

No. 814,549.

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O. H. LEMBERG.
VIOLIN.

APPLICATION FILED OCT. 23, 1905.

Fig. 1.

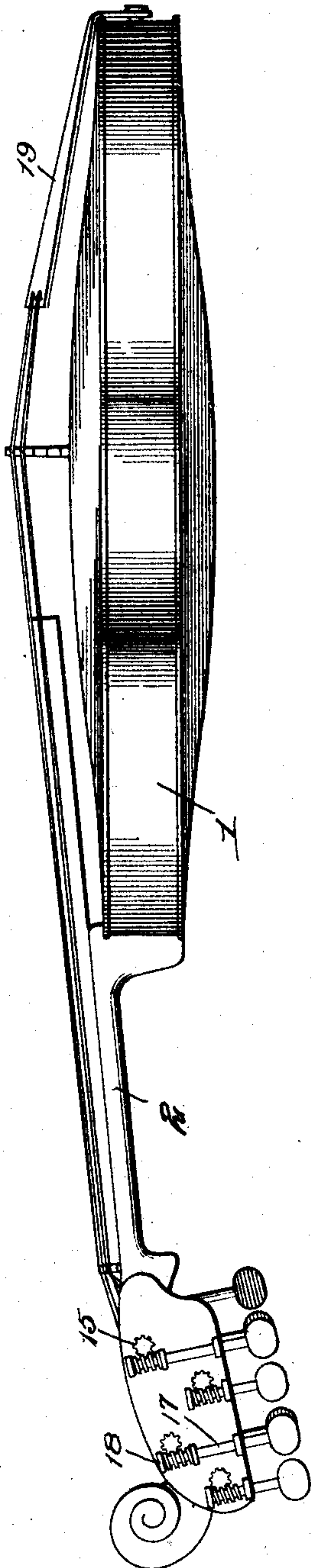


Fig. 2.

