

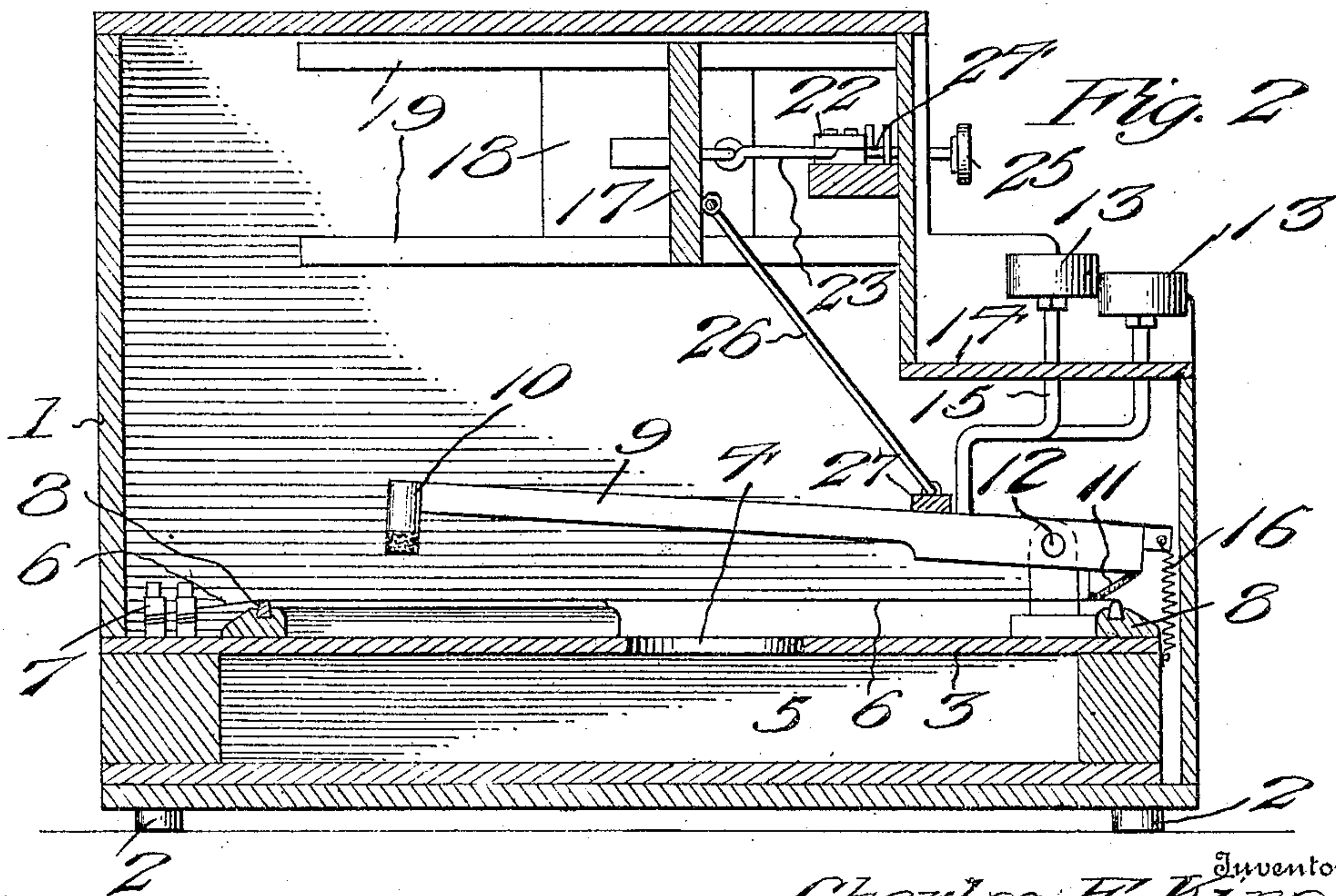
