

(No Model.)

J. H. LING.

KEY ATTACHMENT FOR STRINGED INSTRUMENTS.

No. 545,963.

Patented Sept. 10, 1895.

Fig. 1

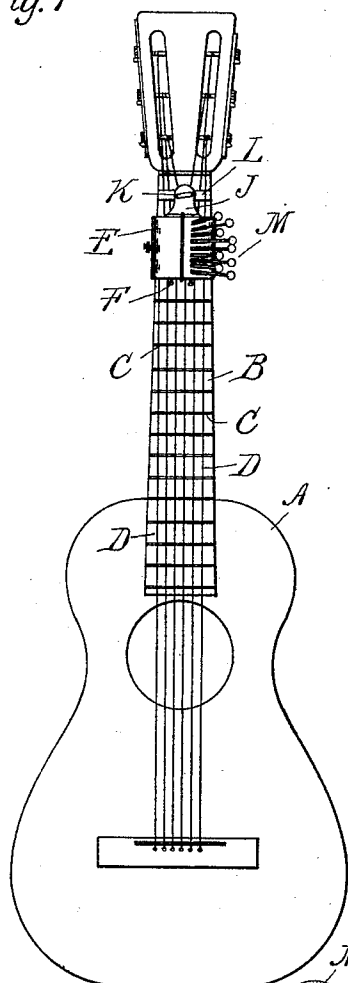


Fig. 2

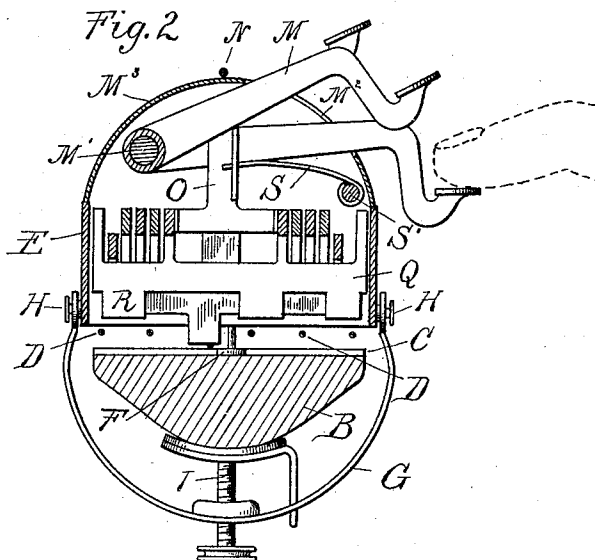


Fig. 4

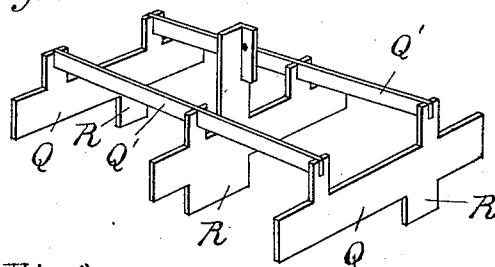
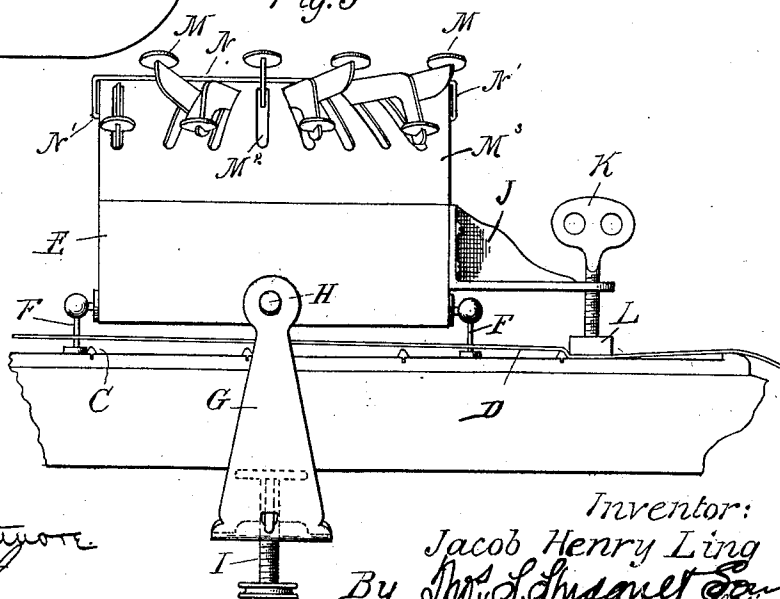


Fig. 3



Witnesses:

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UNITED STATES PATENT OFFICE.

