No. 625,663. Patented May 23, 1899.

R. W. EVERTON & W. FROST.

MUSICAL INSTRUMENT.

(Application filed Jan. 22, 1898.)

(No Model.)

Fig. 1.

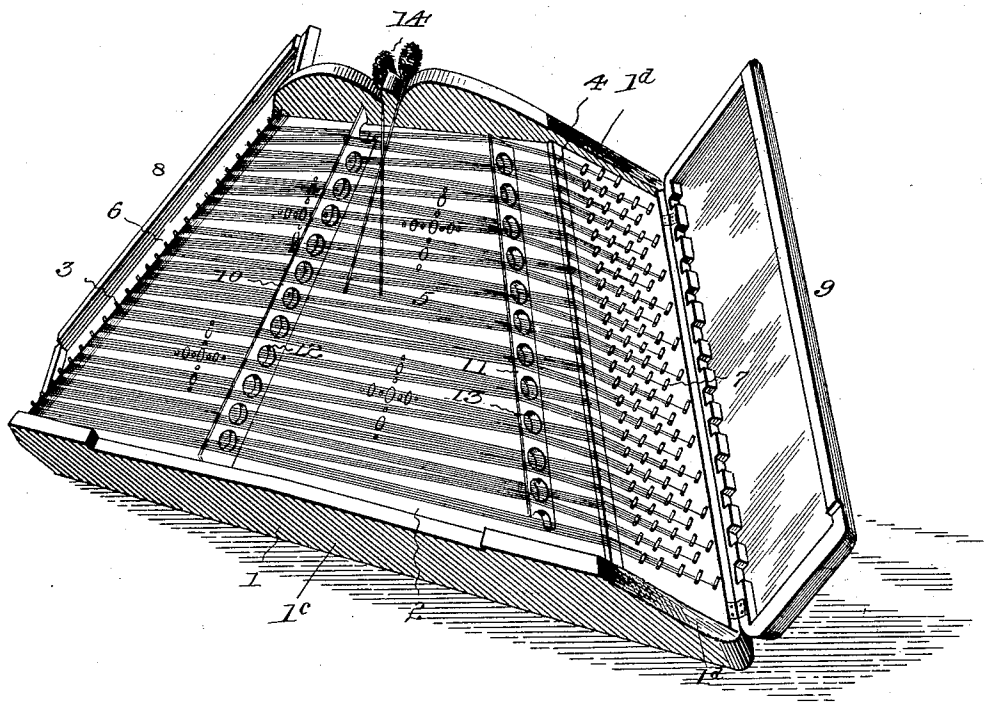
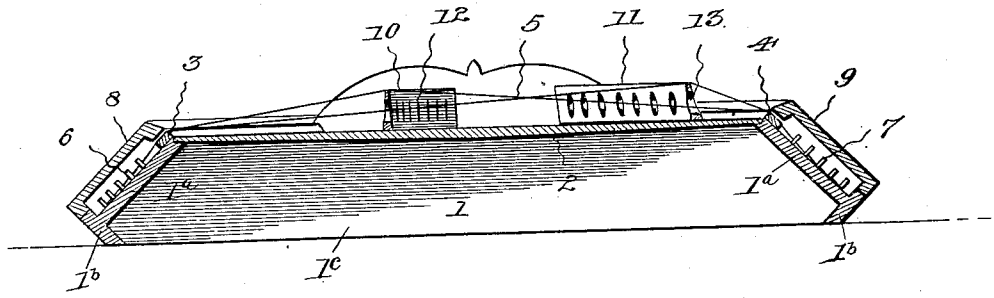


Fig. 2.



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UNITED STATES PATENT OFFICE.

ROLAND WILLIAM EVERTON AND WILLIAM FROST, OF TROY, NEW YORK.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 625,663, dated May 23, 1899.

Application filed January 22, 1898. Serial No. 667,600. (No model.)

To all whom it may concern:

Be it known that we, ROLAND WILLIAM EVERTON and WILLIAM FROST, citizens of the United States, residing at Troy, in the county of Rensselaer and State of New York, have invented a new and useful Musical Instrument, of which the following is a specification.

Our invention relates to musical instruments of the harp, cithern, and analogous types, and has for its object to provide a simple, compact, and efficient construction and arrangement of parts designed to facilitate the use of strikers as playing mediums and to insure the maximum resonance of tone, the construction and arrangement of the sounding-board being such as to adapt the instrument to be supported by any convenient base, such as a table.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of an instrument constructed in accordance with our invention. Fig. 2 is a sectional view of the same, taken parallel with the strings.

Similar numerals of reference indicate corresponding parts in both figures of the drawings.

