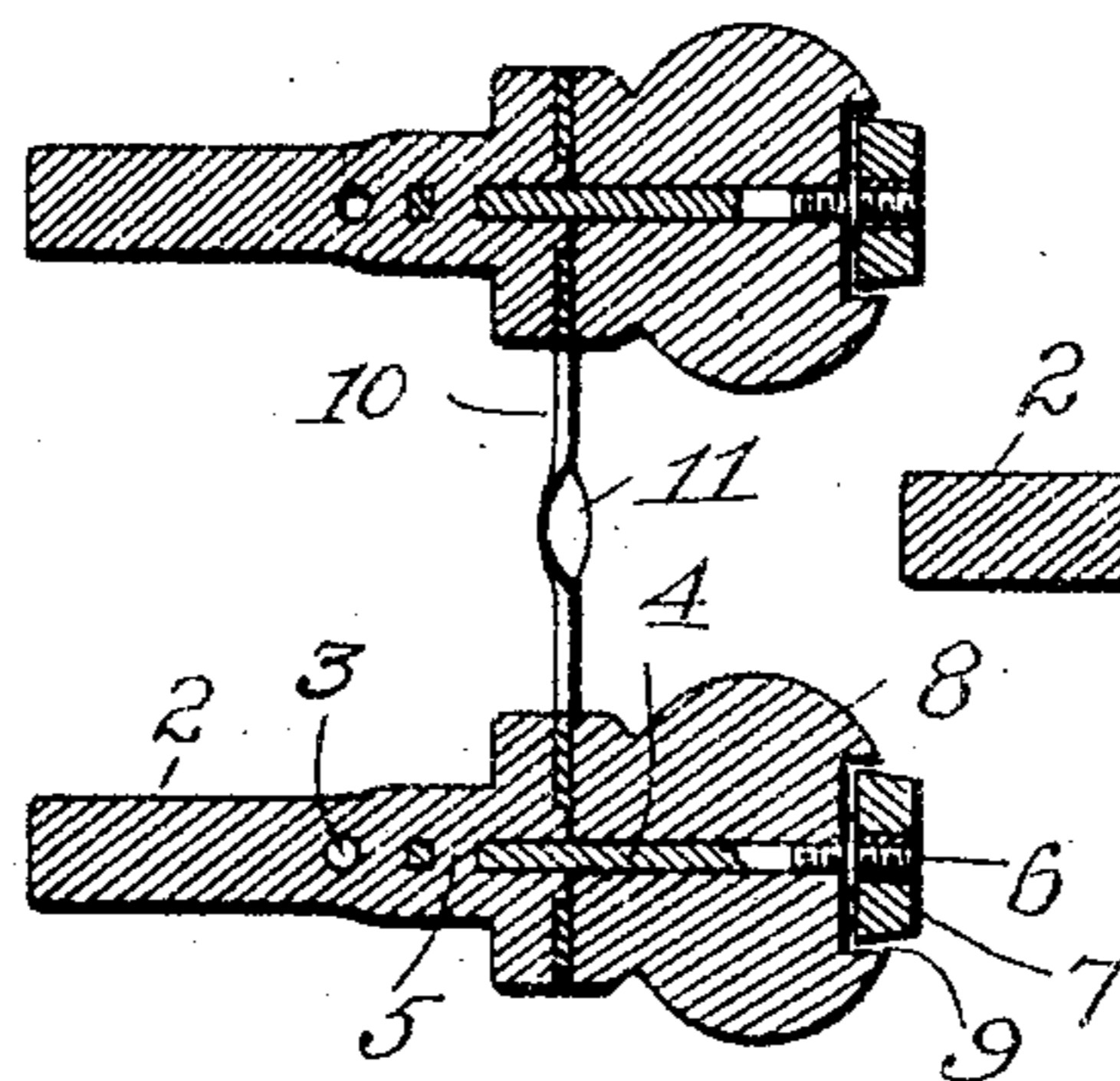
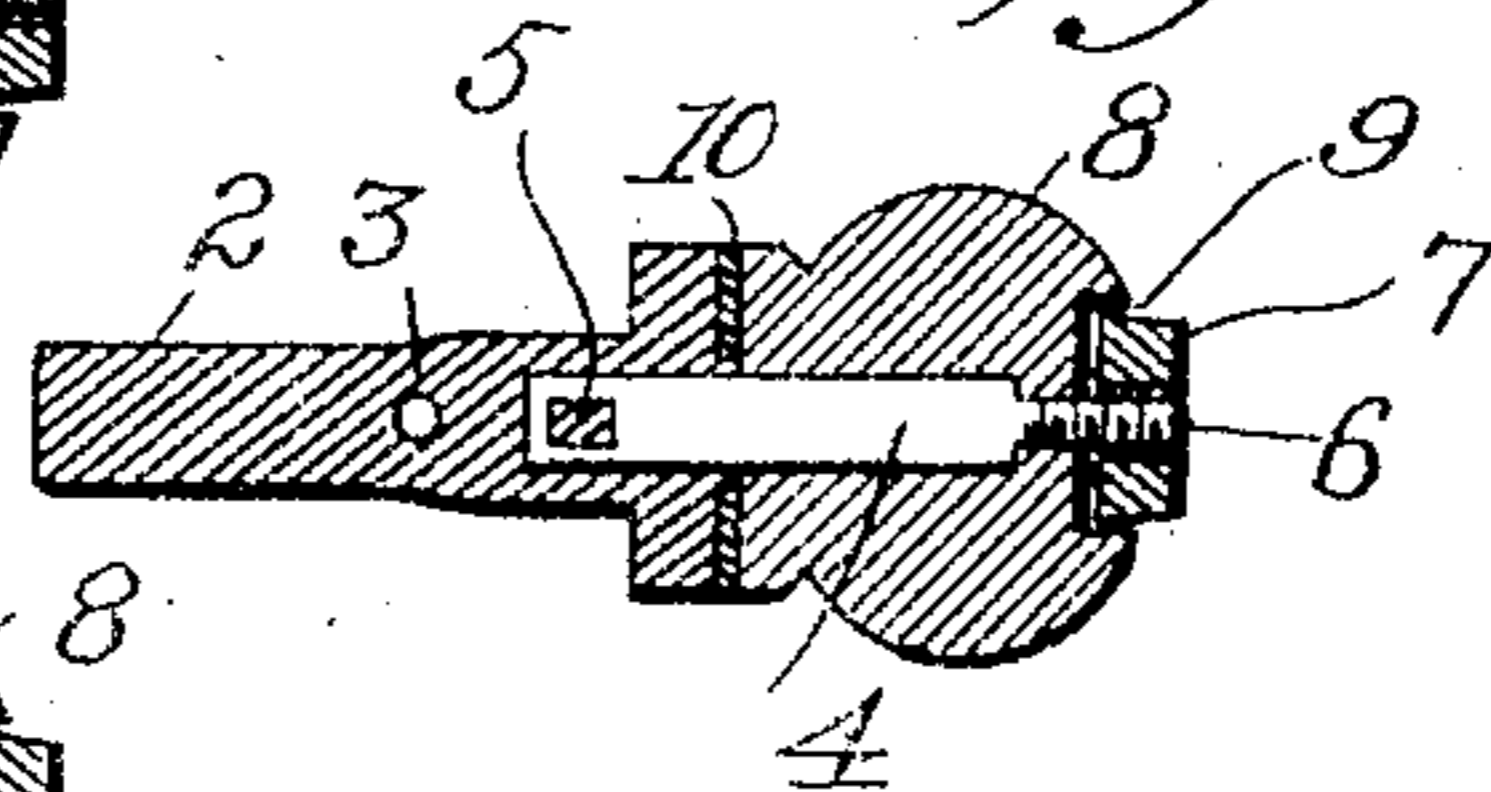


