

No. 621,207.

Patented Mar. 14, 1899.

F. L. BECKER.
TUNING PEG FOR STRINGED INSTRUMENTS.

(Application filed Dec. 13, 1898.)

(No Model.)

Fig. 1.

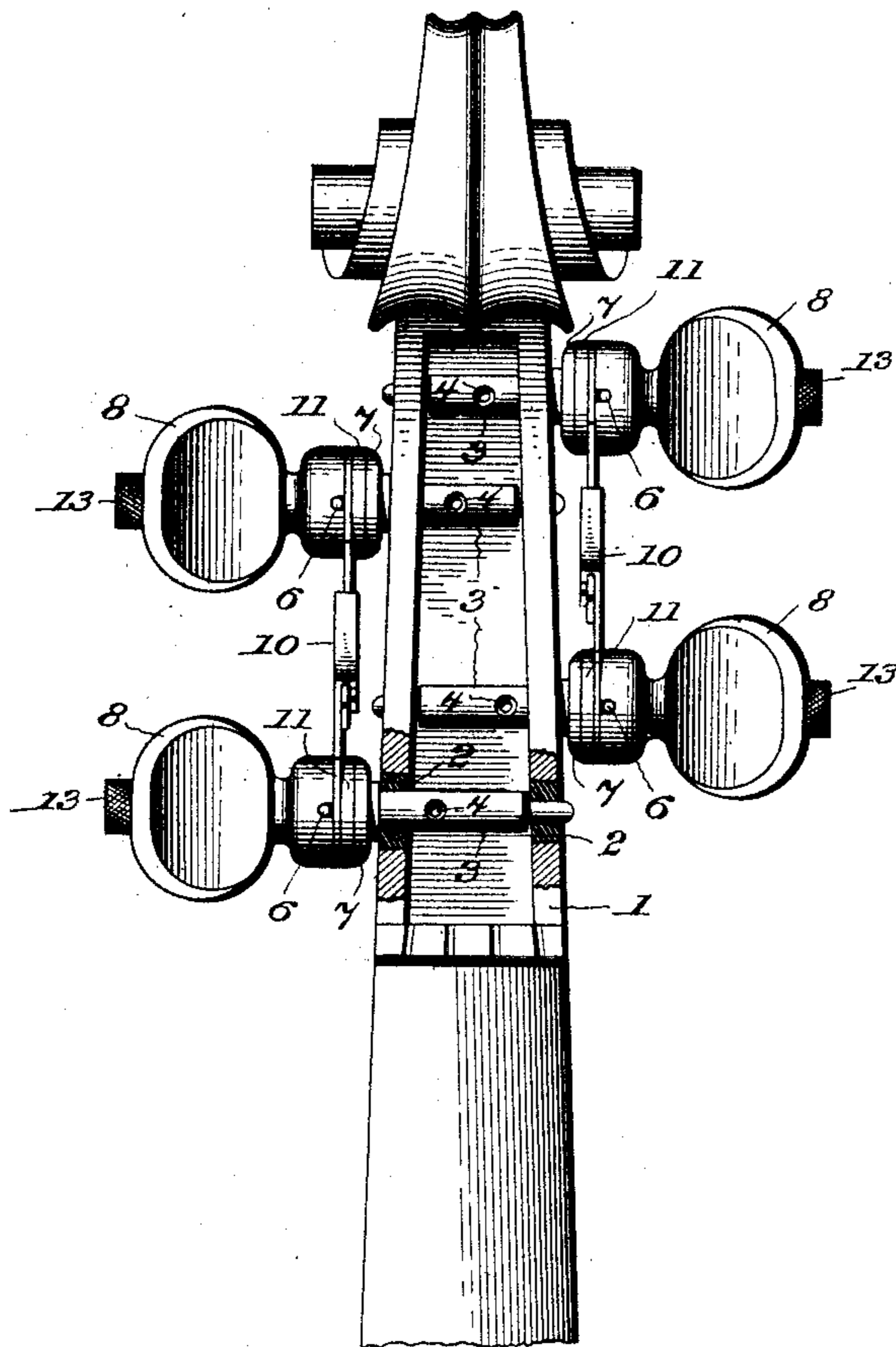


Fig. 2.

