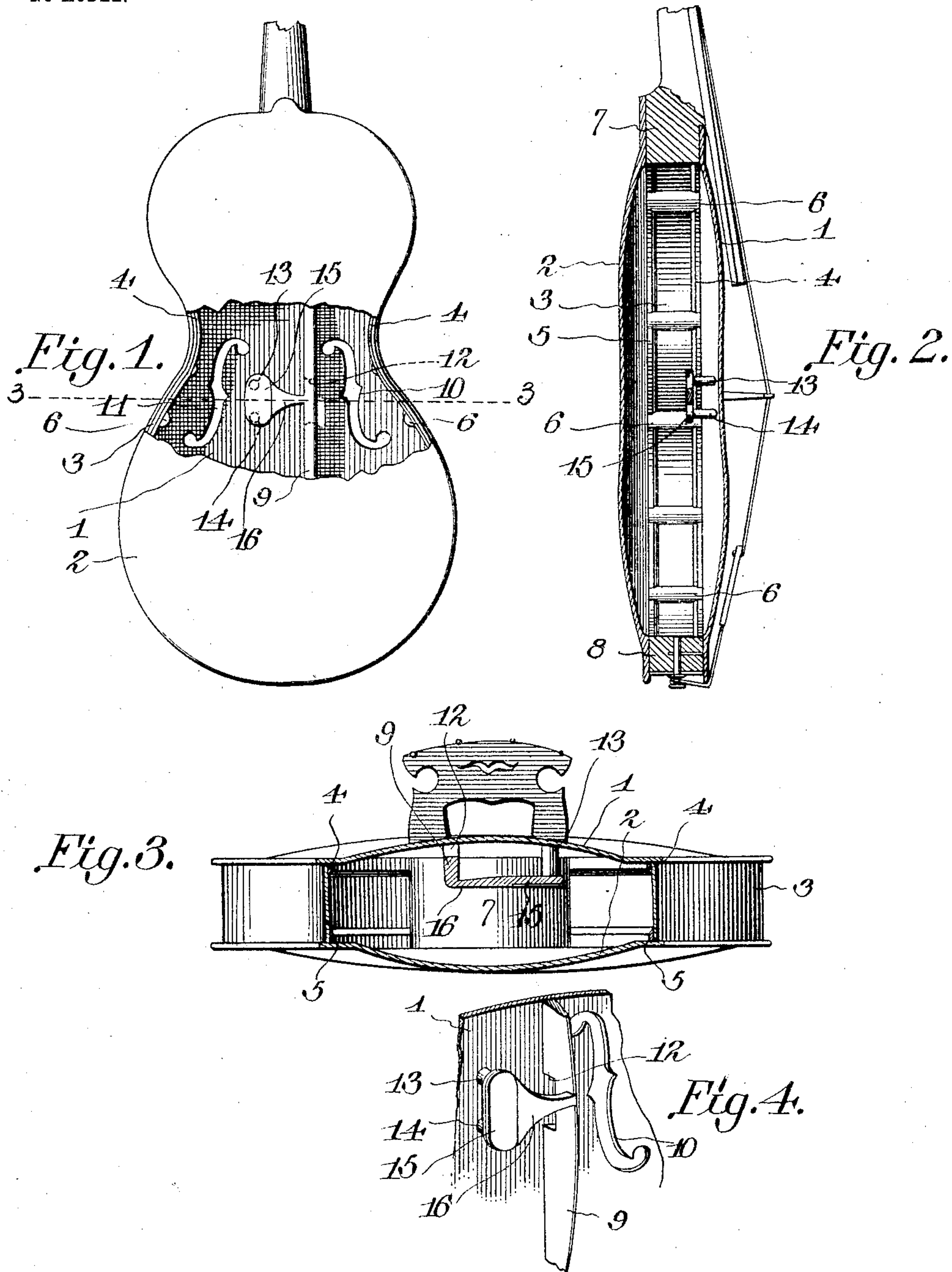


No. 776,933.

PATENTED DEC. 6, 1904.

U. C. PIPES.
MUSICAL INSTRUMENT.
APPLICATION FILED DEC. 12, 1903.

NO MODEL.



Witnesses
E. J. Stewart
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UNITED STATES PATENT OFFICE.

URIAH CLINTON PIPES, OF ARCADIA, LOUISIANA.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 776,933, dated December 6, 1904.

Application filed December 12, 1903. Serial No. 184,936. (No model.)

