(No Model.)

J. D. LOPPENTIEN.

VIOLIN.

No. 406,750. Patented July 9, 1889.

Fig. 1.

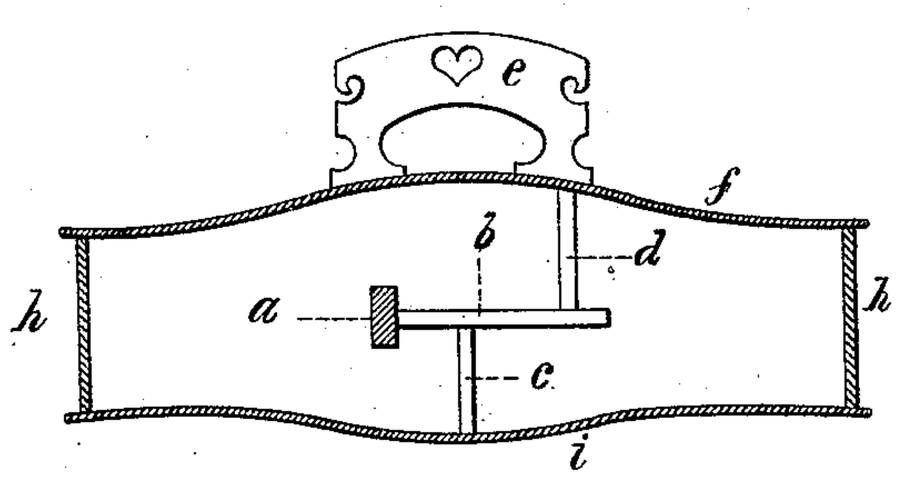
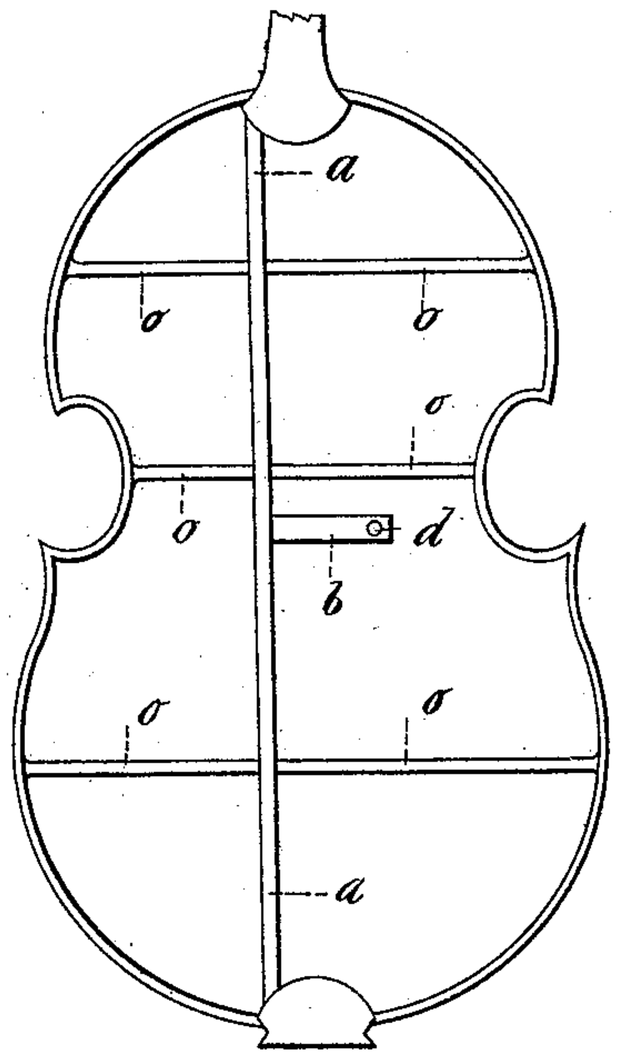


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHAN D. LOPPENTIEN, OF PITTSBURG, PENNSYLVANIA.

VIOLIN.

SPECIFICATION forming part of Letters Patent No. 406,750, dated July 9, 1889.

Application filed July 7, 1888. Renewed June 7, 1889. Serial No. 313,510. (No model.)

To all whom it may concern:

Be it known that I, JOHAN D. LOPPENTIEN, a citizen of the United States, residing at the city of Pittsburg, in the county of Allegheny, in the State of Pennsylvania, have invented a new and useful Improvement in Violins, of which the following is a specification.

My present invention relates to that class of musical instruments which are played with a bow—such as the violin, violoncello, and the like; and it consists in the details of construction and combination substantially as illustrated in the drawings hereinafter described, and subsequently pointed out in the claim.

Figure 1 is a transverse section of a violin, taken near the middle, with my invention attached. Fig. 2 is a plan view of a violin with the front removed.

The center bar of the instrument is designated by *a*, and *o o* indicate the ribs thereof. *e* designates the bridge, and *h* the sides of the instrument. One end of the short lever *b* is let into a mortise in the central bar *a*, slightly behind but nearly under the bridge *e*. The sounding-post *d* stands with one end upon the other end of the lever *b*, and the other end of the sounding-post rests against the inside *f* of the front of the instrument. Under this lever *b*, near its middle, is a post or bridge *c*. One end of this post *c* rests against the lever *b* and the other against the inside of the back *i* of the instrument. Except that the center bar *a* is set a little to one side, and while extending from the neck to the string-block does not touch either the front or back of the instrument, this violin is constructed in the usual and well-known way.

Sometimes in using a violin it is desirable, for the purpose of varying the tone, to increase the tension of the wood of the front and sometimes that of the back. If the post *c* be slipped toward the sounding-post *d*, on account of the conformation of the back *i* the tension of the front *f* will be increased by reason of the increased pressure of the sounding-post *d* upon it, by means of which the tone of the instrument may be varied in one way. The fulcrum of the lever *b* is in the bar *a*, and if the post *c* be slipped away from the sounding-post *d* toward the bar *a* the weight of the pressure will be removed from the front to the back of the instrument, increasing the tension of the back, partly because of the form of the back and partly because the post *c*, approaching nearer to the fulcrum of the lever *b*, exerts greater pressure. Thus the tension may be removed from the front to the back or from the back to the front at pleasure, and thereby the tone of the instrument be varied as circumstances or fancy may require.

This violin is played with a bow in the usual and well-known way.

It is evident that this invention may be applied to violoncellos and all other instruments of like construction.

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

The combination, with the violin *f h i* and the center bar *a* thereof, of the lever *b*, resting with one end in a mortise in said bar *a*, a sounding-post *d*, standing between the other end of said lever *b* and the front *f* of said instrument, and the post *c*, standing between the middle of said lever *b* and the back of said instrument, all substantially as and for the purpose set forth.

In witness whereof I hereunto set my hand in presence of two witnesses.

J. D. LOPPENTIEN.

Witnesses:
JOHN R. BAUM,
WILLIAM J. SIMPSON.