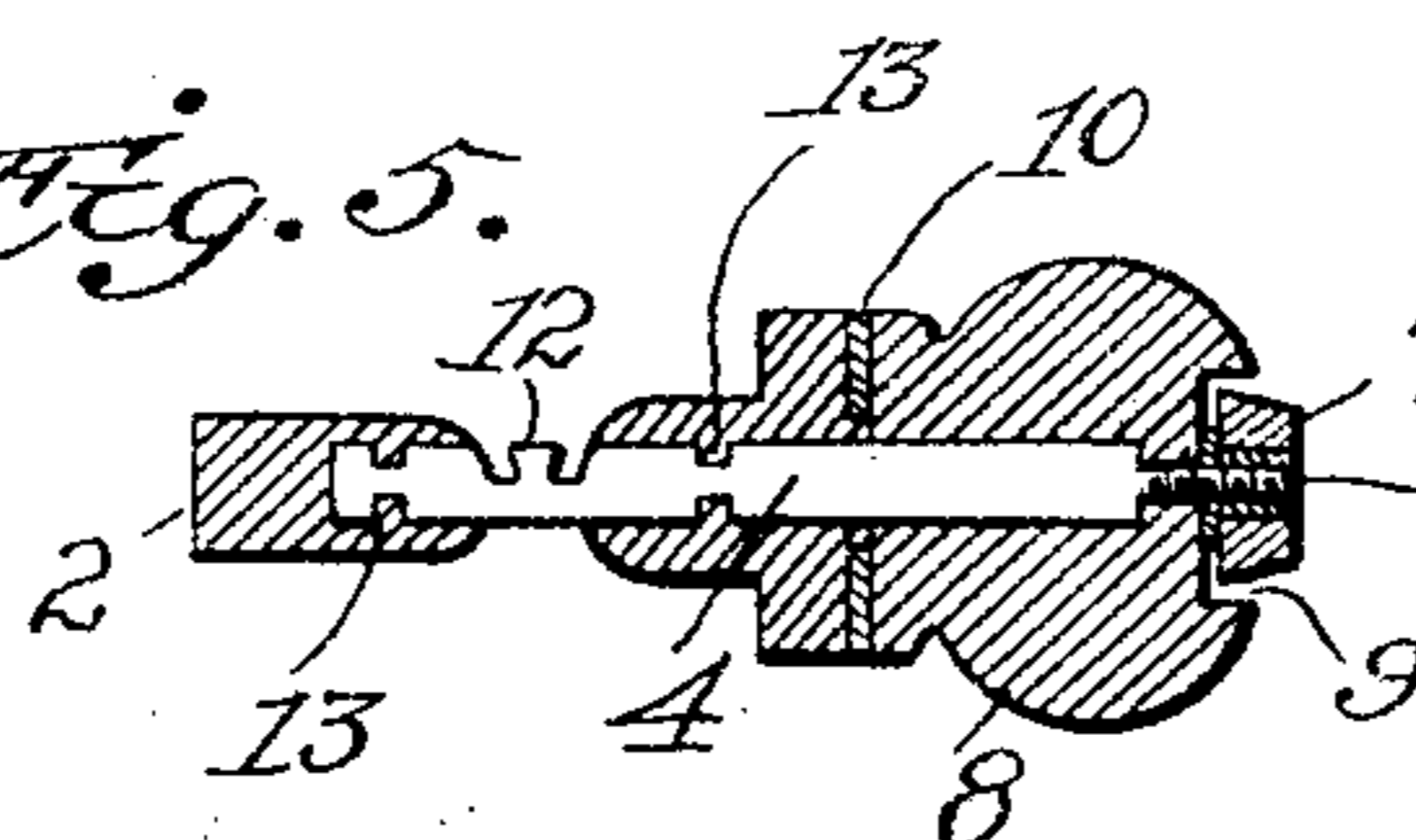
Fig. 4.



