July 12, 1927. 1,635,542

J. S. CONNER

PLAYING ATTACHMENT FOR STRINGED INSTRUMENTS

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Fig. 1.

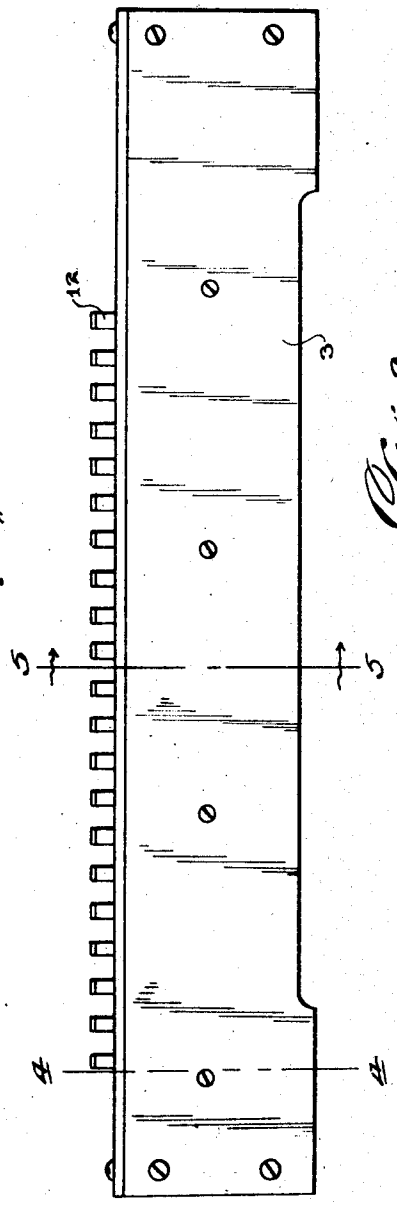
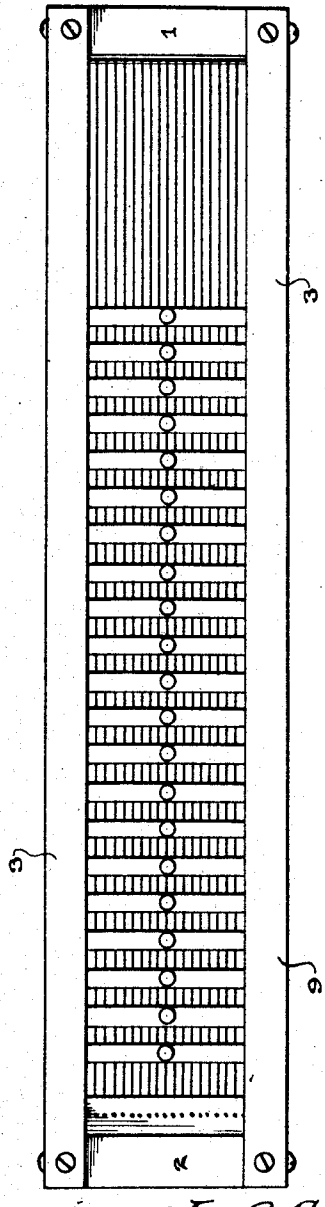


Fig. 2.



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Fig. 5.

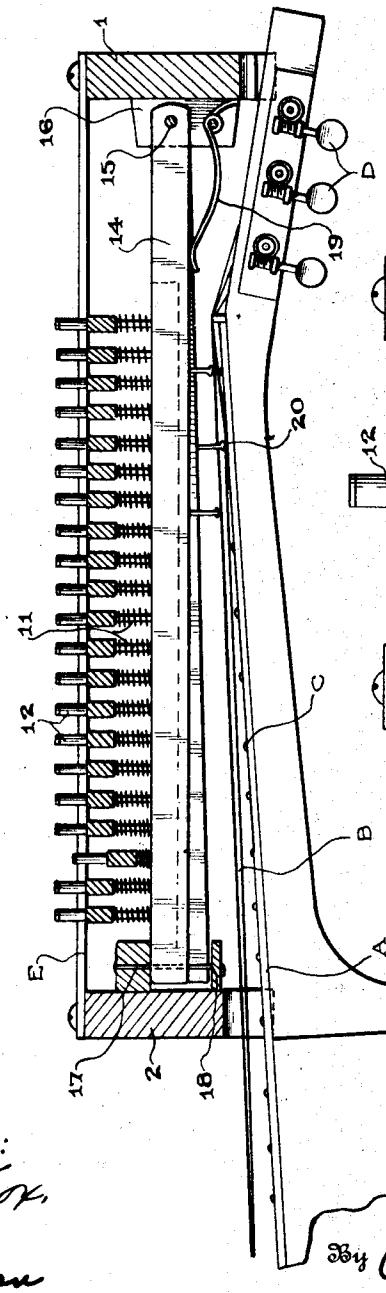
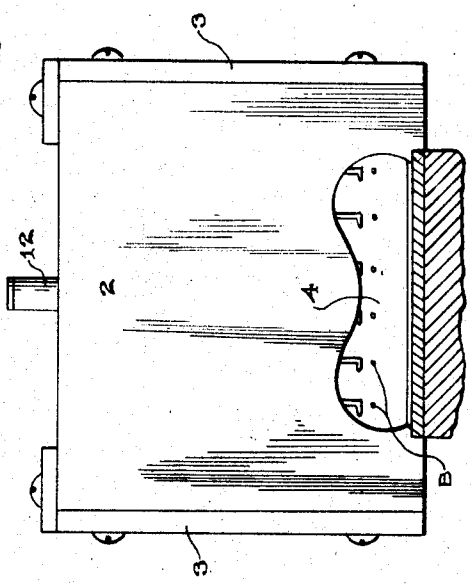


Fig. 6.



