

No. 668,060.

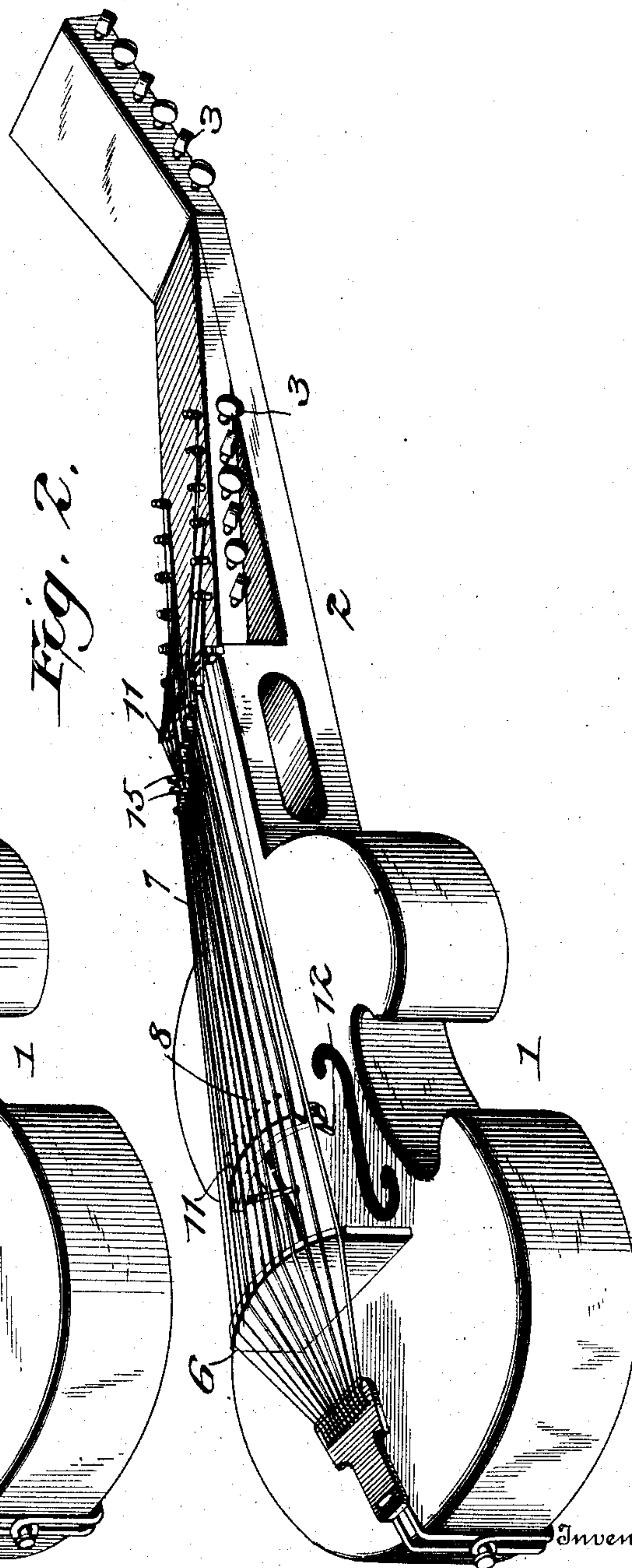
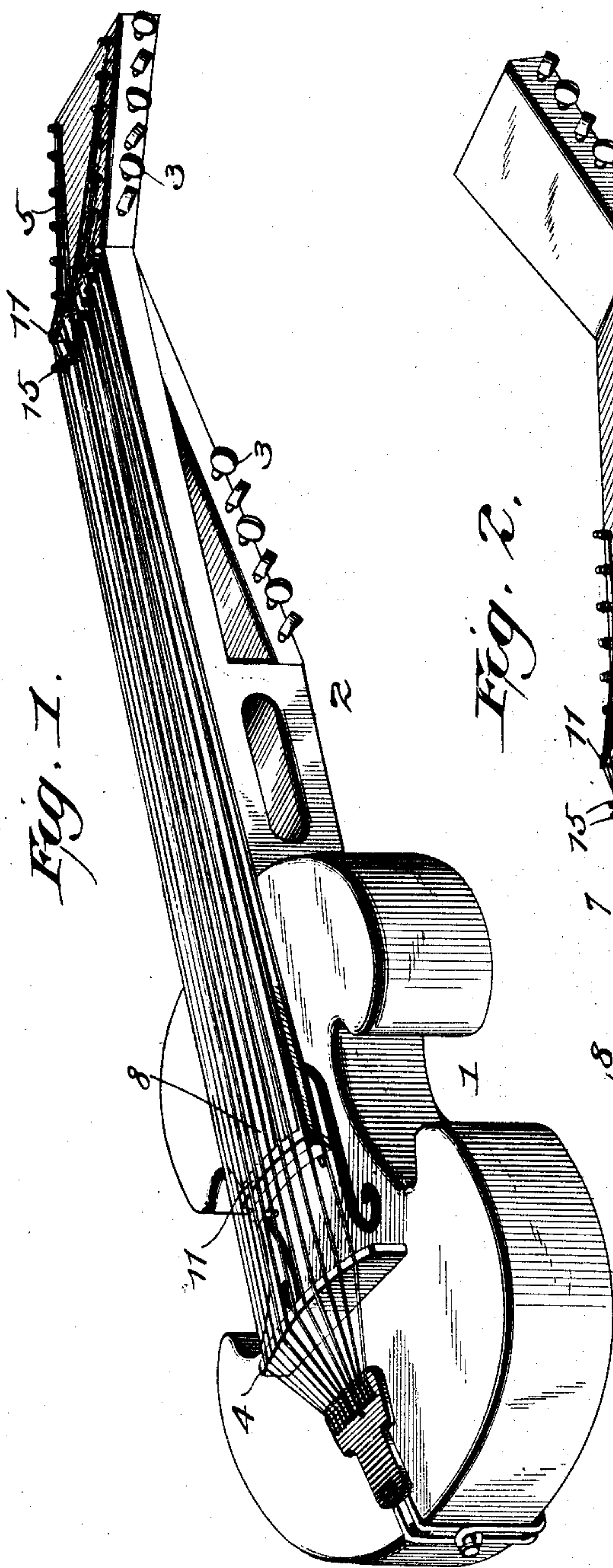
Patented Feb. 12, 1901.

