

L. FARAGO & V. ELIAS.
PEDAL GUITAR.

APPLICATION FILED SEPT. 13, 1902.

NO MODEL.

4 SHEETS—SHEET 1.

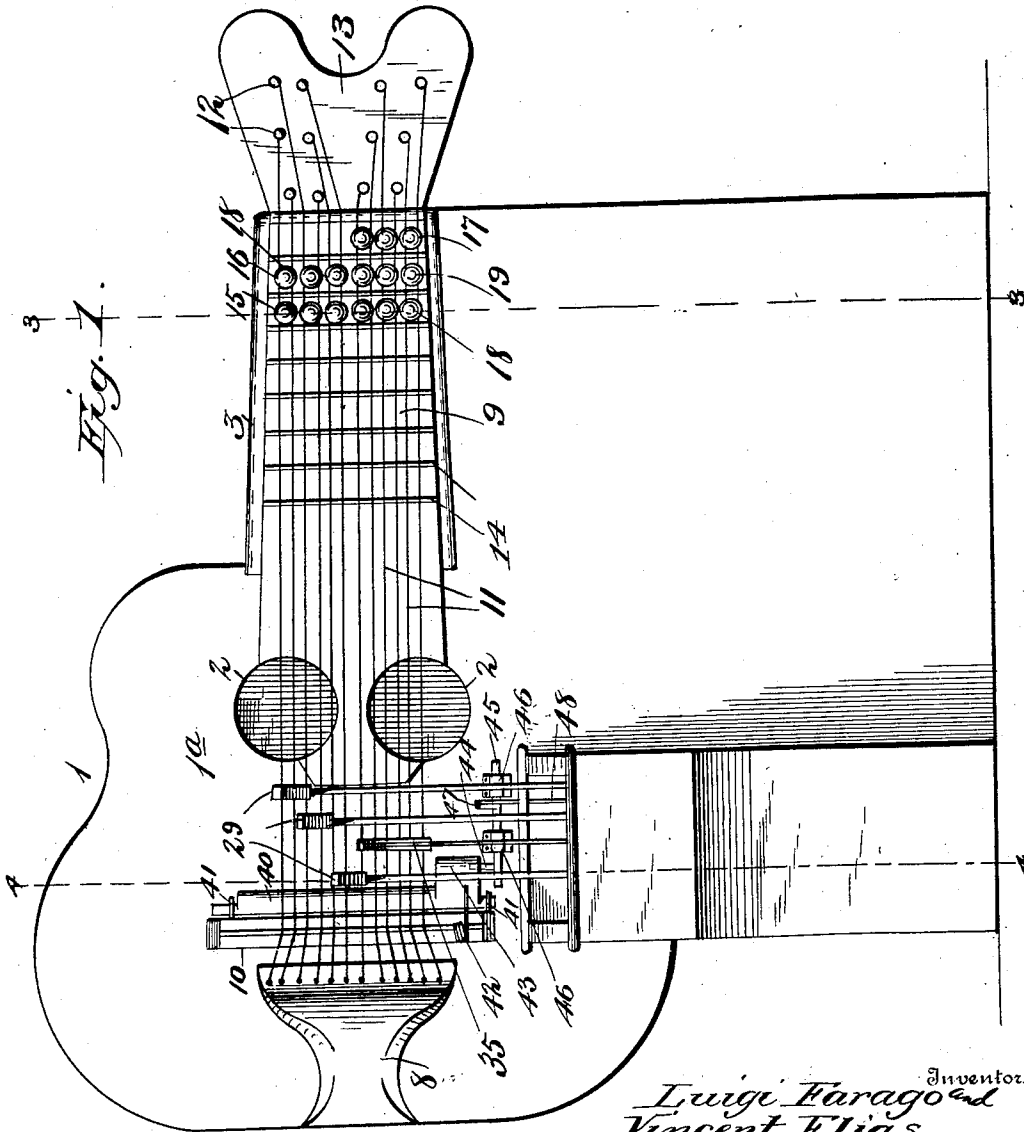


Fig. 1.

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Frank G. Radelfinger.

Inventors,
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Vincent Elias,
 By *Luigi Pagger Co.,*
 Attorneys.