Witnesses

Edwin L. Jewell  
J. H. Burgess

Fig. 5.



Inventor

Frederick W. Becker

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# UNITED STATES PATENT OFFICE.

FREDERICK W. BECKER, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO MARIA ANTONIA BECKER, OF NEW YORK, N. Y.

## TUNING-PEG FOR STRINGED INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 775,767, dated November 22, 1904.

Application filed March 18, 1904. Serial No. 198,871. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK W. BECKER, a citizen of the United States, residing in the borough of Manhattan, city of New York, and State of New York, have invented new and useful Improvements in Tuning-Pegs for Stringed Instruments, of which the following is a specification.

My invention relates to tuning pegs or keys for stringed instruments, and more particularly to that type of such devices wherein the frictional resistance required for said pegs is independent of the instrument-head, such as is disclosed in Letters Patent No. 621,207, granted to Francis L. Becker, March 14, 1899, and has for its object to provide certain improvements over the construction disclosed in said Letters Patent, as will be hereinafter more particularly pointed out and claimed.

In the drawings illustrating my invention I have shown the same applied to a violin, to which it is peculiarly applicable, though it is equally well adapted for use with all other kinds of stringed instruments, as will be readily understood.

In said drawings, Figure 1 is a plan view of a violin-head with my improved pegs applied thereto. Fig. 2 is a side elevation of the same. Fig. 3 is a sectional view of a pair of pegs detached. Fig. 4 is a similar view of one of said pegs, the section being taken at a right angle to that of Fig. 3. Fig. 5 is a view similar to Fig. 4, illustrating a slightly-modified construction.

Similar numerals of reference denote corresponding parts in the several views.

Referring to said drawings, the reference-numeral 1 denotes the head of a violin having its sides apertured, as usual, to receive the four pegs, two on each side, into which the shanks of the pegs may fit snugly, but into which they are not intended to jam, neither said apertures nor said shanks being tapered at the points of contact.

Each peg consists of a shank 2, formed of a suitable composition and apertured at 3 for the reception of its string, said shank having molded therein a stem 4, formed, preferably,

of metal and flattened or angular in cross-section and provided near its inner end with an aperture 5, into which the material of shank 2 flows in the process of molding, whereby the two are held firmly together. Said stem 4 is formed into a screw-threaded outer end 6, adapted to receive a jam-nut 7 for a purpose hereinafter to be described.