M. SHELTON.
STRINGED MUSICAL INSTRUMENT.

(Application filed July 23, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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STRINGED MUSICAL INSTRUMENT.

(Application filed July 23, 1900.)

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2 Sheets—Sheet 2.

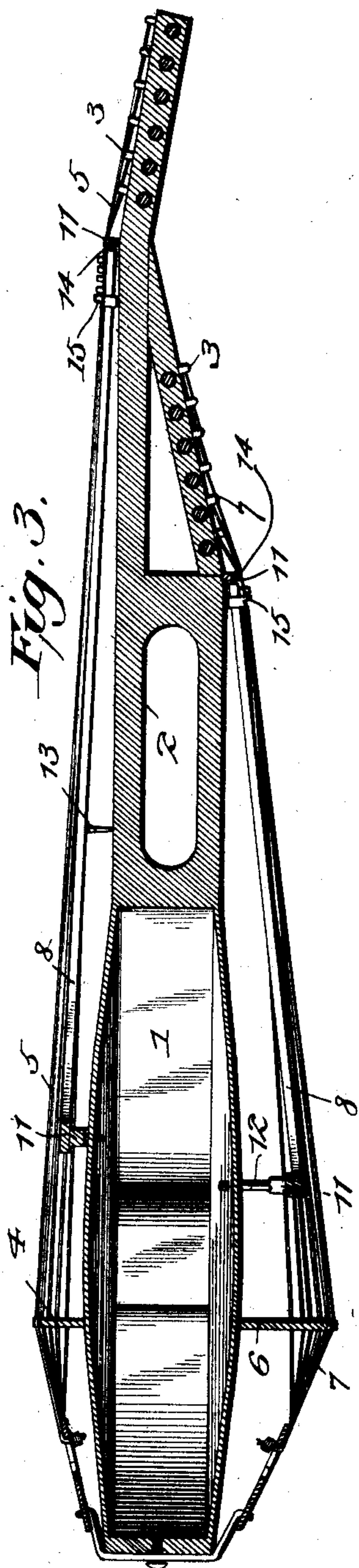


Fig. 3.