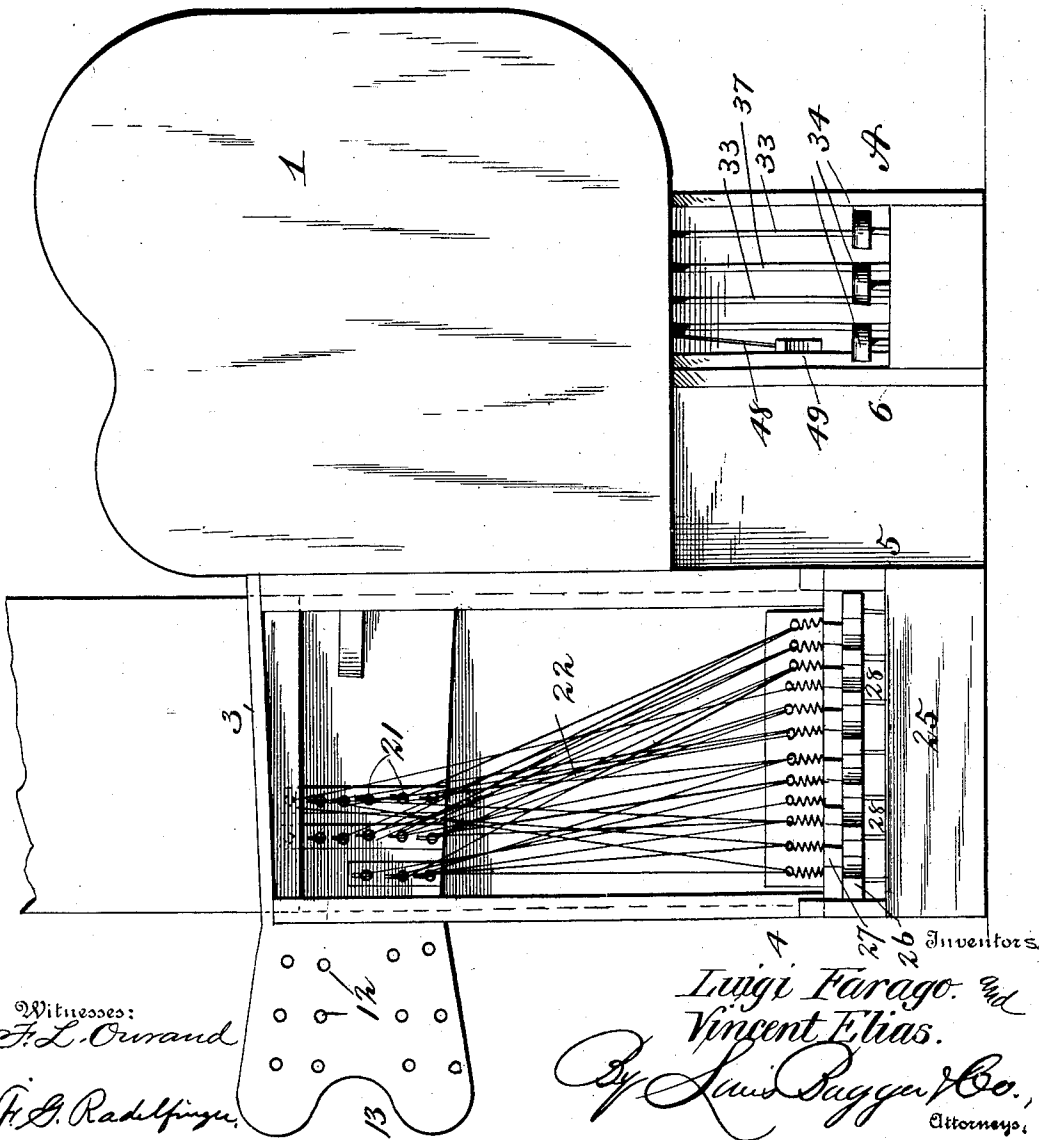
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4 SHEETS—SHEET 2.

Fig. 2.



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4 SHEETS—SHEET 3.