The casing 1 of the instrument embodying our invention consists of upwardly and inwardly inclined side walls 1^a, terminating at their lower edges in inturned flanges 1^b, which are adapted to rest upon a supporting-surface, such as that of a table, and vertical end walls 1^c, which connect said side walls and preferably extend above the same to form terminal beveled edges 1^d. The upper edges of the side walls 1^a are rabbeted or otherwise provided with seats for the reception of the edges of a sounding-board 2, preferably swelled or thickened toward its center or between its points of support to increase the resonance of the instrument, and secured to the side walls 1^a, contiguous to the side edges of the sounding-board, are string-rests 3 and 4, which preferably converge toward one end of the casing and over which extend the strings 5. The pegs 6 and 7, to which the strings are terminally attached, are seated in the diagonally disposed or inclined side walls 1^a below the plane of the string-rests 3, and hinged at their outer edges to the upper edges of the flanges 1^b of said side walls are covers 8 and 9, adapted to conceal the upper surfaces of said side walls and the pegs mounted, respectively, therein, the inner edges of said covers being held from contact with the string-rests by the contact of the ends of said covers with the beveled terminal portions 1^d of the front and rear walls. These covers in the manipulation of the instrument also perform the functions of arm-rests, while giving access to the pegs for the purpose of tuning the instrument. The securing-pins 6 and tuning-pegs 7 are preferably arranged, respectively, upon the opposite walls 1^a.

Disposed between the string-rests in relatively-inclined positions and respectively at different distances from said rests are treble and bass bridges 10 and 11, having openings 12 and 13, which are respectively alined with different groups of strings. The instrument is preferably strung with two or more unison strings for each degree or note, the number in the construction illustrated ranging from three to five, and being preferable by reason of adding volume to the tones produced. Four unison-strings are used, preferably, for the majority of the bass notes, while five are preferable for the treble notes. The treble strings, after leaving the rest 3, pass over the treble bridge 10 and thence to the rest 4 through the openings 13 in the bass bridge, while the bass strings pass from the rest 3 through the openings 12 in the treble bridge and thence over the bass bridge 11 to the rest 4. The bass bridge is arranged at a less interval from the rest 4 than is the treble bridge from the rest 3, whereby the bass strings have an increased operative length, while the exposed portions of the bass and treble strings, which are arranged contiguous, respectively, to the bridges and between the same, are within easy reach of the operator. Strikers 14 (illustrated in Fig. 1) may be used in the operation of sounding the strings, although any analogous devices may be employed in lieu thereof.

From the above description it will be seen that the securing and tuning pegs are completely covered and concealed by the means provided for that purpose, and the raised or

exposed operative or sounding portions of the strings are arranged close together by reason of the described arrangement of the bridges, the difference in the lengths of the bass and treble strings being attained by disposing the bridges at different distances, respectively, from the string-rests, thus producing a compact arrangement of parts, facilitating performance upon the instrument, and providing for a degree of accuracy, from the fact that the exposed strings adjacent to either bridge are exposed at wide intervals, and hence enable the operator to strike the unison-strings of one tone without sounding contiguous strings.

The side walls or wrest-plates 1^a are of a thickness sufficient to form a firm support and anchorage for the pegs 6 and 7 and appreciably add to the resonance of the instrument. The strips 1^b and the lower edges of the plates 1^a stiffen and strengthen them and project upon opposite sides of the plane thereof, the combined covers and arm-rests being hinged to the upper edge portions of the strips and supported thereby and by the beveled ends 1^d of the end strips 1^c. The wrest-plates 1^a do not receive any strain from the arms of the operator when resting upon the covers 8 and 9, the weight being sustained solely by the strips 1^b and by the end portions of the walls 1^c. As a result of thus mounting the covers the wrest-plates are not damped and are free to vibrate and increase the volume of sound. The string-rests 3 and 4 being applied to the upper edges of the wrest-plates strengthen them opposite the rabbets formed therein and prevent the splintering or cracking of the outer walls of the rabbets against which the extremities of the sound-board bear when the instrument is under tension by the straining of the strings.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described our invention, what we claim is—

1. In a stringed instrument, a hollow casing comprising side wrest-plates upwardly and inwardly inclined and having their upper edges rabbeted, reversely-inclined strips applied to the lower edges of the wrest-plates and projecting upon opposite sides thereof, a sounding-board seated in the upper rabbeted edges of the wrest-plates, string-rests applied to the upper edge portions of the wrest-plates opposite the rabbets thereof and the sounding-board, strings strung over a bridge applied to the sounding-board and having their terminals attached to pegs applied to the wrest-plates, and combined covers and arm-rests supported solely by means of the aforesaid inclined strips and the end portions of the end walls of the casing, substantially as described.

2. In a stringed instrument, a hollow casing having the terminal portions of its end walls beveled and comprising side wrest-plates upwardly and inwardly inclined and having their upper edges rabbeted, reversely-inclined strips applied to the lower edges of the wrest-plates and projecting upon opposite sides thereof, a sounding-board seated in the upper rabbeted edges of the wrest-plates, string-rests applied to the upper rabbeted edges of the wrest-plates opposite the sounding-board, treble and bass bridges applied to the sounding-board at unequal distances from the string-rests and consisting of continuous strips having corresponding openings formed at intervals in their length, pegs applied to the wrest-plates, groups of treble and bass unison-strings, alternately disposed and reversely inclined, and combined covers and arm-rests, hinged at their lower edges to the top edges of the aforesaid reversely-inclined strips and having their ends resting upon the beveled edge portions of the end walls of the casing, substantially as and for the purpose specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

ROLAND WILLIAM EVERTON.
WILLIAM FROST.

Witnesses:
JOHN B. NAIRN,
RICHARD CHAS. HASSALL.