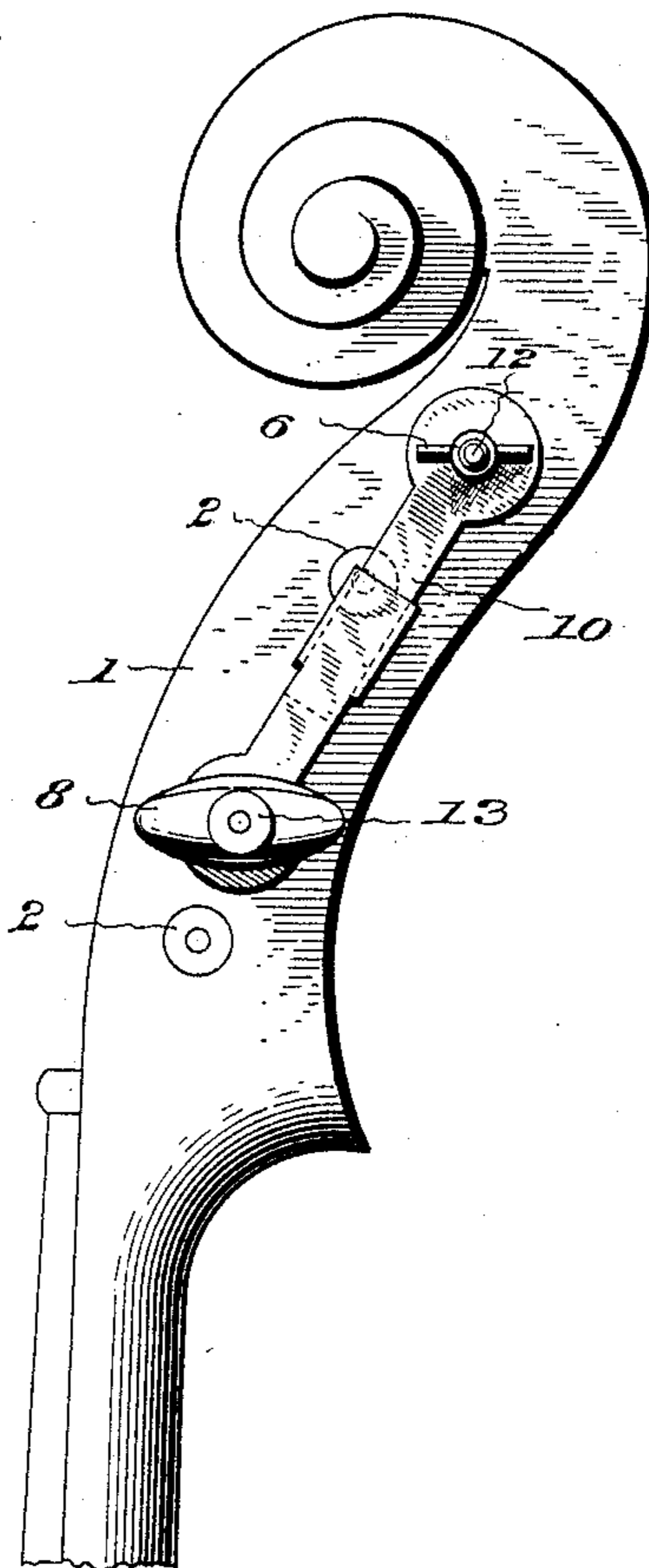


Fig. 3.

