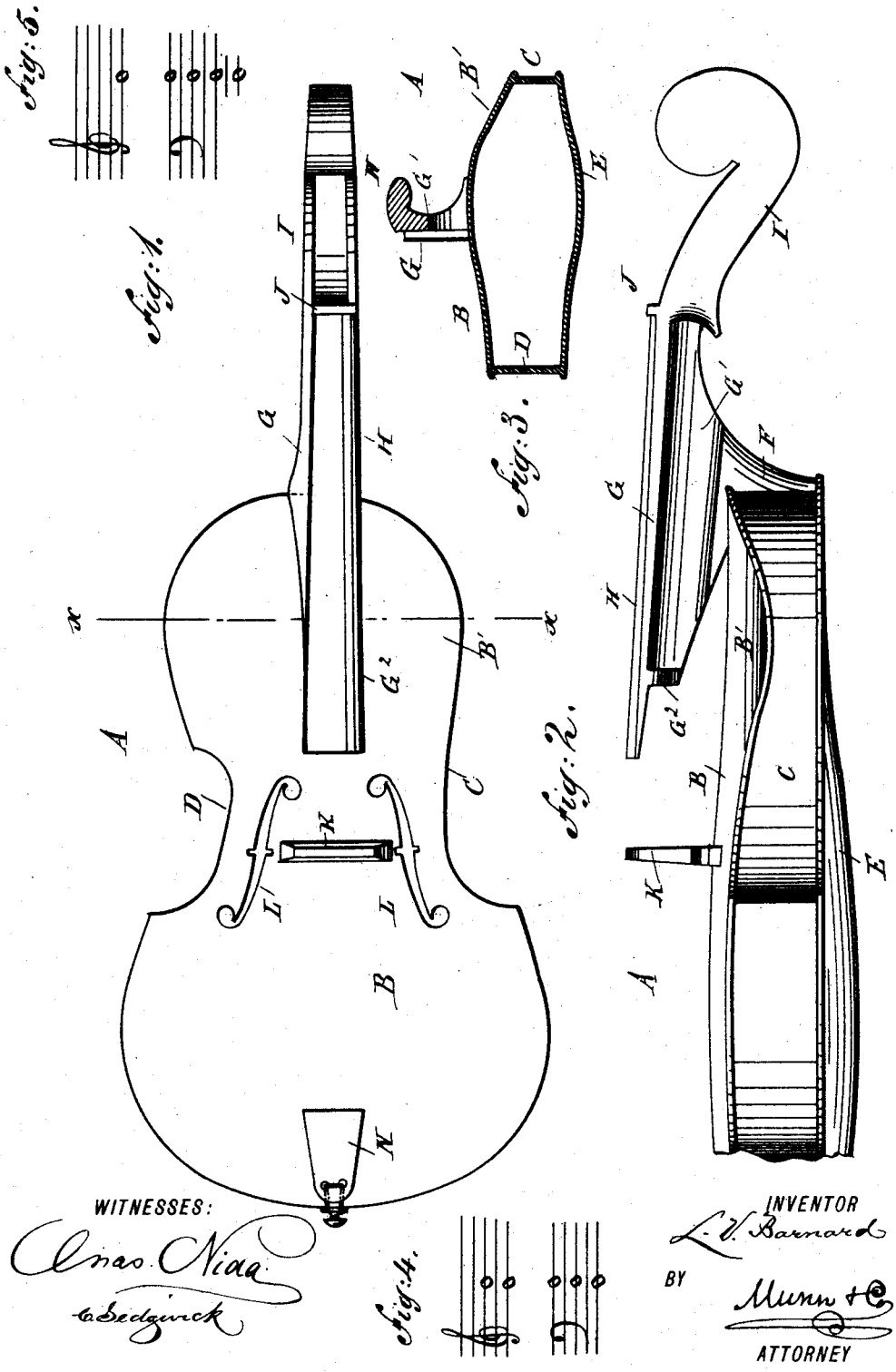
(No Model.)

L. V. BARNARD.

MUSICAL INSTRUMENT.

No. 419,625. Patented Jan. 21, 1890.



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LUCIUS V. BARNARD, OF PITTSFIELD, MASSACHUSETTS.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 419,625, dated January 21, 1890.

Application filed March 1, 1889. Serial No. 301,602. (No model.)

To all whom it may concern:

Be it known that I, LUCIUS V. BARNARD, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented a new and Improved Musical Instrument, of which the following is a full, clear, and exact description.

The invention relates to stringed instruments of the violin class—such as violins, cellos, double bass, &c.; and its object is to provide a new and improved musical instrument which has a superior quality of volume and compass of tone, with great capacity for active execution.

The invention consists of a neck and finger-board elevated above the belly and extending over part of the same to within a short distance of the bridge.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is a side elevation of the same. Fig. 3 is a transverse section of the same on the line $x\,x$ of Fig. 1; and Figs. 4 and 5 are diagrams of the strings.

