No. 762,723. PATENTED JUNE 14, 1904.

W. HUTCHINS.

DEVICE FOR TUNING VIOLINS.

APPLICATION FILED AUG. 28, 1903.

NO MODEL.

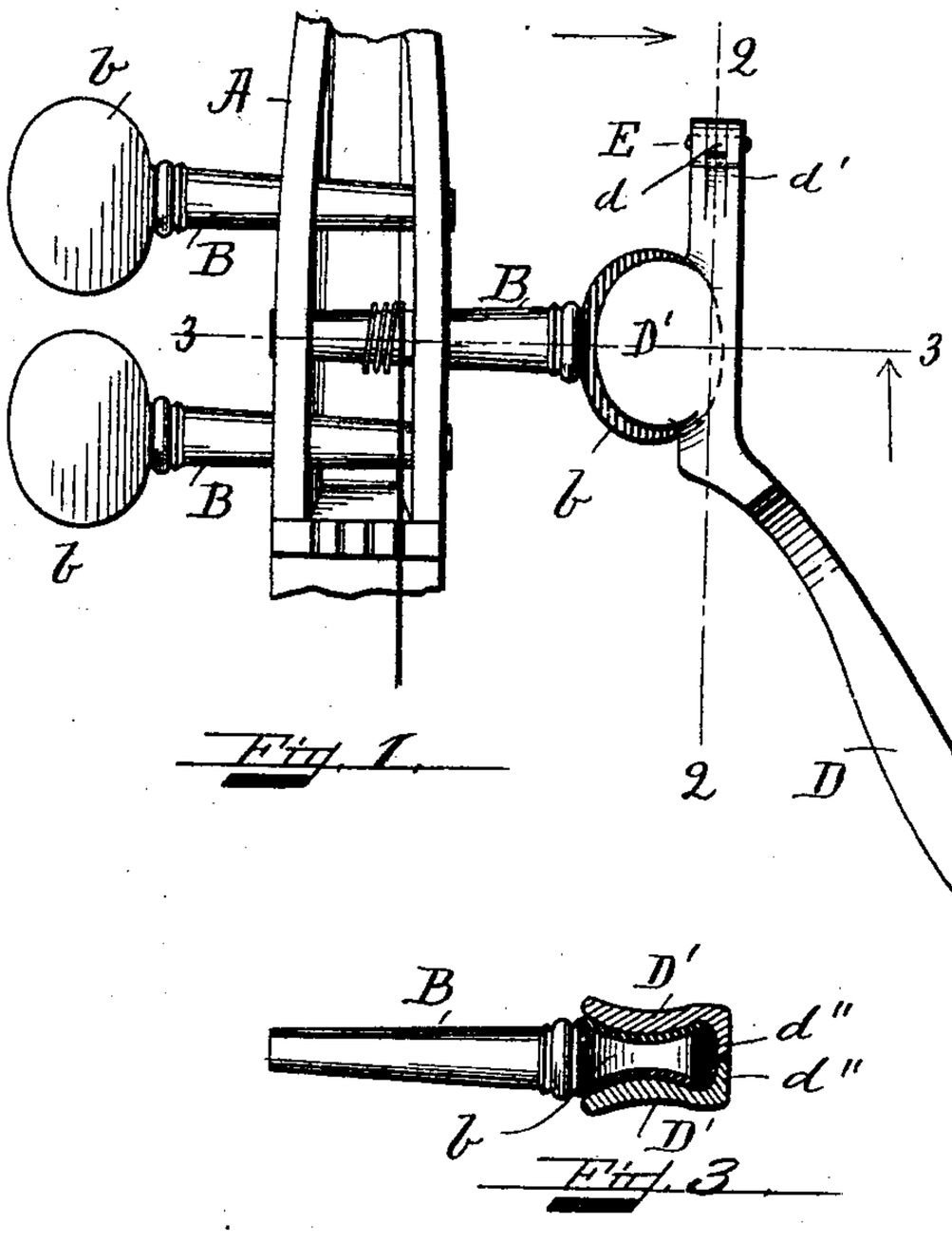

Fig. 1.