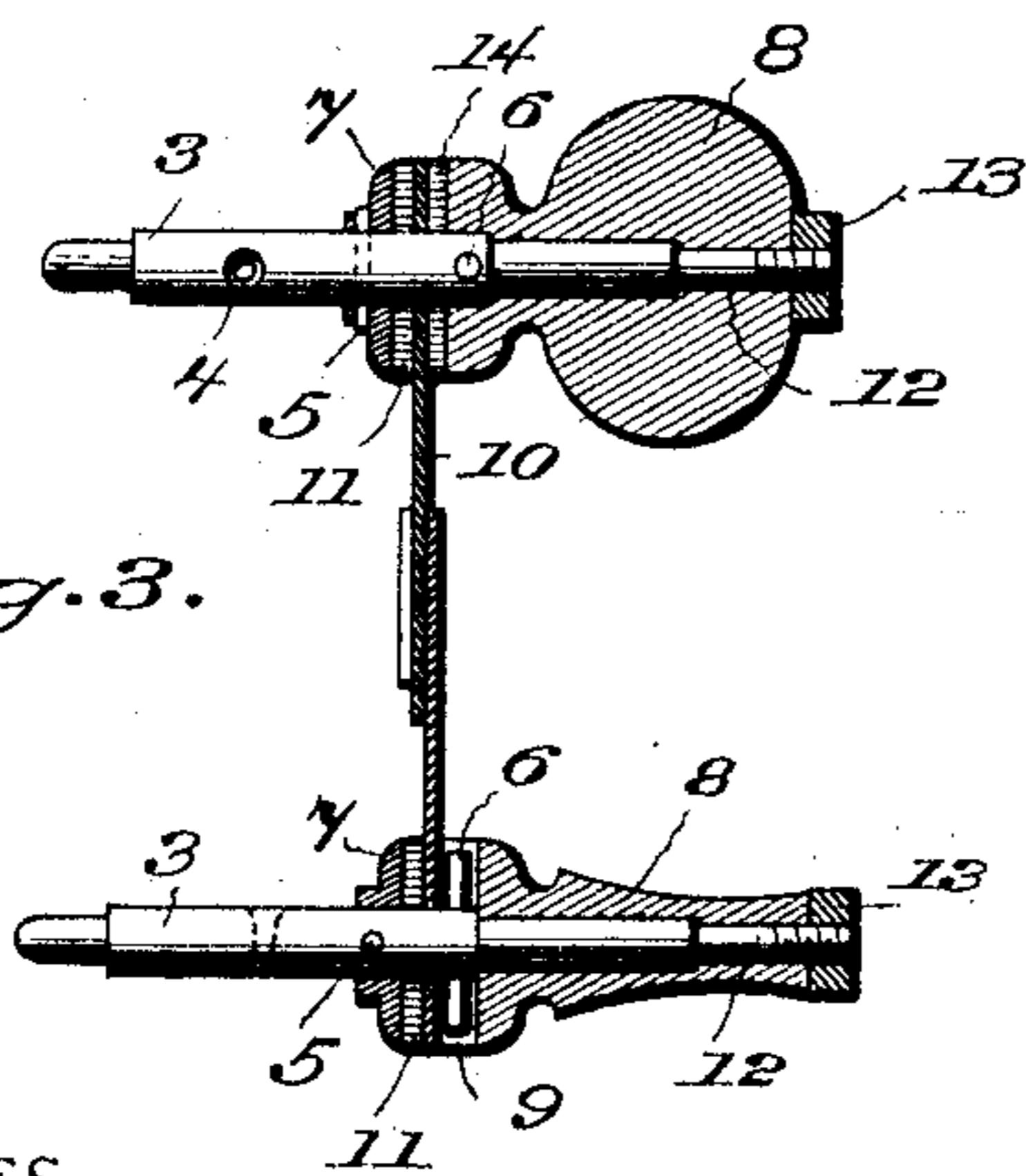
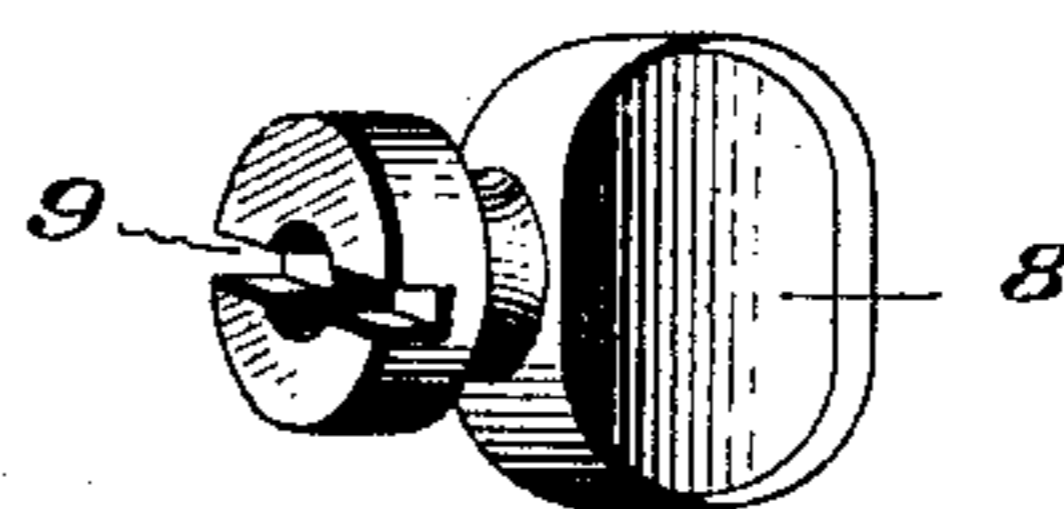


Fig. 4.



WITNESSES

G. S. Elliott.
H. M. Osterling

INVENTOR

Francis L. Becker
By Lucy B. Hille.
Attorney

UNITED STATES PATENT OFFICE.

FRANCIS L. BECKER, OF NEW YORK, N. Y.

TUNING-PEG FOR STRINGED INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 621,207, dated March 14, 1899.