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KEY ATTACHMENT FOR STRINGED INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 545,963, dated September 10, 1895.

Application filed September 1, 1894. Serial No. 521,889. (No model.)

To all whom it may concern:

Be it known that I, JACOB HENRY LING, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Key Attachments for Stringed Instruments, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the construction of an improved chord-playing key attachment for stringed instruments—such as guitars, banjos, &c.—and particularly in the construction of connected damper-plates and the key for actuating them to damp or close the necessary strings to play chords in a given key; further, in the combination of a multiple of such connected series of plates, all as more fully hereinafter described.

In the drawings I have shown my invention applied to a guitar.

Figure 1 is a plan view thereof, showing my device applied. Fig. 2 is a cross-section centrally through the key attachment. Fig. 3 is a side elevation, and Fig. 4 is a perspective view of one set of damper-plates.

In the present state of the art key attachments have been applied to guitars, &c., so constructed and arranged that the operator, instead of fingering the strings, could depress a key, one key for each string on each fret; but this requires the same knowledge of music and fingering that is usually required without such attachment. My attachment embodies but a few keys actuating a series of damper-plates to enable the operator to play accompaniments without knowledge of music or fingering such an instrument, the keys being numbered or lettered, and the music may be correspondingly printed.

A represents a guitar, and B its neck, provided with usual frets C and strings D.

E is a frame, preferably substantially box-shaped and having an open bottom. This is supported at opposite ends on the legs F, which rest upon the neck of the guitar.

G is a yoke or bow, detachably engaging with its ends on pins H on the sides of the frame and centrally provided with the clamping-screw I, by means of which the device is clamped on the neck, as shown in the drawings. At one end this frame is preferably

provided with an extension J, in which is supported the thumb-screw K, carrying the cross-bar or cross-head L, adapted to be engaged upon one of the frets and forming the capotasto, which when the attachment is adjusted beyond the first fret may be turned down to press the strings upon the fret beside the end of the attachment for transposition of the chords.

M are a series of keys journaled on the shaft M' near the top of the frame, at one edge thereof, and preferably extending across and over the other edge through slots M² in the curved cap or cover M³, as shown in Fig. 2. This cover is preferably held on the box-shaped frame by a bail-shaped wire N, passing over the top and having hooked ends N', engaging apertures in the ends of the box or frame. At or near the middle of each key is a post or tooth O, engaging at its upper end on the under side of the key and at its lower end supporting one or more of the presser-bars or damper-plates Q. Where a series of these plates are used, I connect them on top by cross-bars Q', so that on the depression of a key the plates of that series are moved downward and the wards or fingers R thereon press the necessary strings to enable the operator to play chords in the desired key. Each of the presser bars or plates has a suitable returning-spring S, coiled about a shaft S' at one end and having an arm projecting therefrom and engaging the post or tooth O.

This construction enables one without any more skill than is required to depress the proper keys to play accompaniments on a guitar or banjo.

What I claim as my invention is—

1. An attachment for string instruments comprising a case, a detachable yoke encircling the neck of the instrument having a clamping screw bearing against the under face of the neck, legs F extending from the case resting upon the upper face of the neck, a series of spring-actuated damper plates in the case, and a series of keys for actuating the damper plates, substantially as described.

2. An attachment for stringed instruments comprising a case, means for attaching it to the neck of the instrument, a series of keys pivoted on one side of the case and projecting over the other side, the damper plates

Q, having wards R, the connecting bars Q' and a post, one for each key, substantially as described.

3. An attachment for string instruments
5 comprising a case, means for attaching it to the neck of the instrument, a series of keys, a series of spring-actuated damper plates having wards R, the connecting bars Q', and a
10 post one for each key, substantially as described.

4. An attachment for stringed musical instruments comprising a suitable casing, a series of presser bars mounted therein, fingers

on the presser bars for bearing on the strings, teeth which project up from the presser bars, 15 and cross bars arranged in line with the teeth, which cross bars when actuated operate those presser bars, the teeth of which are in the path of movement of the actuated presser bars, substantially as described. 20

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

JACOB HENRY LING.

Witnesses:

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L. J. WHITEMORE.