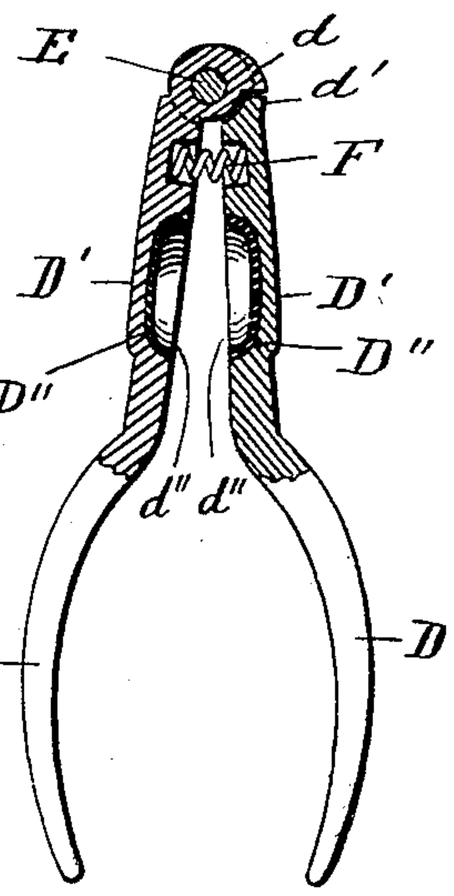

Fig. 2.

Fig. 3.

