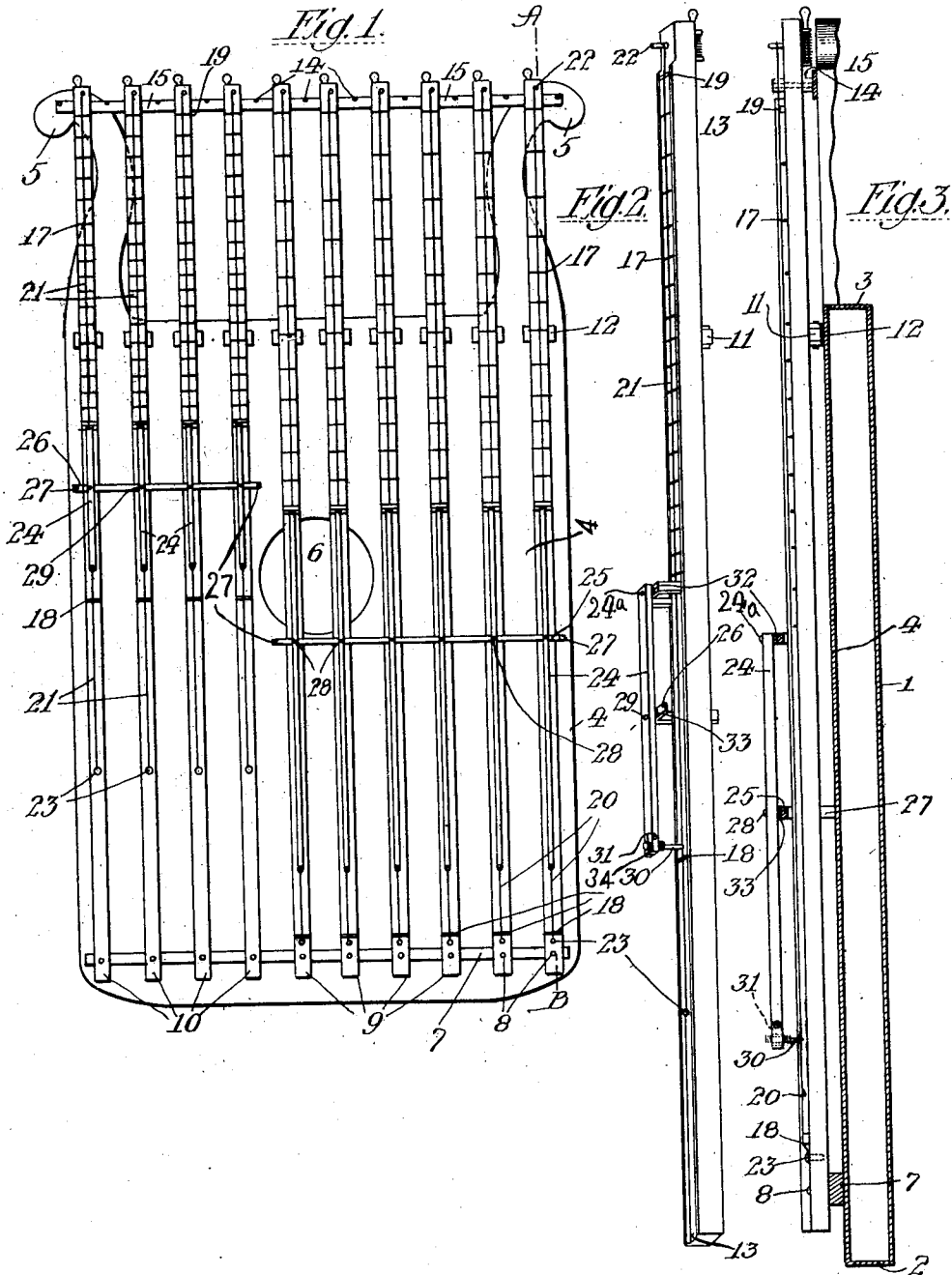


No. 890,296.

PATENTED JUNE 9, 1908.

O. H. NEWMAN.
MUSICAL INSTRUMENT.
APPLICATION FILED SEPT. 12, 1906.



Witnesses:

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MUSICAL INSTRUMENT.

No. 890,296.

Specification of Letters Patent.

Patented June 9, 1908.

Application filed September 12, 1906. Serial No. 334,359.

To all whom it may concern:

Be it known that I, OSCAR H. NEWMAN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Musical Instrument, of which the following is a specification.

My invention relates to a musical instrument, and the object of the invention is to provide a musical instrument operated by fret bars, over each fret bar is stretched a string, in which each note is sounded by pressing said string over its respective fret with the fingers as in the usual manner, and by operating the fret bar, which serves to engage the string sounding means with the string, which sounds the same, and to provide each fret bar with a plurality of frets, thereby producing an instrument having an extended range of octaves with relatively few strings.

The accompanying drawings illustrate the invention, and referring thereto:—

Figure 1 is a plan view of the instrument. Fig. 2 is a perspective of a fret bar and pick bar parts. Fig. 3 is an enlarged section on line A—B Fig. 1, with one side of the fret bar cut away to show the frets in the groove.