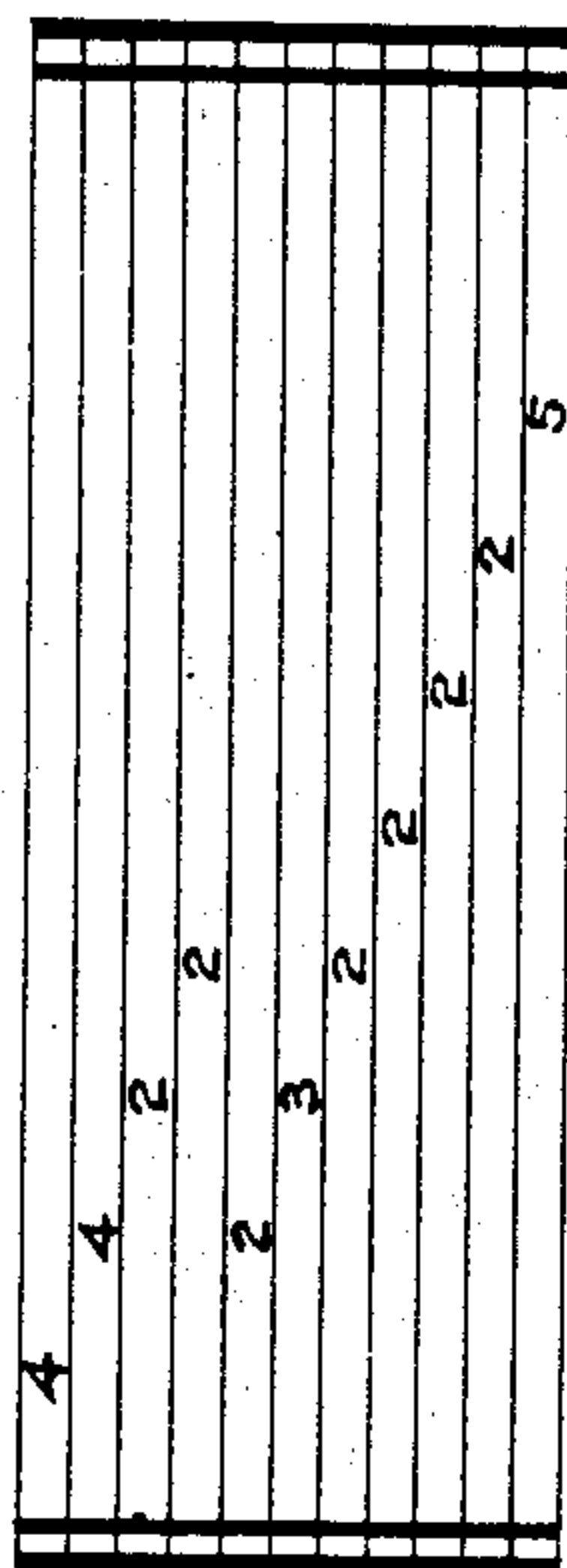


Fig. 6.

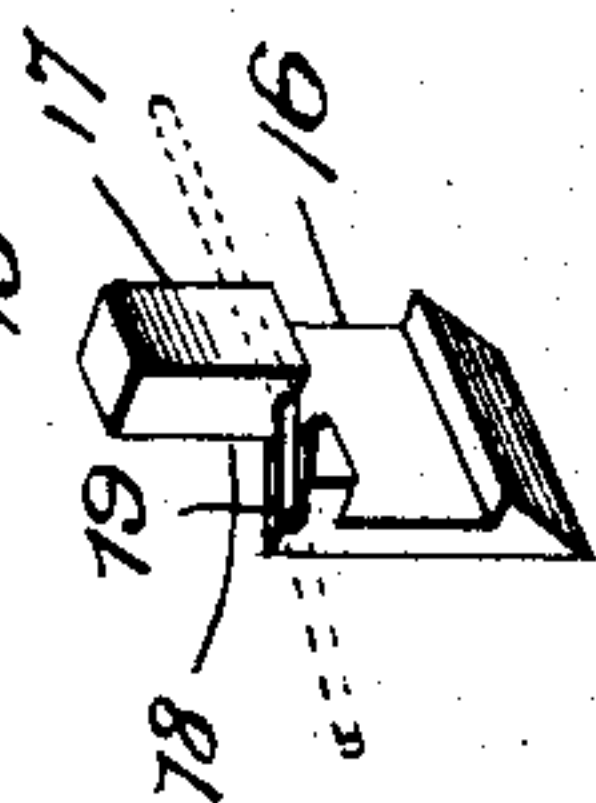


Fig. 5.