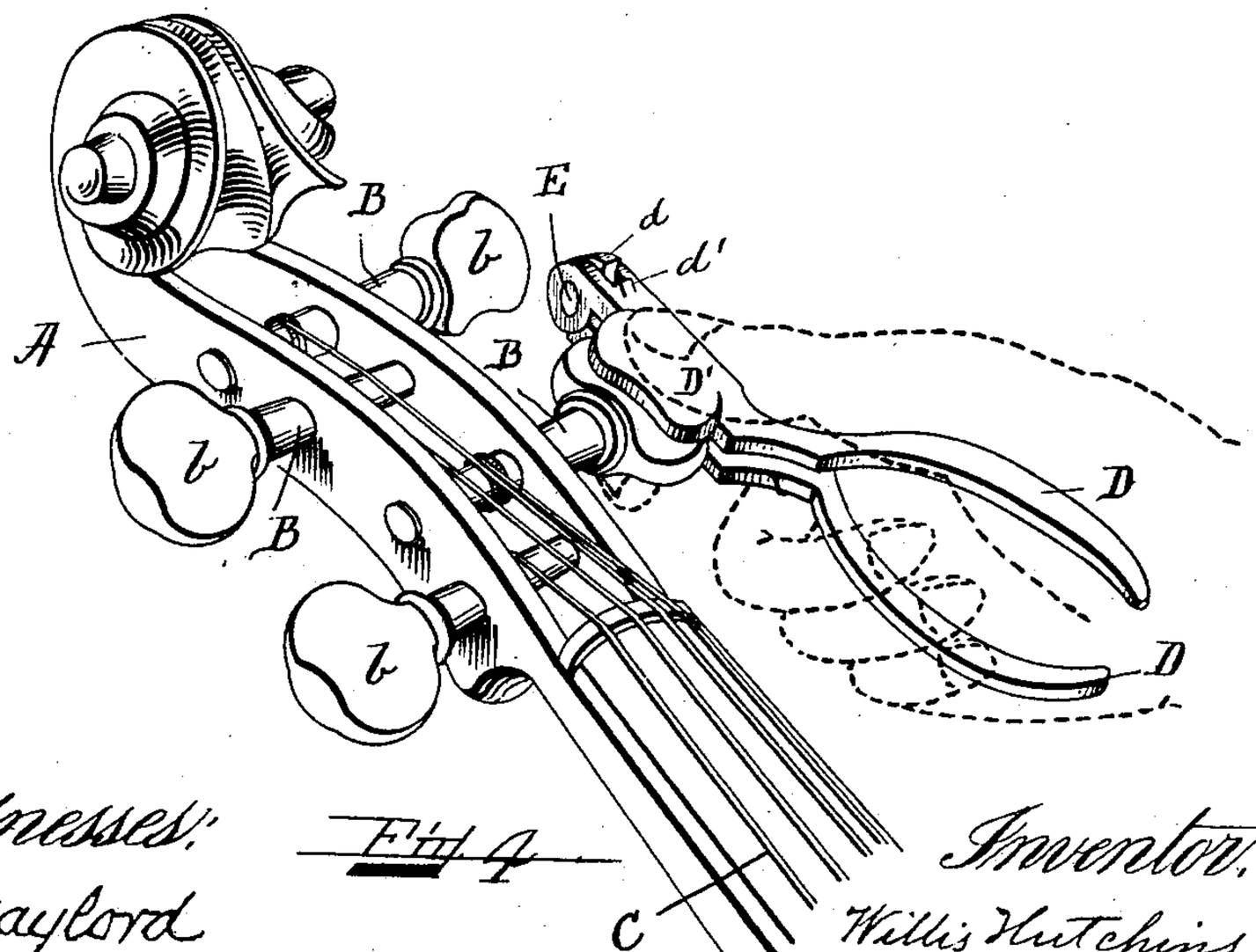

Fig. 4.

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UNITED STATES PATENT OFFICE.

WILLIS HUTCHINS, OF BROOKLINE, MASSACHUSETTS.

DEVICE FOR TUNING VIOLINS.

SPECIFICATION forming part of Letters Patent No. 762,723, dated June 14, 1904.

Application filed August 28, 1903. Serial No. 171,066. (No model.)

To all whom it may concern:

Be it known that I, WILLIS HUTCHINS, a citizen of the United States, and a resident of Brookline, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in Devices for Tuning Violins and Similar Stringed Instruments, of which the following is a specification.

Much difficulty is experienced among violin pupils, especially children under fifteen or sixteen years of age, in turning the pegs of a violin or similar stringed instruments to tune the same. In damp weather the pegs usually swell, thereby increasing the difficulty, so that even experienced pupils are sometimes unable to turn the pegs a small degree, as is required to put the instrument in perfect tune. To obviate such difficulty, I have constructed a device capable of being clamped and held by the operator upon the head of the peg during the tuning operation by which the peg may be turned either way with great ease for loosening or tightening the string attached to the peg, as may be required for tuning the instrument, in a manner as will hereinafter be more fully shown and described, reference being had to the accompanying drawings, wherein—

Figure 1 is a side elevation of my improved tuning device, showing it as placed in position on a peg of a violin-head during the tuning operation. Fig. 2 is a vertical section on the line 2 2 shown in Fig. 1. Fig. 3 is a cross-section of the tuning device on the line 3 3 in Fig. 1, showing the peg in elevation; and Fig. 4 is a perspective view of the head of a violin and the tuning device held on one of the pegs during the tuning operation.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In Figs. 1 and 4, A represents the head of a violin or similar stringed instrument, on which B B represent the tapering pegs for holding the strings C C, said pegs being inserted in perforations in the said violin-head and provided with heads *b b*, as usual.

C C in Fig. 4 represent the strings attached to the pegs B B. For the purpose of adjusting said pegs in tuning the instrument I use my tuning device, which is constructed as follows: It is composed of a pair of levers or handles D D, pivoted together at E and normally held in the open or expanded position shown in Fig. 2 preferably by a suitable expansive spring F, interposed between the inner ends of said levers D D, as shown in Fig. 2, and in practice I prefer to use a coiled spring; but any other form of spring may be used without departing from the essence of my invention.

In practice I prefer to make on one of the hinged members D, at or near the hinged portion thereof, a stop projection *d*, adapted to abut against a similar projection *d'* on the other member, as shown in Fig. 2, so as to prevent undue expansion of said levers when released from the grasp of the operator.