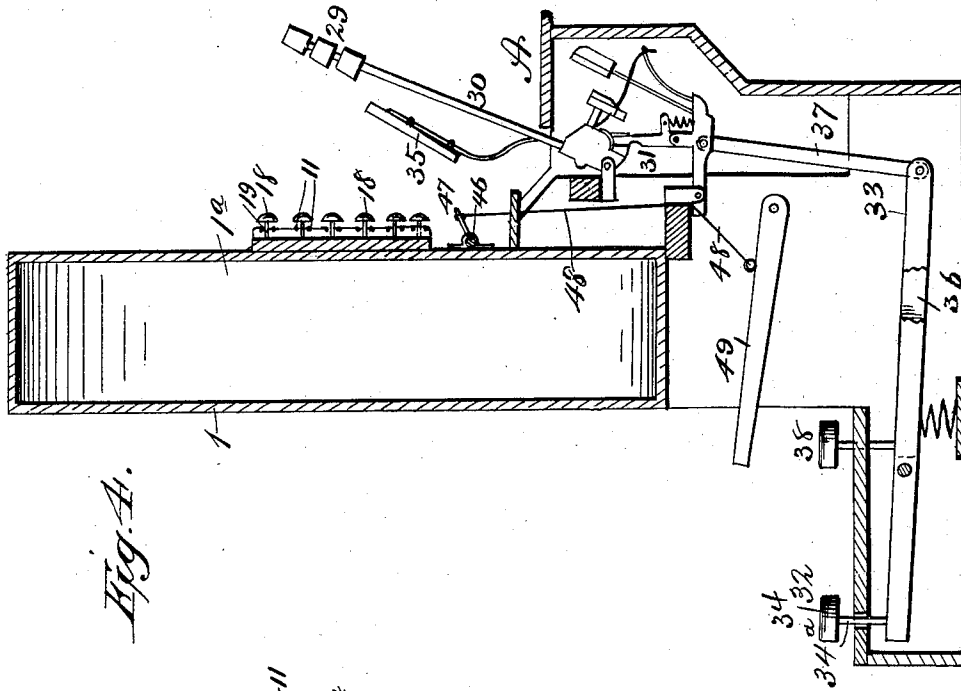


Fig. 4.

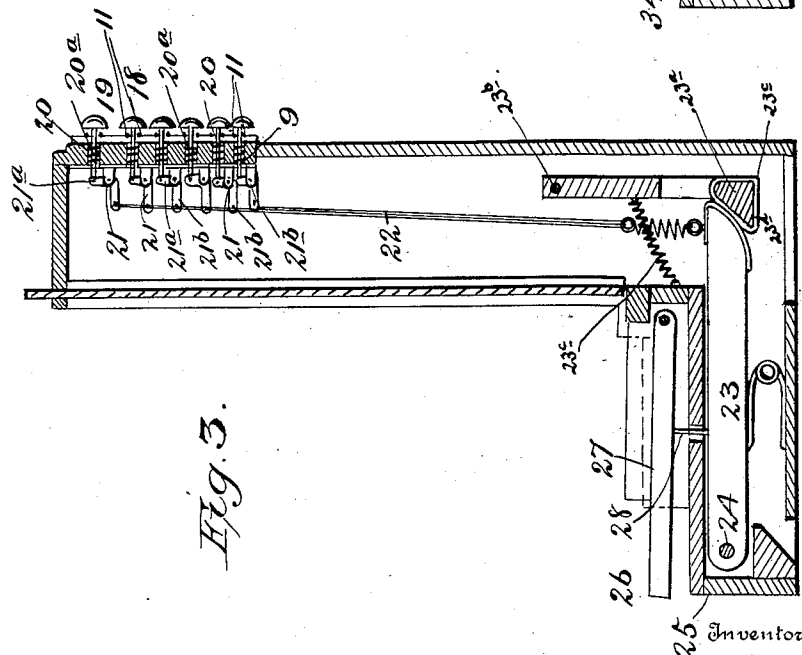


Fig. 5.

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4 SHEETS—SHEET 4.

NO MODEL.

Fig. 5.