The improved musical instrument A is provided with a belly B, connected by the sides or ribs C and D with the back E, so as to form the body portion of the instrument. On the upper end of the body is secured the tenon or post F, which supports the neck G, carrying the finger-board H and the scroll or head I. The latter is provided with the usual pins for tuning the strings. The neck G extends downward and upward from the tenon F, so as to project at the lower part over a portion of the belly B, and in the left side of the said neck is formed a curved recess G′, inverted at the top to give convexity to the under side of the neck, and extending from the scroll I to a transverse stop G^2 in the lower end of the said neck G. The curved recess G′ is adapted to receive the thumb of the player's left hand, so as to guide the hand up and down on the finger-board H very conveniently when pressing the strings. I may also make use of other forms of recess than the one shown. The finger-board H projects a short distance below the lower end of the neck G, so as to be within a short distance of the bridge K. I may make the neck to serve the purpose of and to be identical with the finger-board. Between the upper end of the finger-board and the commencement of the scroll I is placed the usual nut J, over which the strings pass.

At each side of the bridge K, in the belly B, are formed the usual **S**-shaped side holes L, and on the lower end of the belly B is arranged the end-pin and usual tail-piece N, to which the strings are fastened. The upper end of the left rib C of the body of the instrument is **S**-shaped, as is plainly shown in Fig. 1, while the other side D is provided with the usual waist, as shown. The part B′ of the belley B over the **S**-shaped upper end of the rib C is flattened downward, so as to give sufficient room for the operator's hand, wrist, and forearm, so as to move the same in proper position unobstructed from the lowest to the highest notes on the finger-board H.

The instrument is preferably provided with five strings tuned by fifths, the higher strings corresponding in pitch to the middle and upper registers of the soprano voice, to which they also bear a striking resemblance in quality of tone.

The body part of the instrument is about twenty-three inches long, and with the neck and scroll included measures about thirty-five inches. The width of the large end of the body is fourteen inches and the small end about ten inches. The depth of the instrument is about three inches, with a moderate swell in the belly and back.

The strings are arranged as shown in Fig. 4, and the first string is preferably about three-fourths the size of the A violin-string, the second string is three-fourths the size of the D violin-string, the third string is about three-fourths the size of the D cello-string, the fourth is a small G cello-string, and the fifth is a small C cello-string. I may, however, remove the B or first string and make E to be the first string, as shown in Fig. 5, and thus the instrument receives a capacity to perform cello parts per-

fectly and with great advantage in fingering, the stops being much shorter and easier to reach than those on the cello.

It will be seen that by elevating and extending the neck over the belly an uninterrupted passage under the neck or finger-board is formed for the thumb, whereby the performer may guide his hand and carry it deftly from the first to the highest position without obstruction at the shoulder, where the neck joins the body, and where, on all other instruments of this class, the thumb is obstructed in passing to the highest positions on the finger-board.

The special form of the ribs C and the bent-down part B′ of the belly B permits the performer to move his hand and arm easily to any desired position on the finger-board.

The instrument enables the performer to bring into action every note the strings are capable of with wonderful facility, giving a control of the fingering unapproached by any other instrument of its class. The sweet, rich, mellow, and sympathetic quality, with the fullness and great resonance of tone imparted by the large vibratory surfaces of the body, make the instrument of special value. The instrument possesses a distinctive tone throughout, it being of a marked difference from that of the violin, viola, or cello.

When played, the instrument is held in the lap with the back toward the performer, the scroll in front of the left shoulder, and the lower right rib of the side resting against the right leg just above the knee, the first string being at the left. By attaching a small strap to the end pin N and the opposite end of the strap to the chair of the performer, the strap passing under the instrument and over the left side of the lap, the instrument is held with the utmost ease and for a great length of time without becoming tiresome. By passing a strap under the extended part of the neck and over the performer's neck the instrument is easily played while standing or walking.

The remarkable facility the instrument affords for rapid and varied execution, its capacity for two or three parts at once, its effectiveness in and particular adaptation for pizzicato, harmonics, and for all the exquisite effects of the glide that the violin is capable of, together with its great compass of tone, reaching from the lowest notes of the cello to near the highest tones of the violin, and the convenience and gracefulness with which it is held during performance, either by a lady or gentleman, eminently adapt the instrument for solo performance, accompanying the voice, and other varied and important uses.

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

1. A stringed musical instrument of the violin class, provided with a finger-board elevated above the belly and extending over part of the same, and provided with a continuous passage for the thumb, substantially as shown and described.

2. A stringed musical instrument of the violin class, provided with a neck elevated above the belly and extending over part of the same, and provided with a passage for the thumb, substantially as shown and described.

3. In a stringed musical instrument of the violin class, the combination, with the body part, of the neck secured on the upper end of the said body part and elevated over the belly and extending over part of the same, said neck being also provided with a groove or space for the reception of the thumb, a finger-board held on the said neck, or said neck serving alone as finger-board and extending to within a short distance of the bridge, substantially as shown and described.

4. In a stringed musical instrument of the violin class, the combination, with the body part having the upper end of one side **S**-shaped and part of the belly of this side flattened down, of a neck secured on the upper end of the body part, elevated above the belly and extending over part of the same, and provided with a passage for the thumb, substantially as shown and described.

5. In a stringed musical instrument of the violin class, the combination, with the body part, of a neck secured to the body part, elevated above the belly and extending over part of the same, and provided with a passage for the thumb, a finger-board secured on the neck and extending to within a short distance of the side of the bridge, and a scroll secured on the end of the said neck and carrying the usual pins for tuning the strings, substantially as shown and described.

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Witnesses:
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