Intermediate the free ends of the levers or handles D D and their pivotal connection said levers are provided on one side with laterally-extending clamping-jaws D' D', said jaws upon their inner sides being convex, as shown, so that said convex surfaces will fit the usual concaved sides of the tuning-pegs. Each of said jaws is provided upon its inner side or end or that side or end nearest the levers with an inwardly-projecting flange or lip *d''* for the purpose hereinafter set forth. As shown most clearly in Figs. 1 and 4 of the drawings, the levers D D are angular—that is to say, the handle portions of said levers are formed at an angle to those portions of the levers carrying the clamping-jaws—whereby in the act of tuning the handle portions of the levers will stand at an angle to the neck of the violin, and the hand will not come in contact with said neck.

For the purpose of preventing injury or defacement of the peg-heads when clamping the device thereon I prefer to line the interior of the jaws D' D' with felt or other soft material D'', as shown in Figs. 2 and 3.

The outer end of each jaw D is provided with an inwardly-extending lip or rest projection *d''*, (shown in Figs. 2 and 3,) which serves as a stop against the outer end of the peg-head *b* when the clamping device is placed and held on said peg-head when the peg is

being turned and at the same time forced slightly inward toward its bearings in the head of the instrument.

In using the device for tuning the instrument the operator takes hold of the handles D D and places the jaws D′ D′ onto the peg-head *b*, so that the lips *d″ d″* abut against the end of the said peg-head, after which the operator places his or her thumb and first finger on opposite sides of the outside of the jaws D′ D′ and grasps and compresses the handles D D by the hand, thus enabling the peg to be turned easily as well as adjusted longitudinally during the tuning operation.

By the simple device a stringed instrument may readily be tuned with great ease and without the expenditure of much muscular power by young pupils who otherwise would not have the necessary strength to turn and adjust the pegs by hand alone.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

1. A tuning device for stringed instruments, comprising a pair of levers pivotally connected at one end and provided with a pair of clamping-jaws projecting laterally from one side thereof, said clamping-jaws having convex inner surfaces arranged to engage the head of a tuning-peg, substantially as described.

2. A tuning device for stringed instruments, comprising a pair of levers pivotally connected at one end and provided with a pair of clamping-jaws integral with the levers and projecting laterally from the operative faces thereof and arranged to engage the head of the tuning-peg, said clamping-jaws being provided with convex inner faces arranged to engage the end of the head of the tuning-peg whereby the peg may be simultaneously turned and forced inward, substantially as described.

3. A tuning device for stringed instruments, comprising a pair of handles pivotally connected at one end and provided on one side with a pair of clamping-jaws projecting laterally from one side thereof, said clamping-jaws being convex on their inner surfaces to engage the sides of a tuning-peg, and provided at one of their edges with inwardly-projecting flanges for engaging the end of a tuning-peg, said convex surfaces and flanges being provided with linings of soft material, substantially as described.

4. A tuning device for stringed instruments, comprising a pair of handles pivotally connected at one end and provided at one side with a pair of laterally-projecting clamping-jaws arranged to engage the head of a tuning-peg, a spring arranged between said handles near their pivotal point for normally holding the clamping-jaws apart, and coöperating shoulders formed on the pivoted ends of said handles for limiting the outward movement of said clamping-jaws, substantially as described.

5. A tuning device for stringed instruments, comprising a pair of handles pivotally connected together at one end and provided on one side with a pair of laterally-projecting clamping-jaws for clamping the head of a tuning-peg, the handle portions of said levers being formed at an angle to those portions of the levers carrying the clamping-jaws, substantially as described and for the purpose specified.

6. A tuning device for stringed instruments, comprising a pair of levers pivotally connected at one end and provided with a pair of clamping-jaws projecting laterally from one side thereof and with means for limiting the opening of the levers, said clamping-jaws having convex inner faces arranged to engage the head of the tuning-peg, substantially as described.

7. A tuning device for stringed instruments, comprising a pair of levers pivotally connected at one end and provided with a pair of clamping-jaws projecting laterally from one side thereof, means for automatically opening the levers, and with means for limiting the opening of the levers, said clamping-jaws having convex inner faces arranged to engage the head of the tuning-peg, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIS HUTCHINS.

Witnesses:
ALBAN ANDRÉN,
LAURITZ N. MÖLLER.