To all whom it may concern:

Be it known that I, URIAH CLINTON PIPES, a citizen of the United States, residing at Arcadia, in the parish of Bienville and State of Louisiana, have invented a new and useful Musical Instrument, of which the following is a specification.

This invention relates to violins; and the primary object thereof is to provide a musical instrument which will prove capable of producing a rich resonant tone without liability of the tone becoming marred by conflicting sound-waves intersecting one another. As is well known, the excellence of tone quality depends upon the uniformity of the vibration of the sound-waves and the equal distribution thereof in all parts of the sound-box previous to their escapement through the *f*-holes. As the top and bottom plates of the sound box or harp of the violin distribute the major portion of the sound-waves, it is desirable that they work in unison; but at the same time provision must be made for the proper disposition of the bridge upon the top plate of the instrument.

The construction of the invention whereby the desired result is accomplished will be clearly described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a rear elevation of a violin, parts being broken away to illustrate the interior thereof. Fig. 2 is a vertical longitudinal sectional view of the violin. Fig. 3 is a cross-sectional view through the violin looking toward the neck, taken on the line 3 3 of Fig. 1; and Fig. 4 is a fragmentary perspective view of a portion of the sound-board, showing the sound-table attached thereto.

The sound-box consists of the usual belly and back plates 1 and 2, connected by a continuous intermediate rim or band 3. On either side of the sound-box is a lining comprising two spaced strips 4 and 5, glued or otherwise fastened to the adjacent rim-band portion, so as to become practically an integral part of the sound-box. These spaced strips 4 and 5 are further connected by a plu-

rality of spaced transverse sound-posts 6, which snugly fit against the strips and against the inner wall of the band, the strips and sound-posts adding considerable strength to the sound-box, as well as materially contributing to the successful distribution of the sound-waves within the resonant area of the sound-box. The sound-posts 6 are preferably equidistantly spaced except at points near the respective ends of the box, so that the vibrations will be distributed from the belly of the violin at regular intervals. The distances between the posts 6 near the respective ends of the box are greater than at the intermediate portions, because the head and tail blocks 7 and 8 will compensate for the differences in distance between the posts.

The belly or front plate 1 of the violin-body is provided with a longitudinally-disposed sound-bar 9 at one side of the longitudinal center of the belly-plate and between the *f*-holes 10 and 11. The bar 9 is provided with an intermediate slot or cut-away portion 12, which is so disposed with relation to the remaining parts of the instrument that it will be positioned immediately below one leg of the violin-bridge, permitting the vibration thereof corresponding to the vibration of the strings imparted by the bow. The other leg of the bridge will rest upon the belly-plate immediately between the two interior sounding-posts 13 and 14, which support the transversely-disposed sounding-table 15, illustrated as comprising a disk connected to the sound-bar 9 by a rigid constricted connecting-bar 16.

Instead of the usual method of mounting the bridge I have found it greatly advantageous to permit both legs of the bridge to vibrate, and to this end it is contemplated to place the bridge directly over the space between the two sound-posts and over the slot in the bar. Such an arrangement will permit the vibration from the strings to be communicated to the sound-box immediately over the posts 13 and 14, where they will collect and be distributed to the bar 9 and then to the sound-box, each and every part contrib-

uting to produce a smooth, even, but resonant tone with an absence of inharmonious or false tone values.

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

1. In a violin, a sound-bar carried by the belly of the violin, a sound-post carried by the belly of the violin and having one end connected to the sound-bar.
2. A violin having a longitudinal sound-bar connected to and depending from the belly of the violin, the upper edge of the sound-bar having an opening extending at opposite sides of the adjacent leg of the bridge, sound-posts depending from the belly at opposite sides of the other leg of the bridge, and a cross-bar connecting the sound-posts and the sound-bar in alinement with the bridge.
3. In a violin, a sound-bar therein with a slot, and spaced sound-posts connected to the belly and to the sound-bar.
4. A violin having two spaced sound-posts

secured to the belly thereof, a sound-table carried by the free ends of the posts and a sound-bar connected to the table.

5. A violin having two spaced sound-posts, a sound-bar having a slot alining with the space between the posts, and a sound-table connected to the posts and to the bar.

6. A violin comprising a back, a belly, a rim separate from and connected to the back and belly, liner-strips separate from the rim and connected to the inner face thereof at the top and bottom edges of the rim, and a peripheral series of sound-posts separate from the rim and the strips and lying against and connected to said elements.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

URIAH CLINTON PIPES.

Witnesses:

J. A. DORMAN,

W. U. RICHARDSON.