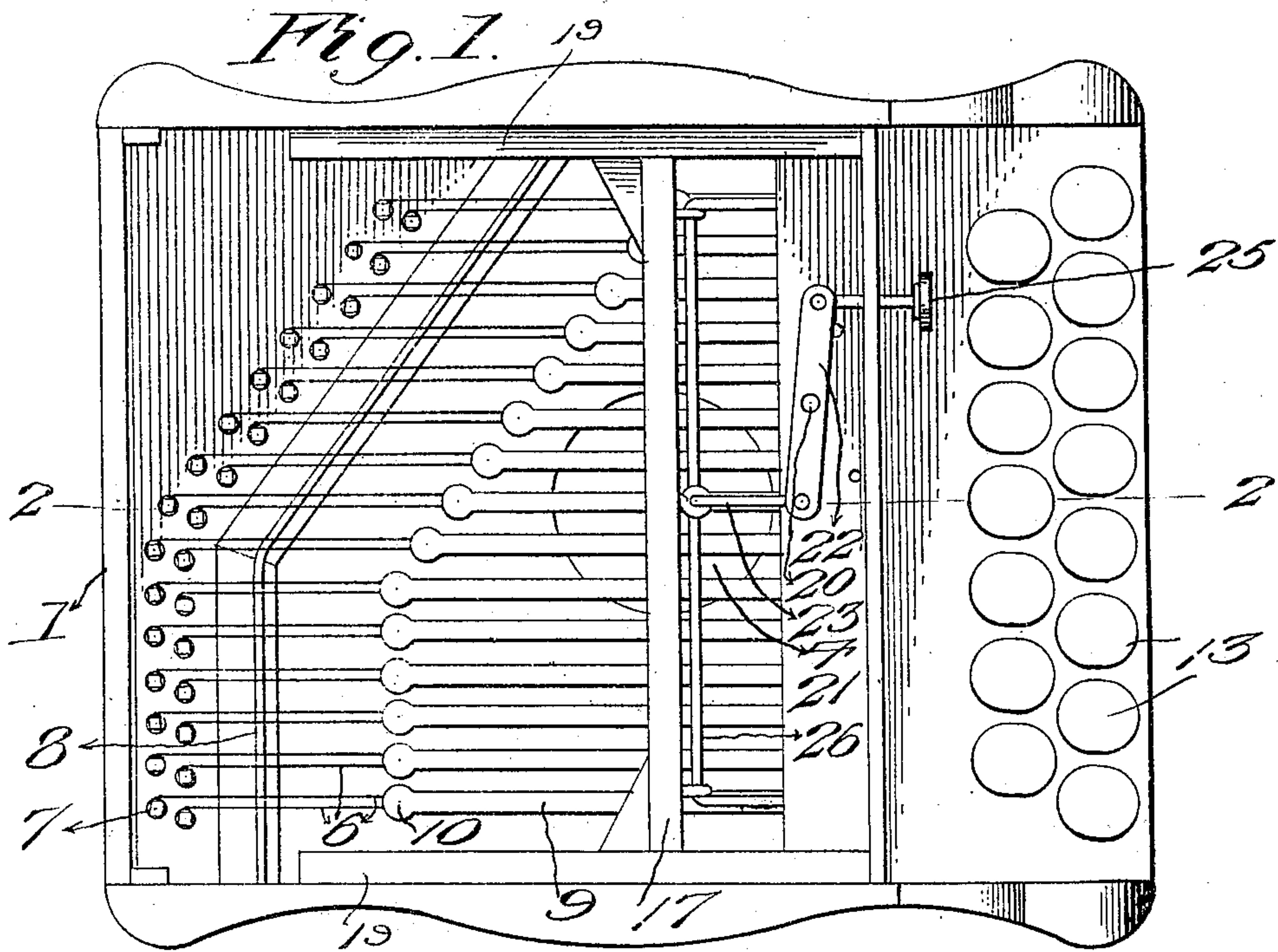
No. 819,556.

