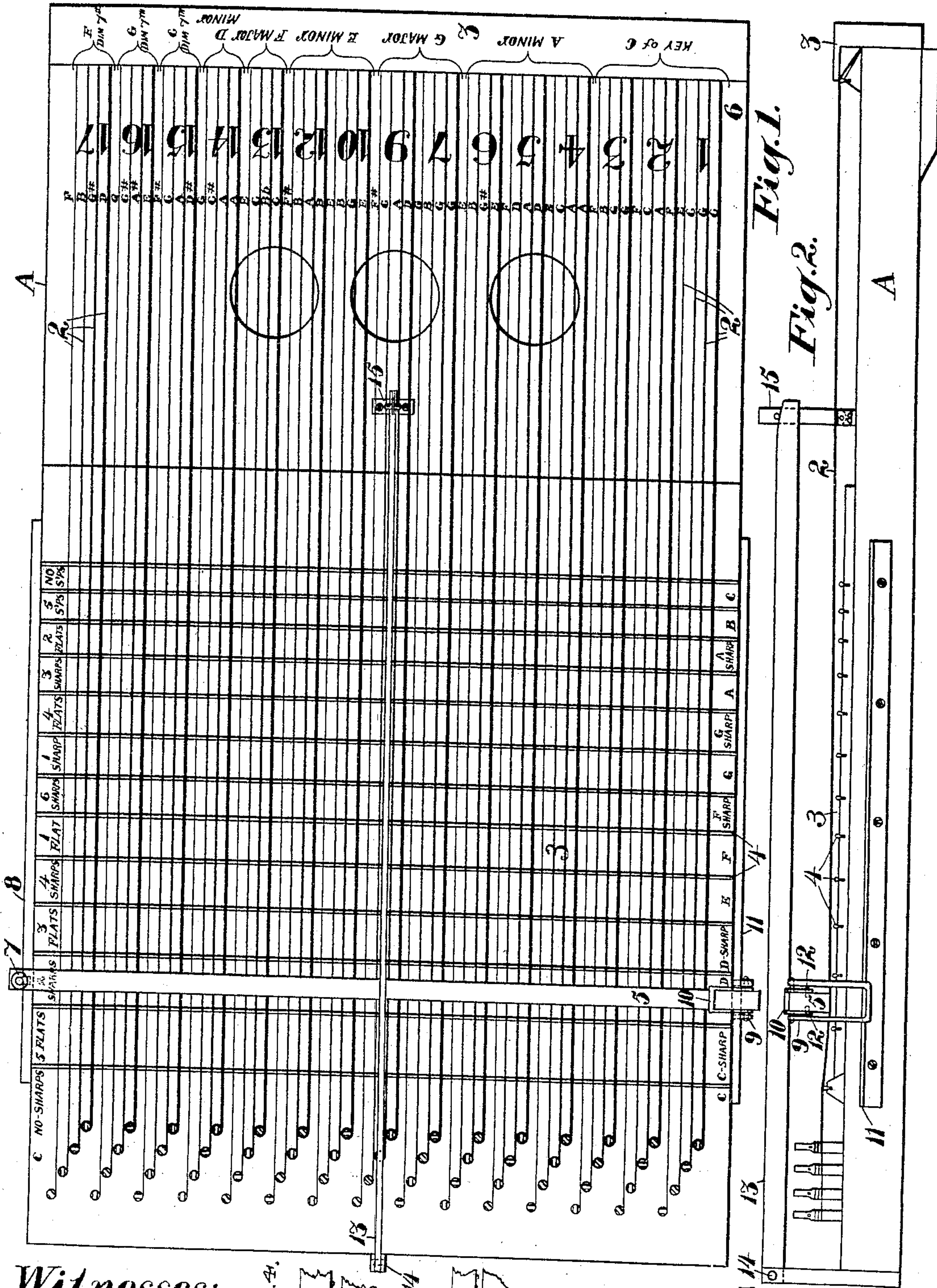


No. 770,864.