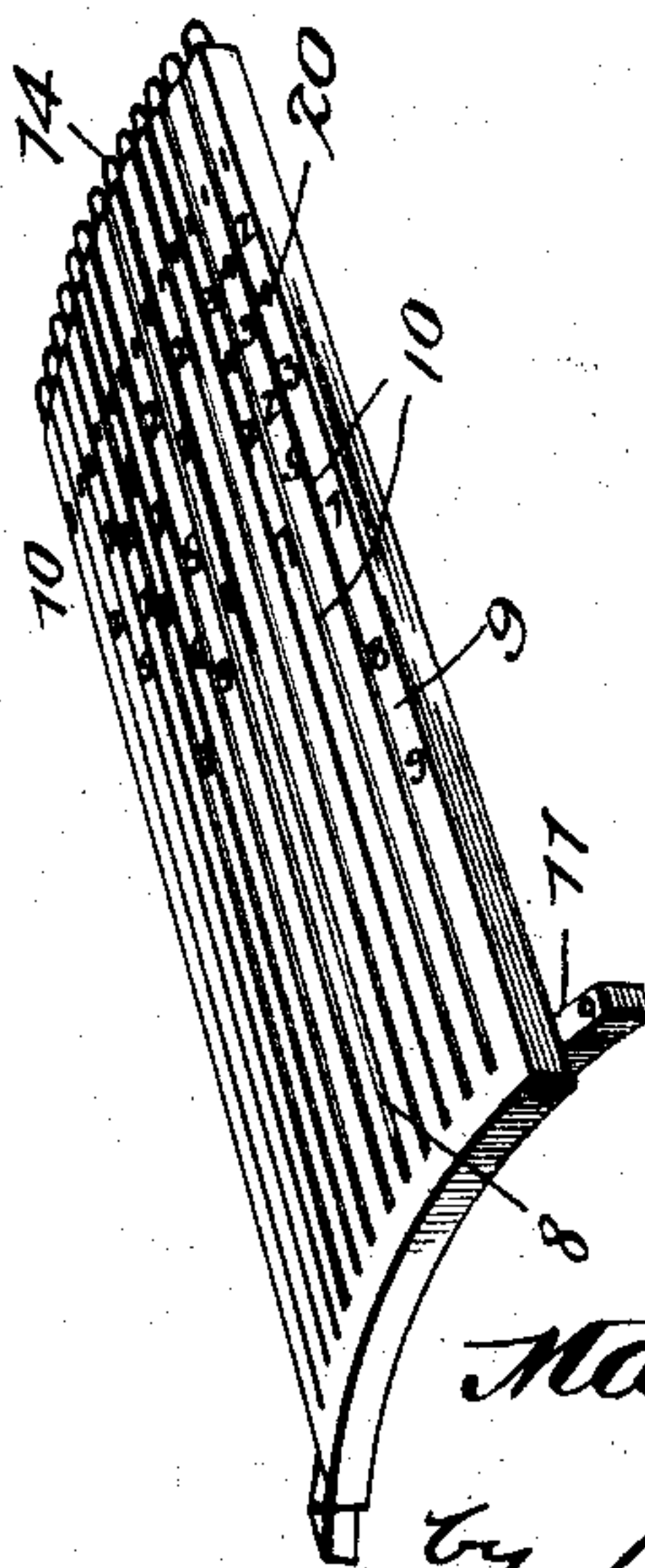
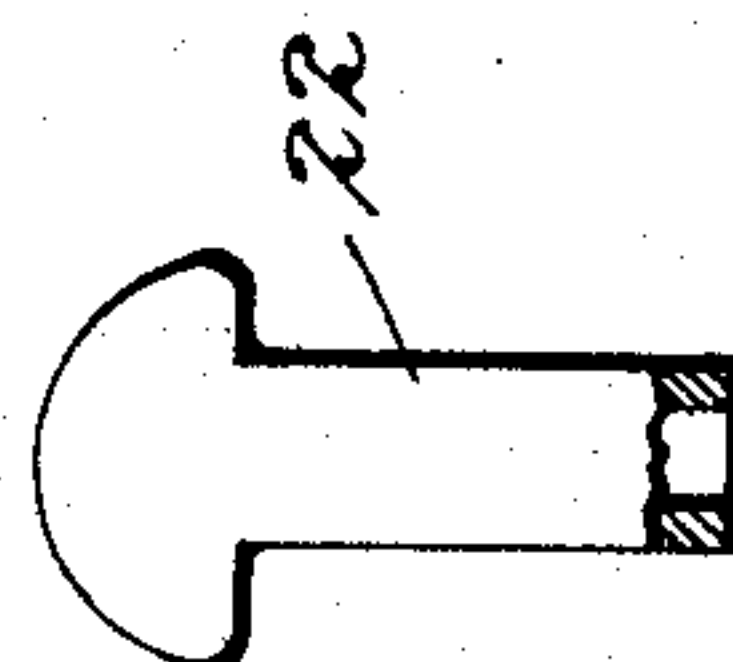