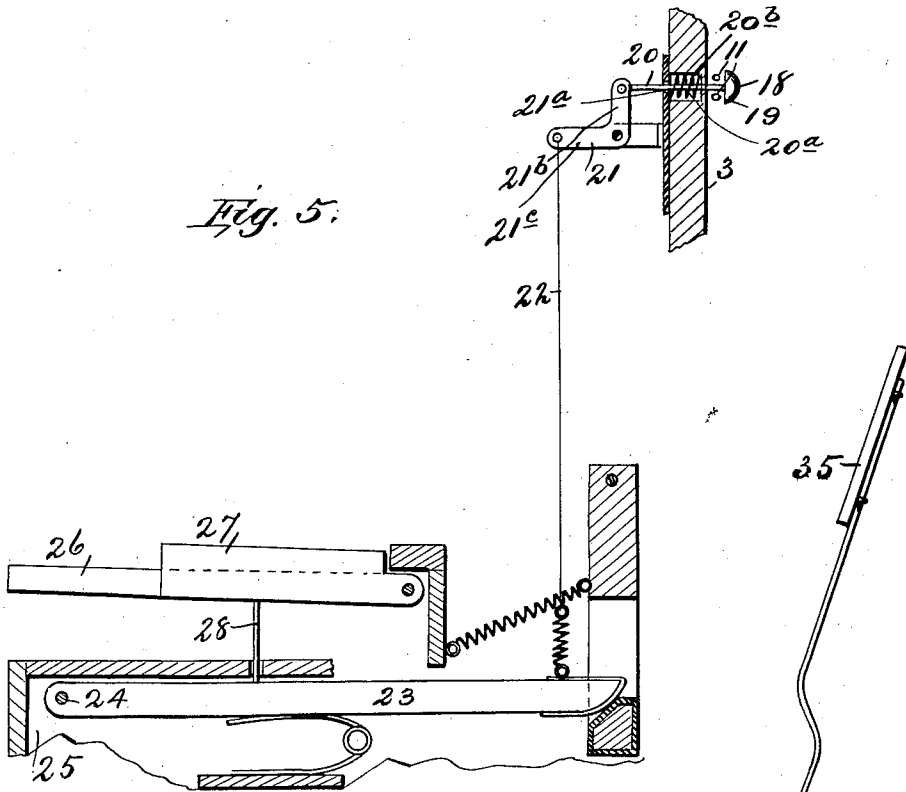
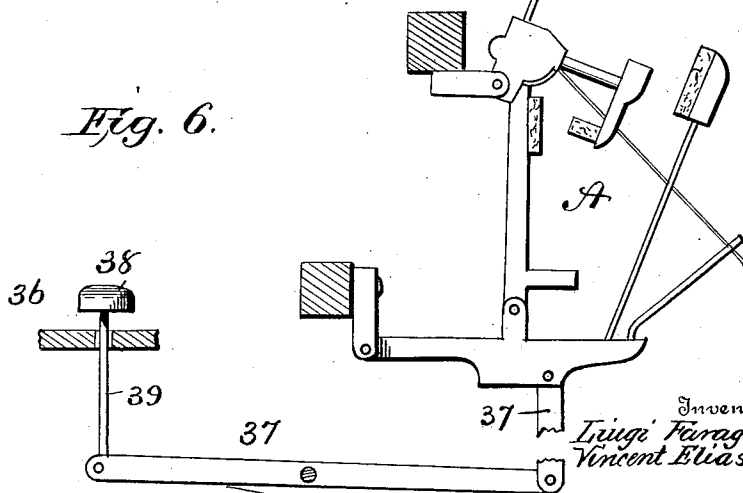


Fig. 6.



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UNITED STATES PATENT OFFICE.

LUIGI FARAGO AND VINCENT ELIAS, OF MARBLEHEAD, OHIO.

PEDAL-GUITAR.

SPECIFICATION forming part of Letters Patent No. 738,018, dated September 1, 1903.

Application filed September 13, 1902. Serial No. 123,311. (No model.)

To all whom it may concern:

Be it known that we, LUIGI FARAGO and VINCENT ELIAS, citizens of the United States, residing at Marblehead, in the county of Ot-tawa and State of Ohio, have invented new and useful Improvements in Pedal-Guitars, of which the following is a specification.

Our invention relates to pedal-operated instruments which can be played by the feet while playing on another instrument, and has for its object to construct an instrument of this character which will resemble a guitar in its shape and in the tuning of its strings.

The simple and novel construction employed by us in carrying out our invention is fully described and claimed in this specification and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a front elevation of our instrument. Fig. 2 is a rear elevation of the same. Fig. 3 is a section on the line 3 3, Fig. 1. Fig. 4 is a section on the line 4 4, Fig. 1. Fig. 5 is a detail of one of the stops, the pedal-levers, and bearing-plate. Fig. 6 is a detail of the action.

Like characters of reference designate like parts in the different views of the drawings.

The numeral 1 designates the sounding-board of our instrument, which is shaped like the body of a guitar, but has two sound-openings 2 therein instead of the usual one. A neck 3 is connected to the sounding-board 1, and the whole structure is supported on uprights 4, 5, 6, and 7. A tailpiece 8 is attached to one end of the sounding-board in alinement with a finger-board 9. A bridge 10 is mounted on the belly 1^a of the sounding-board 1 adjacent to the tail 8. Six pairs of strings 11 are attached at one end to the tail 8 and at the other end to keys 12, mounted in a head 13, formed integral with the neck. The members of each pair of strings 11 are tuned to the same pitch by means of the keys 12. Frets 14 are seated in grooves in the finger-board 9, and arranged in alinement with three of said frets are three rows 15, 16, and 17 of stops 18. There are six stops 18 in each of the rows 15 and 16, but only three in the row 17, although more might be used if it were desired to increase the range of the instrument. Each of the stops 18 comprises a button 19, secured on a pin 20, slidingly mounted in an

aperture 20^a in the finger-board 9 and neck 3. Elbow-levers 21 are mounted on the back of the neck 3, and each has one of its arms 21^b pivoted to one of the pins 20. Springs 20^b serve to hold the stops 18 normally out of engagement with the strings. Wires 22 are connected at one end to the free arm 21^c of the levers 21 and at their other ends to levers 23, fulcrumed on a shaft 24, mounted in a base 25. The levers 23 are operated by two sets of pedals 26 and 27, mounted on the base 25 and bearing on pushers 28, seated in the levers 23. Each of the levers 23 has several of the wires 22 attached to it, and thereby operates several of the stops 18 in unison, as will be readily understood, to correspond to the different chords, as in fingering a guitar.