The frame of the instrument comprises a base board 1, a tail board 2, a head board 3, a sound board 4, and two necks or knobs 5, one on each side at the head board, the sound board 4, has a sound hole 6, and arranged on one end of the sound board is a rail 7 having a plurality of upright pins 8 to which one end of the fret bars 9 and 10 are pivoted, each of the fret bars at their other ends swing in a horizontal plane by means of a roller 11 which is arranged on the bottom of each fret bar and rests on the sound board.

To avoid any noise in the movement of the rollers felt or other like deadening material may be provided at 12 on the sound board and under the rollers 11. Each fret bar is provided with a groove 13, for the purpose of holding the fingers more firmly, whereby the fret bars are under control and operated at will. To limit the movement of said fret bars pins 14, are provided between each fret bar and are made fast to a rail 15, which is secured to the necks or knobs of the instrument, said pins 14 being preferably faced with or composed of felt or other like material, so as to avoid any noise in the movement of the fret bars.

Each fret bar has a plurality of frets 17, and two bridges 18 and 19. Stretched

across the bridges on fret bars 9 are six base strings 20, and stretched across the bridges on fret bars 10 are four treble strings 21, the ends of the strings being fastened to tuning mandolin patent heads 22 in the head of the fret bars 9 & 10, all of the strings at their other ends being fastened in perforations in the fret bars by pins 23. Extending partially across the instrument above the fret bars and strings and under the pick bars 24, are two bars 25, 26 which tend to support the pick bars, and are secured to pins 27, which extend up from the sound board. To each of the fret bars 9 & 10 is pivoted a pick bar 24 at 24^a. Each of the pick bars on fret bars 9 is pivoted at 28, on bar 25, and each of the pick bars on fret bars 10 is also pivoted at 29 on bar 26. Each pick bar has a pick 30, consisting of a round piece of material inserted into a coiled spring wire, said pick being removably secured in a slit and hole in the pick bar by a tension screw 31, and extends down past the string, so that when the fret bar is operated the pick bar will turn on its pivots causing the pick to move against and pass over the string, sounding the same. To avoid any noise in the movement of the pick bars 24 and picks 30, leather or other like deadening material may be provided at 32 on the fret bars and under the pick bars, at 33 on bars 25, 26 and at 34 in slit of pick bars.

The operation is as follows:—On depressing any string 20 or 21 down on any of the frets 17, the string will be brought against the fret so that the string will vibrate between that fret and the bridge 18, and a right or left side movement of the fret bar turns the pick bar 24 on its pivots, causing the pick to strike and pass the string, the string vibrating in response. The tremolo is produced in this way in about the same way as on other instruments such as a mandolin.

It is obvious that the strings and fret bars can be arranged in any desired manner, and I do not limit myself to the particular arrangement of strings and fret bars herein shown, and it is obvious that the bars can be used without the frets without departing from the spirit of the invention.

Having thus explained the nature of my invention, although without having attempted to set forth all the forms in which it may be embodied or all the modes of its use, what I claim is:—

1. A musical instrument comprising mov-

able fret bars, a plurality of frets on each fret bar, a string on each fret bar, the pitch of which is changed by fingering in the usual manner, and a string sounding means for
 5 each string operated by the corresponding fret bar.

2. A musical instrument comprising a sound board, movable fret bars, a plurality of frets for each bar, a string on each fret bar,
 10 the pitch of which is changed by fingering in the usual manner, each fret bar having a pick and actuating means therefor operated by the movement of the fret bar to sound the string, stop pins to limit the movement of
 15 the fret bars, a groove in each fret bar to assist the player to control and operate the said fret bar, each fret bar being provided with a roller between it and the sound board to assist the player to operate the said fret bar to
 20 sound the associated strings.

3. A musical instrument comprising a sound board, movable fret bars, a plurality of frets for each bar, a string on each fret bar, the pitch of which is changed by fingering in
 25 the usual manner, a pick and actuating means therefor adjacent to each string operated by the movement of the corresponding fret bar to sound the string, stop pins to limit the movement of the fret bars, a groove in

each fret bar to assist the player to control
 and operate the said fret bar, each fret bar
 being provided with a roller between it and
 the sound board to assist the player to oper-
 ate the said fret bar to sound the associated
 strings. 30

4. A musical instrument comprising a sound board, movable fret bars, a plurality of frets for each bar, a string on each fret bar, the pitch of which is changed by fingering in the usual manner, a pick for each string pro-
 35 vided with a pivoted actuating means comprising a member pivoted to the corresponding fret bar and said means being operated by the movement of the said fret bar, a roller means for each fret bar to assist the player to
 40 operate the said fret bar. 45

5. A musical instrument comprising a sound board, movable fret bars, a plurality of frets for each bar, strings on the fret bars, the pitches of which are changed by fingering in
 50 the usual manner, a groove in each fret bar, a roller for each fret bar, stop pins for the fret bars, and means operated by each fret bar to sound the associated string.

OSCAR H. NEWMAN.

Witnesses:

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