Fig. 4.



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UNITED STATES PATENT OFFICE.

MARK SHELTON, OF NEIER, MISSOURI, ASSIGNOR OF ONE-HALF TO JOHN
ALTENMELLER, OF SAME PLACE.

STRINGED MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 668,060, dated February 12, 1901.

Application filed July 23, 1900. Serial No. 24,559. (No model.)

To all whom it may concern:

Be it known that I, MARK SHELTON, a citizen of the United States, residing at Neier, in the county of Franklin and State of Missouri, have invented a new and useful Stringed Musical Instrument, of which the following is a specification:

My invention relates to musical instruments, and has for its object to produce an instrument which may be provided with more than one set of strings, either one or both of which may be played upon without the usual fingering; and it consists in the improved construction and novel arrangement of parts of such an instrument, as will be hereinafter more fully set forth.

In the accompanying drawings, in which the same reference-numerals indicate corresponding parts in each of the views in which they occur, Figures 1 and 2 are perspective views of my improved musical instrument. Fig. 3 is a longitudinal sectional view of the same. Fig. 4 is a perspective view of one of the fret-boards detached. Fig. 5 is a perspective view of one of the frets. Fig. 6 is an illustration of the method of writing the music to be played upon my instrument, and Fig. 7 is a detail view.

In the drawings I have shown my improved instrument arranged as a violin and guitar, the violin being upon one side and the guitar upon the other. In constructing my instrument I form the usual hollow body portion 1 in any desired shape and dimensions. The neck 2 extends therefrom and is provided with the usual keys 3.

As the bridge 4 upon the guitar side of the instrument is usually low and comparatively flat on top, the neck upon that side of the instrument preferably extends substantially in a straight line with that side of the body and has its outer end bent slightly to the rear for the reception of the keys for the strings 5. As the bridge 6 upon the violin side is generally higher and curved on top and as the violin-strings 7 are shorter than the guitar-strings, the neck upon the violin side, or the portion thereof provided with the keys, can be arranged at an angle to the neck upon the guitar side and joined thereto near its outer end.

Each side of the instrument is provided with a fret or finger board 8, which is formed from a suitable piece of material, preferably metal, which is divided into sections or strips 9, which extend from end to end thereof and are separated at a suitable distance apart by means of slots or spaces 10. The strips preferably taper from the rear to the front, so as to correspond to a certain extent with the directions of the strings, which are arranged directly above them. The ends of the strips are preferably secured to suitable cross-pieces 11, which may be secured to the instrument in any suitable manner—as, for instance, by means of screws at the forward ends and by means of legs 12, as shown at the rear of the sections on the violin side.

Owing to the extreme length of the strips upon the guitar side I find it desirable to provide the central portions with pins 13, which extend into the neck of the instrument, and thereby prevent lateral movement of the sections. The rear cross-piece of the strips is preferably formed upon or permanently secured thereto, but the cross-piece in front may be detachably secured to the strips, the ends of the strips being preferably reduced and shouldered, as shown at 14, to fit within perforations in the cross-piece.