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Fig. 5.

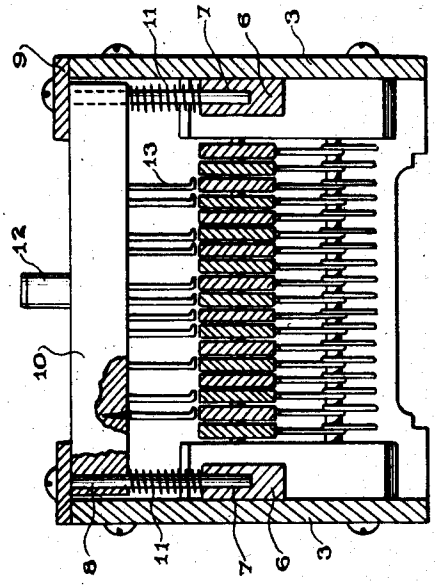


Fig. 6.

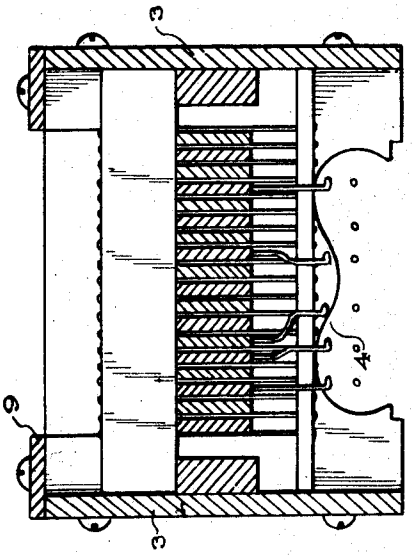
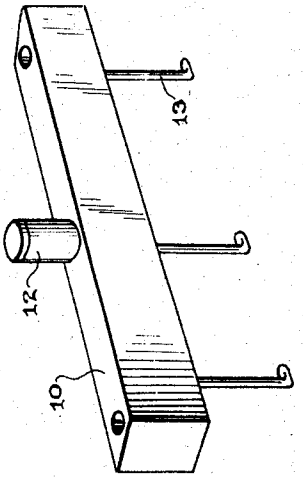


Fig. 7.



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UNITED STATES PATENT OFFICE.

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PLAYING ATTACHMENT FOR STRINGED INSTRUMENTS.

Application filed October 18, 1922. Serial No. 595,387.

In carrying out the present invention it is my purpose to provide a playing attachment which will be found especially useful in connection with guitars, ukuleles, banjos and other stringed musical instruments, and which will be constructed in such manner that the same may be placed on the finger board of the stringed instrument and manipulated by hand, so that all for any selected group of strings may be stopped in accord and any chord made possible, either major, minor, dominant or diminished sevenths thus eliminating the difficult fingering of conventional playing, and making it possible for anyone with a knowledge of music to play accompaniments to songs or instrumental compositions without requiring the usual long and tedious practice.

A further object of the invention is to provide an attachment of the class described which will embrace the desired features of simplicity, efficiency and durability, which may be readily and quickly applied to the stringed instrument and which may be easily manipulated by the player.

With the above recited objects in view, and others of a similar nature, the invention resides in the construction, combination and arrangement of parts set forth in and falling within the scope of the appended claims.

In the accompanying drawings:

Figure 1 is a view in side elevation of a playing attachment for stringed instruments constructed in accordance with my invention.

Figure 2 is a top plan view of the same.

Figure 3 is a longitudinal sectional view showing the attachment as applied to the finger board of the stringed musical instrument.

Figure 4 is a section on the line 4—4 of Figure 1.

Figure 5 is a section on the line 5—5 of Figure 1.

Figure 6 is a section through the finger board showing my attachment in end elevation.

Figure 7 is a perspective view of one of the finger bars.

Referring now to the drawings in detail, A designates a finger board of a guitar, mandolin or similar stringed musical instrument. Over the finger board A extends the strings B of the instrument, and arranged across the finger board are frets C suitably spaced apart, the finger board at its outer end being equipped with the usual tuning keys D by means of which the strings B may be tuned.