The handle or thumb-piece 8 of the peg is composed of any suitable material and is centrally apertured to fit the flattened or angular configuration of stem 4, whereby it is freely adjustable longitudinally on said stem, but will impart rotary movement thereto. Said handle or thumb-piece is also recessed or countersunk at 9 to receive the jam-nut 7, it being observed by reference to Fig. 2 that the diameter of said jam-nut is slightly greater than the cross area of said handle or thumb-piece through the flattened side of the latter, also for a purpose hereinafter to be described.

Connecting each pair of pegs is a friction member 10, the same being formed of some ductile metal, preferably brass, and being twisted at approximately its center at 11 at a right angle to its flat body portion, whereby said friction member may be bent at this point to permit the distance between its pegs to be varied, as clearly seen in Fig. 2.

From the above description the operation of my improved construction will be understood to be as follows: Each pair of pegs and its common friction member 10 are assembled independently of the violin-head, as seen in Fig. 3, and are ready for insertion into the latter, the adjustability of said friction members by bending at their centers 11 providing for any variation in the distance between the holes which receive the shanks. The pegs being inserted into position and their strings attached thereto in the usual manner, by slightly loosening its jam-nut 7 each peg may be rotated until its string is properly attuned, when by an independent rotation of its jam-nut 7 the thumb-piece 8 and shank 2 will be clamped against the friction member 10, thus firmly holding the peg in its adjusted position. It will be observed that by reason of the coun-

tersinking of said jam-nut 7 in the end of thumb-piece 8 and the slightly larger diameter of said jam-nut the latter is under the control of the operator while turning the peg without shifting the position of his thumb and finger, so that when the proper tension on the string is obtained the peg may be clamped in said position by simply sliding the thumb and finger across the thumb-piece 8 and without danger of varying the position of the peg.

In order that the same movement of the thumb and finger may turn the jam-nuts 7 to the same positions on either side of the violin-head, I make their screw-threads right and left handed, the jam-nuts for the A and E strings on one side being right-handed, while those for the D and G strings on the other side are left-handed.

While I have illustrated my improvement as applied to a violin in which there are two pegs on each side and have therefore shown the said pegs connected in pairs by friction members 10, I wish it to be understood that I do not confine myself to such an arrangement, as in instruments where there are more than two pegs on a side three or more pegs may be connected by a common friction member.

In Fig. 5 I have illustrated a modified construction of the means for attaching the strings to the pegs, the usual apertures 3 being dispensed with. In this construction the metal stem 4 is extended farther into the shank 2, and at the point where the string is to be attached said stem is notched to provide a central lug 12, around which the string may be looped, it being understood that said stem is exposed at this point instead of being covered by the material forming the shank 2. With this construction I also prefer to dispense with the aperture 5 in the stem 4 and provide the same with notches 13 for the same purpose.

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

1. In combination with a plurality of tuning-pegs for stringed instruments, a friction member formed in one piece and adapted to receive said pegs, and so constituted as to be capable of a relative adjustment of its points of engagement with said pegs to vary the distance between the same.

2. In combination with a plurality of tuning-pegs for stringed instruments, a friction member adapted to receive said pegs and formed of a single piece of flat material twisted intermediate the points of engagement with

the pegs to permit said friction member to be bent to vary the distance between its points of engagement with said pegs in a plane at a right angle to the axes of said pegs.

3. In tuning-pegs for stringed instruments, the combination with two or more pegs, each consisting of two parts rotating together, but adjustable longitudinally with respect to each other, of a common friction member for said pegs independent of the instrument-head and adapted to be engaged between the parts of each peg, said friction member being formed in one piece and capable of a relative adjustment of its points of engagement with said pegs to vary the distance between said pegs.

4. A tuning-peg for stringed instruments, consisting of a shank, an angular stem fixed to said shank and having a screw-threaded outer end, a handle apertured to correspond with the angular stem and longitudinally movable thereon, a friction member independent of the instrument-head through which said stem passes freely and with which said shank and handle contact on opposite sides, and a jam-nut engaging the threaded end of the stem to adjustably force the shank and handle against the friction member.

5. A tuning-peg for stringed instruments, consisting of a shank and a handle rotatable together, but longitudinally movable independently of each other, a friction member intermediate said shank and handle and independent of the instrument-head, and a jam-nut for forcing said shank and handle into contact with said friction member, said handle being recessed to receive said jam-nut.

6. A tuning-peg for stringed instruments, consisting of a shank and a handle rotatable together, but longitudinally movable independently of each other, a friction member intermediate said shank and handle and independent of the instrument-head, and a jam-nut for forcing said shank and handle into contact with said friction member, said handle being recessed to receive said jam-nut, and said jam-nut being of a diameter to project beyond the grasping-surface of said handle.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FREDERICK W. BECKER.

Witnesses:

ALFRED R. PERRIN,  
ROBT. McCASTLINE.