PATENTED MAY 1, 1906.

C. E. KING.

ACTION FOR STRINGED MUSICAL INSTRUMENTS.

APPLICATION FILED NOV. 25, 1905.



Charles E. King, ^{Inventor}

Witnesses
Wm. Koeth.
J. S. Elmore

Victor J. Evans ^{Attorney}

UNITED STATES PATENT OFFICE.

CHARLES E. KING, OF WASHINGTON, KANSAS.

ACTION FOR STRINGED MUSICAL INSTRUMENTS.

No. 819,556.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed November 25, 1905. Serial No. 289,097.

To all whom it may concern:

Be it known that I, CHARLES E. KING, a citizen of the United States, residing at Washington, in the county of Washington and State of Kansas, have invented new and useful Improvements in Actions for Stringed Musical Instruments, of which the following is a specification.

This invention relates to musical instruments of the type embodying a series of strings adapted to be acted upon by key-operated strikers or hammers, and has for its objects to provide a comparatively simple inexpensive device of this character which may be readily operated, one wherein the tones produced will be clear, sharp, and entirely distinct, and one which in practice will reproduce or simulate the tones of a mandolin.

Further objects of the invention are to provide a device of this class in which the volume of the tones may be regulated and controlled, and one wherein the hammers or strikers serve after action upon the strings to check the vibrations thereof for rendering the tones sharp and distinctive, and one wherein the contact portions of the strikers will be maintained normally in position to bear upon the strings.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a top plan view of the instrument with the top of the casing removed. Fig. 2 is a vertical longitudinal section taken on the line 2 2 of Fig. 1.

Referring to the drawings, 1 designates a box or casing provided with feet 2 and containing a sounding-board 3, suitably sustained in spaced relation to the bottom of the casing and having an opening 4 leading to the resonance-chamber 5 beneath the board, over the top of which is strung a series of strings 6, terminally engaged with string-posts 7 and sustained in spaced relation to the sounding-board by bridges 8, mounted upon and adjacent the front and rear ends of the board, the strings being arranged in pairs.

Pivoted in the casing 1 and to act, respectively, on the pairs of strings is a series of striking members or levers 9, provided at their rear ends with hammers 10 and at their forward ends with contact-pieces or dampers 11, the levers, which are pivoted adjacent their forward ends, as at 12, for independent move-

ment, being adapted for operation through the medium of finger-keys 13, properly arranged above a keyboard 14 and having stems 15, engaged at their lower ends respectively with the levers at a point in rear of the pivotal axes 12 of the latter, while engaged with the forward end of each of the levers is a spring 16, against the action of which the levers are moved for striking the strings.

In practice when the keys 13 are depressed the corresponding levers 9 will be operated for causing the hammers 10 to strike the strings, it being apparent that as soon as the keys are released the springs 16 will in contracting return the levers to normal position and bring dampers 11 into contact with the strings, thus checking the vibrations of the latter and reducing the length of the tone produced, whereby the tones will be rendered sharp and clear and distinctive one from another. It may be mentioned that the tone vibrations produced by striking the strings will be properly augmented in volume, as usual, through the medium of the sounding-board 3 and resonance-chamber 5.

Disposed in the casing 1 and extending transversely thereof is a bar 17, having end portions or heads 18 arranged for movement between spaced guide members or rails 19, there being centrally pivoted at 20 upon a support 21 within the casing a rocking member or lever 22, connected at one end by means of a link 23 with the bar 17 and at its other end with the stem 24 of a push-button 25, situated at the front of the casing, while connected with the bar 17 by means of a pivoted bail 26 is a cross-piece or presser-bar 27, arranged to overlies the levers 9. When it is desired to vary the striking movement of the levers 9, the button 25 is moved inward or outward, as the case may be, thus rocking the lever 22 and through the medium of the link 23 moving the bar 17 back or forth in its guides, whereupon the presser-bar 27 will be moved back or forth lengthwise of the levers 9 to positively move the hammer 10 toward or permit movement away from the strings, whereby the dampers may be positively maintained out of contact with the springs to prolong the tones, as will be readily understood.

Having thus described my invention, what I claim is—

1. In a musical instrument, a sounding-board, a string stretched thereover, a striking-lever pivoted above to act upon said string,

means for operating the lever, a movable governor-bar sustained above the lever, a cross-piece operatively connected with the bar to bear on said lever, a pivoted operating-lever 5 operatively connected at one side of its fulcrum with the governor-bar, and a push-button connected with the operating-lever at the other side of its fulcrum.

2. In a musical instrument, a casing provided with guides, a sounding-board above 10 the casing, a string stretched over the board, a striking-lever pivoted between its ends in position to act upon the string, said lever having a head adapted to act upon and a damper 15 to normally contact with the string, a spring

for maintaining the lever in normal position; a governor-bar movably mounted in the guides, a cross-piece adapted to bear on the striking-lever and operatively connected with said bar, an operating-lever pivoted in 20 the casing, a push-button connected with said lever, and operative connections between the operating-lever and governor-bar.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. KING.

Witnesses:

MAY REITZEL,

EMMA B. HARNAKER.