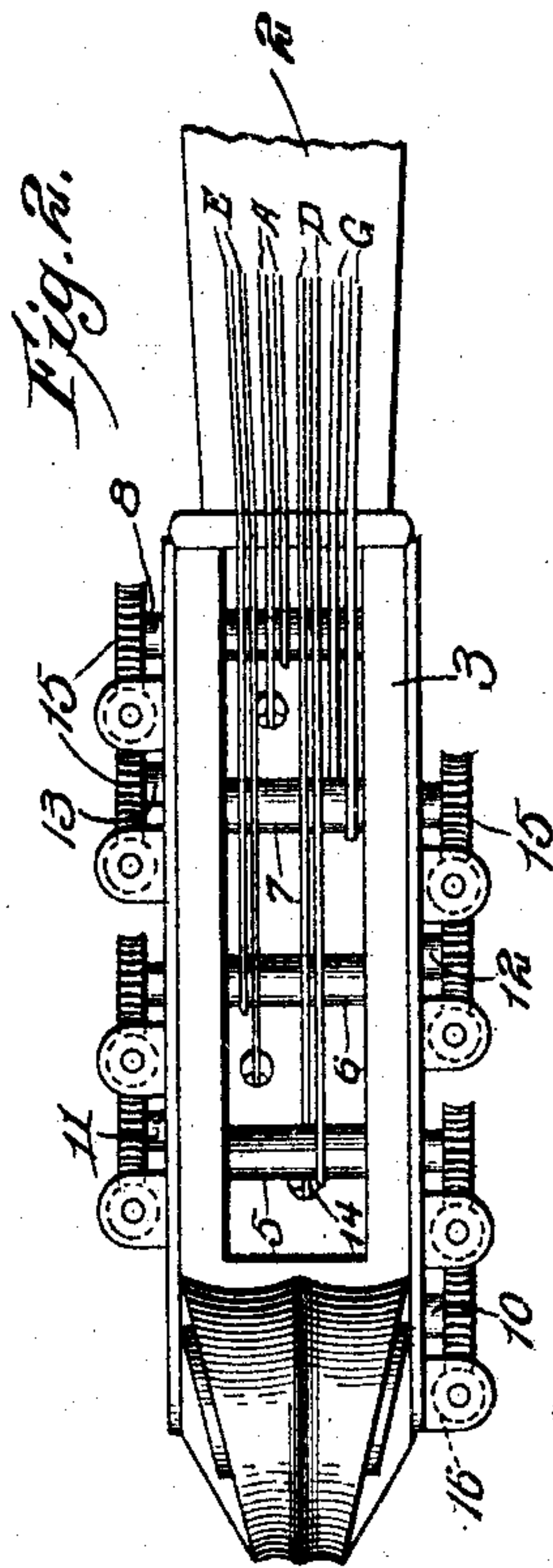


Fig. 4.