Arranged in the spaces between the strips are movable blocks or pins 15, which are movable longitudinally along the strips, and thereby serve as frets for the strings. Each of the blocks is recessed upon one side, as shown at 16, to fit between the different strips and has its upper edge provided with a projection 17, by means of which it may be moved upon the fret-board. The upper edge is cut away substantially at its center, as shown at 18, so that the string may pass under the portion of the upper edge provided with the upward extension and over the top of the remaining portion, said portion being preferably slightly grooved or notched, as shown at 19, for the reception of the string. The upper face of each strip is provided with a series of characters or numbers extending from the lower end up toward the bridge to indicate the positions to which the different frets must be moved to arrange the instrument for being played upon without the necessity of the usual fingering.

In using my instrument the frets are all moved down to the first character upon the fret-board and the instrument is tuned as follows: The first string is tuned to correspond with the ordinary pitch or sound G, the second string to A, the third, fourth, and fifth strings to D, and the remaining strings to E, there being preferably twelve strings upon each side of the instrument. After the instrument has been tuned the piece of music to be played is examined and the different frets are moved upon the board to the points or characters thereon which correspond with the characters upon the staff upon which the music is written, the staff being provided with as many spaces as there are strings upon the instrument. I prefer to move the frets by means of a key 22, although they may be moved back and forth by means of the extension thereon, which projects above the strings. After the frets have been arranged in this manner to correspond with the music to be played the performer draws the bow or fingers the strings, as the case may be, the time and frequency of the different notes being indicated by the usual characters upon the staff. In this manner the location of the character upon the staff will always indicate the string corresponding with the space within which the character is placed, so that the same tone is always produced for a character within the corresponding space at any point along the staff.

In using a combined instrument, as shown in the drawings, it is preferably supported upon one end, with one hand of the performer holding the neck in such manner that the strings upon the guitar side may be operated thereby while the bow is being drawn back and forth upon the other side by the other hand. In this manner the two instruments may be played in unison or one of them can be played as an accompaniment to the other; but when the instrument is only provided with one set of strings it can be held in the usual manner of holding such instruments and played in the same manner, except that there is no need for any fingering of the strings. Instead of arranging the instruments for violin or guitar it is evident that the same principle can be applied to mandolins and other stringed instruments.

As above described, it will be seen that by means of my improved instrument correct music may be produced by any person without any special musical training or education, as all that is necessary is to arrange the frets to correspond with the numbers upon the music to be played and then manipulate the strings by means of the bow or fingers, the same string always producing the same tone throughout the entire piece of music. After any piece has been played any other piece of music arranged in the same key may be

played by simply rearranging the frets to correspond with the characters indicated at the beginning of the staff of music.

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

1. In a stringed instrument, the combination, with a body, of strings thereon, means for changing the tension of the strings, a movable fret for each string, and a support for the frets provided with characters to indicate the positions of the different frets, substantially as described.

2. In a stringed instrument, the combination, with a body provided with a neck, of strings thereon, keys at the end of the neck for changing the tension of the strings, a longitudinally-slotted support one end of which rests on the body of the instrument and the other end on the neck, and movable frets upon the support, there being a fret for each string, substantially as described.

3. In a stringed instrument, the combination, with a body provided with a neck and keys, of a longitudinally-slotted support upon the neck, and movable frets upon the support, each fret being recessed upon one side and cut away upon its upper edge at one corner to form a projection in position to engage with the strings of the instrument, the projecting portion being separated from the remaining portion of the fret which lies on the same side of the recess as the projection for the passage of the string from under the projection to over the remaining portion, substantially as described.

4. In a stringed instrument, the combination, with a body provided with a neck and keys, of a fret-board comprising a series of tapering strips and a cross-piece at each end, one of the cross-pieces being perforated and the ends of the strips being reduced and shouldered to engage therewith, and movable blocks between the strips, each block being adapted to engage with one of the strings of the instrument, and each strip being provided with characters upon its upper face, substantially as described.

5. The combination, with a stringed instrument, of a support, the upper face of which is provided with characters, movable frets upon the support in position to engage with the strings of the instrument, and a staff of music, the beginning of which is provided with characters to correspond with a portion of the characters upon the instrument, and the remaining portion is provided with characters to indicate the time of the music, substantially as described.

MARK SHELTON.

Witnesses:

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AUG. BAUR.