My improved playing attachment is indicated as an entirety at E and is placed upon the finger board over the strings, as clearly shown in Figures 3 and 6 of the drawings. In the present instance this playing attachment E comprises end pieces 1 and 2 and side pieces 3—3 connecting the end pieces 1 and 2 and spaced apart at a distance corresponding to the width of each end piece. These end pieces and side pieces constitute the supporting frame of the attachment and this frame is of a length approximately equal to that of the finger board and of a width approximating the corresponding dimensions of the finger board. In the present instance, the end piece 1 is arranged beyond the keys D at the outer end of the board, as clearly shown in Figure 3 of the drawings, while the end piece 2 is arranged adjacent to the inner end of the finger board and the bottom edge of the end piece 2 is cut away, as at 4, in order to provide a space for the strings B to pass, as clearly shown in Figure 6 of the drawings. Fastened to the inner sides of the side pieces 3—3 are longitudinally extending bars 6—6, respectively, arranged approximately midway of the height of the end pieces 3. The upper edge of each bar 6 is formed with vertical openings 7 that are spaced apart along the upper edge of the bar and each opening 7 in one bar 6 corresponds in position to the opposite opening in the other bar, as clearly shown in Figure 5 of the drawings. Mounted in these corresponding openings and extending upwardly are rods 8 having their upper ends abutting the strips 9 that extend along the upper edges of the end pieces 3—3 and project inwardly therethrough, as shown in Figures 4 and 5. Extending transversely of the frame are what I term finger bars 10 of the required number. Each finger bar 10 is slidably mounted upon the corresponding rods 8, so that the finger bars may be moved up and down and surrounding the rods 8 are coiled expansion springs 11 that act to hold the finger bars normally at their limit of upward movement against the strips 9. The finger bars are equipped respectively with upstanding finger buttons 12 and connected to the lower edge of each finger bar are depending fingers 13 properly spaced apart

and capable of having the distances therebetween varied for a purpose which will presently appear.

Arranged beneath the lower ends of the fingers 13 and extending longitudinally of the frame and at right angles to the finger bars 10 are what I term chord bars 14. These chord bars 14 are arranged side by side and spaced apart short distances and the ends thereof adjacent to the end piece 1 are pivoted upon a rod 15 that is carried by a block 16 that is fastened to the inner side of the end piece 1. The other ends of the chord bars 14 terminate adjacent to the inner side of the other end piece 2 and are capable of movement between an upper stop block 17 and a lower stop block 18, which blocks 17 and 18 are fastened to the inner side of the end piece 2 above and below the adjacent ends of the chord bars 14, as clearly illustrated in Figure 3 of the drawing. Each chord bar 14 is held in its uppermost position by a spring 19, one end of which is fastened to the end piece 1 and the other end of which bears against the under side of the chord bar. Thus, the chord bars may be swung downwardly about the pivot bar 15 against the action of the springs 19 and are normally held in their elevated positions, so that they engage the upper stop block 17. Fastened to the lower edge of each chord bar 14 depending therefrom is a string engaging pin or finger 20, which may be arranged to correspond to any desired fret on the finger board and the string engaging fingers on the chord bars may be arranged in any desired relative positions, according to the accompaniment to be played on the stringed instrument.

In the present form of my invention I have shown eighteen chord bars, thus enabling the fingering and manipulation of the strings chromatically and including the six open strings which form a chromatic scale of twenty-four notes. In practice, the fingers 13 that engage the chord bars and the string engaging pin 20 on the chord bars are so arranged that when chord bars are depressed, incident to the depressing of the finger bars, they move the combination of string engaging pins in such intervals of the chromatic scale (open notes included) to form any given chord in music.

I have entered into a detailed description of the construction and relative arrangement of parts embraced in the present and preferred embodiment of my invention with a view to imparting a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the said specific construction and relative arrangement of parts inasmuch as in the future practice of my invention such changes or modifications may be made as fairly fall within the scope of my invention as defined by my appended claims.

Having thus described the invention, what is claimed as new, is:—

1. A playing attachment for a stringed musical instrument comprising a plurality of bars disposed in side by side parallelism, a mounting adapted to be attached to the stringed neck of the musical instrument, said mounting being adapted for disposition over the strings, said bars being pivotally connected to the mounting, a string pressing pin depending from each bar, the various pins being disposed for cooperation with predetermined strings and frets, a plurality of separately operable finger bars disposed over said first named bars, means carried by said finger bars and cooperable with the pin carrying bars, whereby when one finger bar is depressed, a predetermined group of the first named bars will be operated, and means for maintaining the finger bars normally in an inoperative position.

2. A playing attachment for a stringer musical instrument comprising a mounting frame adapted to be connected to the neck of the instrument, a plurality of bars pivotally mounted upon said frame and disposed in side by side parallelism, a spring pressing pin carried by each bar, said pin being disposed for cooperation with predetermined springs and frets, a plurality of transverse finger bars disposed above said first named bars and slidably mounted in said frame, said finger bars being adapted for separate operation, spaced members carried by said finger bars and arranged to engage certain of said first named bars, so that a group of the latter are simultaneously operated when each finger bar is depressed, and spring means interposed between the bars for normally maintaining the finger bars in inoperative position.

In testimony whereof I affix my signature.

JAMES S. CONNER.