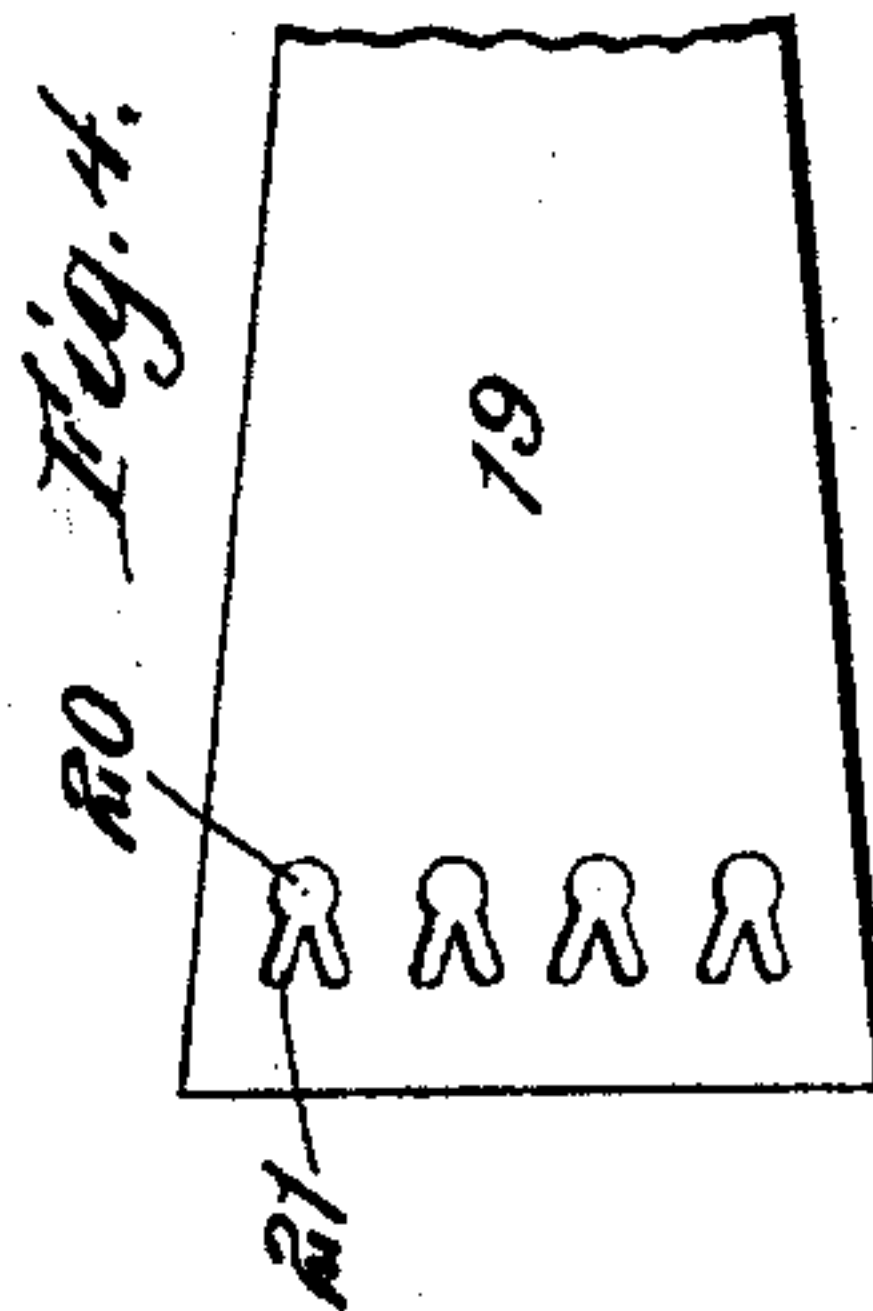
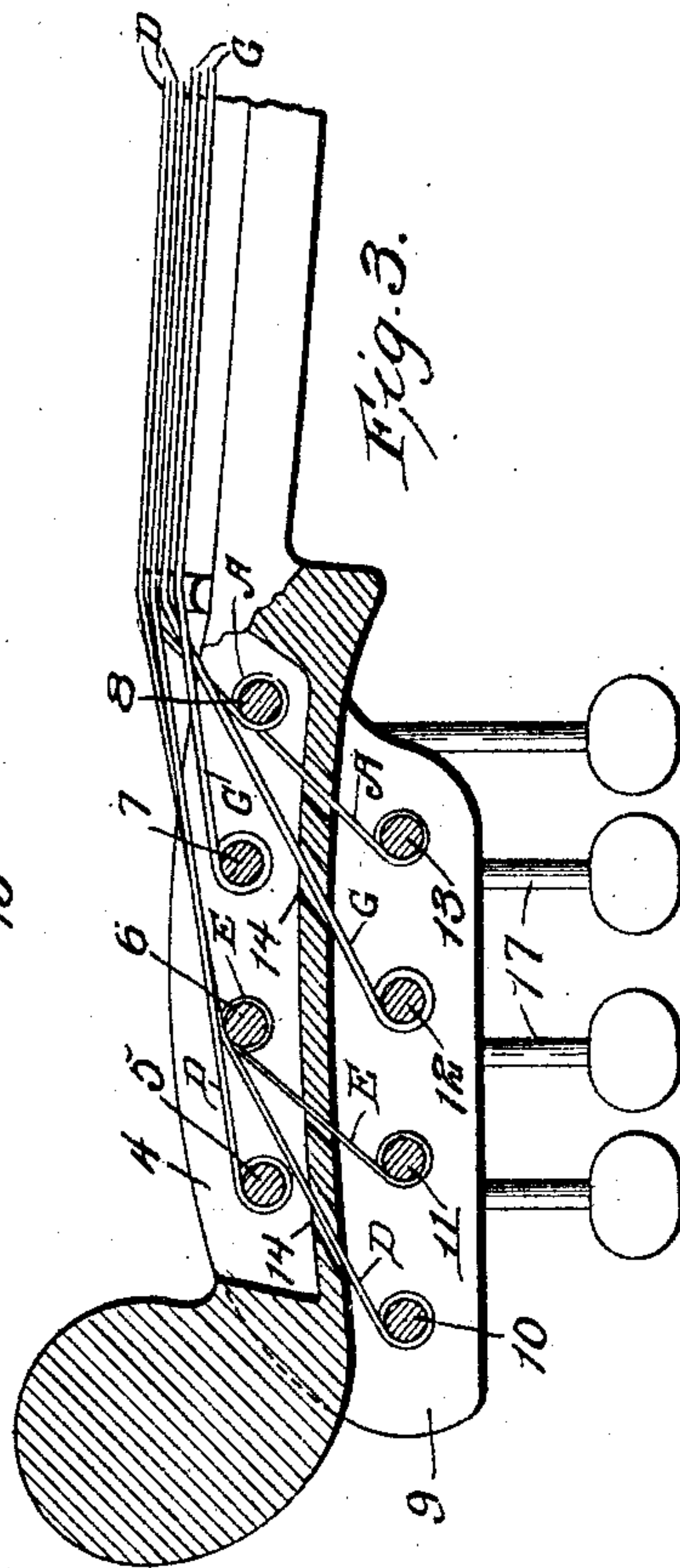


Fig. 3.