A yielding bearing-plate 23^a is mounted within the casing and is supported by a pivot 23^b. Inclined faces 23^c are formed on said bearing-plate, which faces are engaged by the free ends of the levers 23, which are rounded off on their under sides at 23^d. A spring 23^e is connected to the plate 23^a and serves to retard the backward swing thereof and to return it to its initial position. When the levers 23 are operated through the action of the pedals 26 and 27, the bearing-plate 23^a will retard the movement of the levers 23 and insure a soft action of the pedals.

Three hammers 29 are carried by levers 30, fulcrumed in standards 31, and form part of an action A of well-known construction, which is operated by a set of three pedals 32, comprising levers 33 and knobs 34, carried by pins 34^a, seated in the levers 33. A fourth hammer 35 is made of greater length than the hammer 29 to adapt it to strike the remaining three pairs of strings and forms part of the action A. A pedal 36, comprising a lever 37 and a knob 38, carried by a pin 39, serves to operate the hammer 35. By the above-described arrangement all the strings may be played on by operating the pedals 32 and 36.

A bridge 40 is mounted on the sounding-board 1 and is pivoted in keepers 41. A spring 42 bears on the bridge 40 and holds it normally down out of contact with the strings. An arm 43 is formed on the bridge 40 and is engaged by an arm 44, carried by a roller 45, journaled in keepers 46. An arm 47 is also carried by the roller 45, and a wire 48 is con-

nected at one end to said arm and at its other end to a pedal 49. By this arrangement the bridge 40 can be raised by use of the pedal 49 to sharp the notes or released to flat them.

5 In operation our instrument is played by a musician with his feet, his hands being already engaged in playing some other instrument. The pedals 26 and 27 are operated by the left foot to operate the stops 18 to vary
10 the effective length of the strings on the sounding-board, and thereby control the pitch of the notes given out by them. The pedals 32 and 36 are operated by the right foot to actuate the hammers 29 and 35 to strike the
15 strings. The pedal 49 is also operated by the right foot to raise the bridge 40 up into engagement with the strings to sharp the notes or released to flat them.

We do not wish to be limited as to details
20 of construction, as these may be modified in many particulars without departing from the spirit of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

25 1. In a pedal-guitar, the combination with a pair of strings, of a spring-actuated pin mounted intermediate said strings and bearing a button which serves to engage said
30 strings, an elbow-lever having one arm pivoted to said pin, a pedal and means connecting said elbow-lever and said pedal, substantially as described.

2. In a pedal-guitar, the combination of a
35 stretched string, a pin bearing a button, a spring mounted to normally hold said pin out of contact with said string, an elbow-lever connected to said pin, and a pedal connected to said lever and designed to be operated to
40 operate said lever to bring said button in con-

tact with said string, substantially as described.

3. In a pedal-guitar, the combination of a spring-actuated stop, an elbow-lever connected to said stop, a pedal, a coiled spring
45 connected at one end to said pedal, and a wire connected at one end to said elbow-lever and at the other end to the other end of said spring, substantially as described.

4. In a pedal-guitar, the combination of a
50 first-pedal lever fulcrumed at one end, a second-pedal lever mounted parallel to said first-pedal lever and fulcrumed at one end, the pivoted ends of said levers being disposed oppositely, a pusher carried by said second pedal
55 and engaged by said first pedal, a pivoted bearing-plate having an inclined face engaging the free end of said second-pedal lever and a spring connected to said bearing-plate
60 and arranged to retard the movement of said bearing-plate but to permit it to yield to permit the said second pedal to be displaced by operating said first pedal, substantially as described.

5. In a pedal-guitar, the combination with
65 a pedal-lever fulcrumed on one end and rounded off on the under side at the other, a yielding pendent bearing-plate having an inclined face engaging the rounded end of said
70 pedal, and a spring mounted to retard the movement of said bearing-plate, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

LUIGI FARAGO.
VINCENT ELIAS.

Witnesses:

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GEO. EBERWINE.