Application filed December 13, 1898. Serial No. 699,106. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS L. BECKER, a citizen of the United States, residing in the borough of Manhattan, in the city of New York, State of New York, have invented certain 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 has for its object to provide certain improvements in the construction of the same whereby the frictional resistance required for said pegs may be independent of the instrument-head and be obtained between adjustable parts of said pegs, the construction being such that the frictional resistance may be readily varied or adjusted at will and without the use of any additional implement.

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 top plan view, partly in section, 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 detail perspective view of the handle or thumb-piece of one of the pegs.

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

Referring to the drawings, the numeral 1 denotes the head of the violin, having its sides apertured, as usual, to receive the four pegs, two on each side. I prefer to employ in these apertures bushings 2, of vulcanized rubber or other suitable material, into which the shanks of the pegs may fit snugly, but into which they are not intended to jam.

Each peg consists of a shank 3, apertured at 4 for the reception of the string and also apertured at two other points for the reception of removable pins 5 and 6. Removably fitted onto said shank is a collar 7, having an apertured enlargement formed on one side, through which the pin 5 passes, whereby said collar is engaged to rotate with the shank 3. The handle or thumb-piece 8 is composed of any suitable material and is centrally aper-

tured to fit onto the shank 3, its inner face being recessed at 9 to engage with the pin 6, whereby said handle and shank will rotate together. Connecting each pair of pegs is a friction member 10, the same being formed extensible, preferably, by forming it in two parts adjustably connected together, as shown. The shanks 3 of each pair of pegs pass freely through suitable apertures in the opposite ends of said friction member, the collars 7 being on the side opposite to the handles 8, as shown in Fig. 3, while there is interposed between each of said collars 7 and the friction member a washer 11, preferably of celluloid. The outer end of each shank 3 is screw-threaded at 12 and projects slightly beyond its handle, as shown, for the reception of a jam-nut 13 for adjustably binding the parts together.

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 by first locating and fixing the collars 7 on the shanks 3 by means of the pins 5, then slipping the washers 11 in place next the friction member 10, then inserting pins 6 and locating on the shanks the handles 8, care being taken that the recesses 9 therein register with and engage over said pins 6, so that each handle and its shank will rotate together, and finally screwing on the jam-nuts 13. Now by adjusting said jam-nuts the frictional contact of the various parts may be adjusted at will, owing to the fact that the collars 7 are fixed with respect to the shanks 3, while the engagement of the handles 8 with the pins 6 will cause said handles and shanks to rotate together without affecting the limited longitudinal movement of said handles on their shanks necessary to vary the frictional contact. Each pair of pegs is now ready for insertion into the violin-head, the adjustability of the friction members providing for any variation in the distance between the holes which receive the shanks.

From the above description it will be seen that the requisite frictional resistance to the rotation of the pegs is obtained absolutely independent of the violin-head, while the jam-nuts 13 afford a ready means for varying the

frictional resistance of each peg independently and without the use of any additional implement.

Experience has demonstrated that celluloid
5 and brass afford a most perfect friction-surface, one that is practically indestructible and which requires no lubricant, and I therefore prefer to form the friction members 10 of brass, against which the celluloid washers
10 11 contact. While in practice the contact of the inner end of the handles 8 against the brass friction member 10 has been found not to affect this desired frictional contact, still, if preferred, I may interpose between the handles and friction member a second celluloid
15 washer 14, as shown in the upper peg of Fig. 3.

While I have illustrated my improvement as applied to a violin in which there are two
20 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 arrangements, as in instruments where there are more than
25 two pegs on a side three or more pegs may be connected by a common friction member.

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

30 1. A tuning-peg for stringed instruments, consisting of two parts rotating together, but adjustable longitudinally with respect to each other, and a friction member adapted to be engaged between the parts of the peg, said
35 friction member being independent of the instrument-head, substantially as set forth.

2. A tuning-peg for stringed instruments, consisting of a shank, a handle mounted thereon and rotatable therewith, but adjustable longitudinally thereon, a fixed collar on
40 said shank, and a fixed friction member intermediate the collar and handle, said handle, collar and friction member being exterior of and independent of the instrument-head, substantially as set forth. 45

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
50 pegs adapted to be engaged between the parts of each peg, said friction member being independent of the instrument-head, substantially as set forth.

4. A tuning-peg for stringed instruments, 55 consisting of a shank screw-threaded at its outer end, a removable collar fixed to said shank, a friction member exterior to the instrument-head through which said shank freely passes, a pin removably passing through
60 said shank, a handle recessed in its inner end to engage with said pin, and a jam-nut engaging the threaded end of the shank to adjustably force the various parts into frictional contact, substantially as set forth. 65

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

FRANCIS L. BECKER.

Witnesses:

WILLIAM FRANK,
FRED W. BECKER.