Witnesses

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VIOLIN.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, OTTO HERMAN LEMBERG, a citizen of the United States, residing at Lockhart, in the county of Norman and State of Minnesota, have invented certain new and useful Improvements in Violins; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to violins; and its object is to provide a novel arrangement of strings whereby the volume of tone may be considerably increased and produce the effect of two instruments played in unison.

A further object is to provide a novel arrangement of keys for tuning the strings.

With the above and other objects in view the invention consists of certain novel features of construction and combination of parts, which will be hereinafter more fully described, and pointed out in the claim.

In the accompanying drawings I have shown the preferred form of my invention.

In said drawings, Figure 1 is a side elevation of a violin constructed in accordance with my invention. Fig. 2 is an enlarged plan view of the head. Fig. 3 is an enlarged longitudinal section through the head, and Fig. 4 is a detail view of a portion of the tailpiece.

Referring to the figures by numerals of reference, 1 is a violin of the usual construction, the neck 2 of which terminates in a head 3, which has a longitudinally-extending recess 4 therein, through which extend four rotatable keys 5, 6, 7, and 8, respectively. Plates 9 are fastened to the sides of the head and extend a short distance therebelow, and rotatably mounted within these plates and close to the head are four other keys 10, 11, 12, and 13. Apertures 14 are formed within the bottom of recess 4, so that strings can be extended through the head to the keys disposed thereunder. The two end keys 5 and 10 and the keys 7 and 12 have worms 15 secured thereto at one side of the head, and these worms mesh with worms 16, secured to key-operating devices 17, which are mounted within ears 18 on the adjoining side plate 9. The remaining keys are provided with similar worms 15 upon the other side of the head, and these worms are likewise engaged by worms 16 on operating devices 17, provided

for them. The tailpiece 19 has openings 20, which are provided with forks 21, and there are four of these openings and two forks to each opening, therefore adapting the tailpiece to be used with eight strings.

In stringing the violin the two G-strings are fastened at one end within one of the end openings 20 and are then placed in engagement with the two forks of said opening. One of these strings is then secured to the key 7, while the other G-string is extended through the aperture 14 in said key and is fastened to the key 12.

It will be noticed that the operating devices 17 of both of the keys 7 and 12 are located at the same side of the head 3. One of the D-strings is fastened to the key 5, while the other extends through the end aperture 14 and is fastened to the end key 10. The operating devices 17 of these keys 5 and 10 are disposed at the same side of head 3. The A-strings are fastened to keys 8 and 13, which in turn are adapted to be operated from the right side of the head, and the E-strings are secured to keys 6 and 11, which are also actuated from the right side of the head. In tuning the violin the two G-strings are of course brought to the same pitch, and the same is true of the D, A, and E strings, and upon playing on the instrument, as the bow will vibrate twice as many strings as with the ordinary instrument, the volume of sound will be doubled, and, moreover, such sound will simulate the playing of two instruments in unison and excellent effects can be produced.

By adjusting the keys with the means shown by me the strings will not readily get out of tune as a result of the keys slipping.

The side plates 9 can be made of very light material and the instrument will have practically the same appearance as the ordinary violin.

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

The combination with a violin having a recessed head and apertures through the bottom of the recess; of side plates secured to the head, keys rotatably mounted within the plates outside the recess and adjacent the apertures, and keys rotatably mounted within the head and extending through the recess, every key within said recess being paired

with a key below the head, means for rotating the keys, the means of each pair being disposed on the same side of the head, two sets of strings arranged in pairs, the strings of
5 each pair being of the same tone and secured to a pair of keys, one string of each pair extending through an aperture to its key.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OTTO HERMAN LEMBERG.

Witnesses:

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