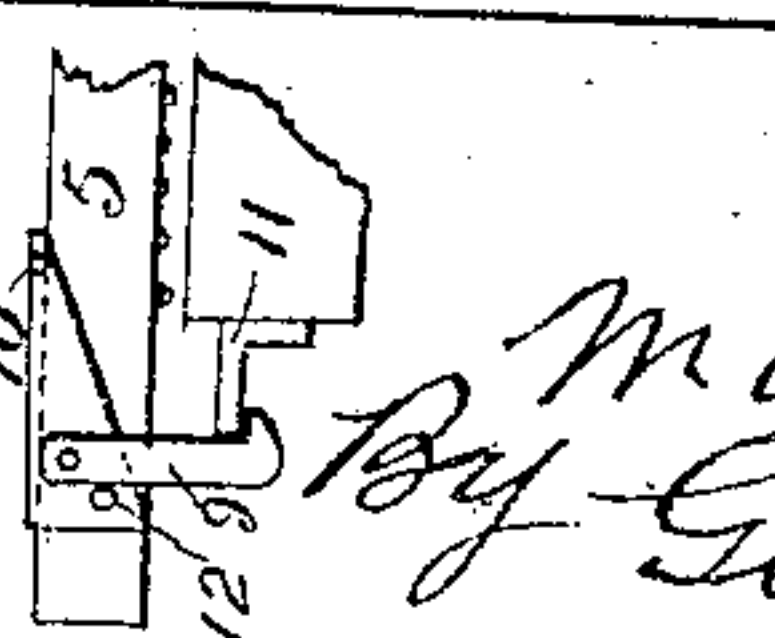
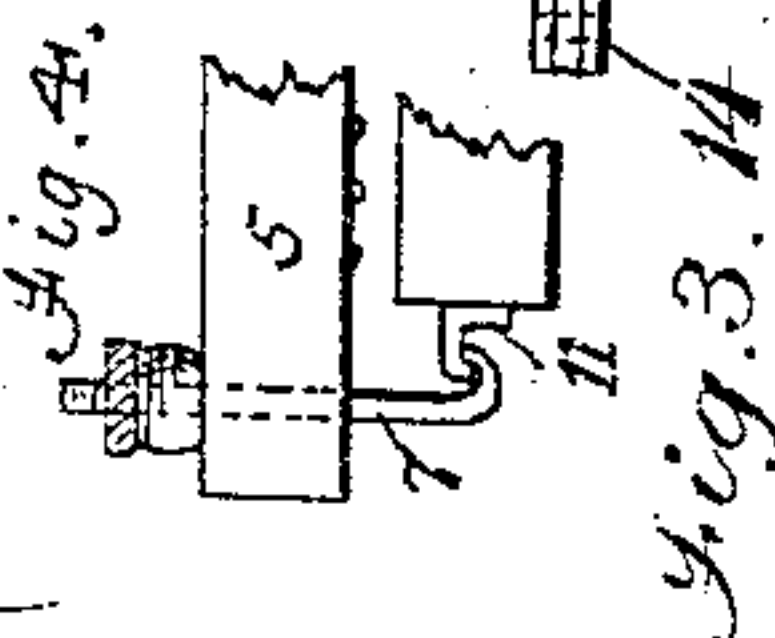
PATENTED SEPT. 27, 1904.

M. KOLANDER.
ACCOMPANIMENT GUITAR ZITHER.
APPLICATION FILED DEC. 31, 1903.

NO MODEL.



Witnesses:-
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UNITED STATES PATENT OFFICE.

MAX KOLANDER, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO OSCAR SCHMIDT, OF JERSEY CITY, NEW JERSEY.

ACCOMPANIMENT GUITAR-ZITHER.

SPECIFICATION forming part of Letters Patent No. 770,864, dated September 27, 1904.

Application filed December 31, 1903. Serial No. 187,268. (No model.)

To all whom it may concern:

Be it known that I, MAX KOLANDER, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Accompaniment Guitar-Zithers, of which the following is a specification.

My invention relates to improvements in musical instruments, and particularly in that instrument known as a "zither."

The object of the invention is to provide a zither suitable especially for accompaniment purposes in which the strings are grouped, primarily, with relation to the chords to be played, so that the most unskilled or unmusical person may easily and correctly play all the chords to any song, including such modulations or changes from one key to another as may be demanded or proper.

It consists of the parts and the construction and combination of parts as hereinafter more fully described, having reference to the accompanying drawings, in which—

Figure 1 is a plan view of the zither. Fig. 2 is a side view of same. Fig. 3 is a detail of the locking devices 9, 10, 11, and 12. Fig. 4 is a detail of the adjustable hook member 7.

A represents the body of my zither, which in the present instance is shown as rectangular in outline.

2 represents the strings, and 3 the finger-board, which is fretted, as at 4, after the manner of a guitar.

No fingering by the left hand is necessary with this instrument, the frets being for the purpose of adapting the instrument by means of a capo tasto 5 to any key. With the capo tasto removed the strings are all tuned to the key of C. The strings are arranged in groups of four, one bass and three treble strings for each group, progressively across the board in such manner that for the key of C the first three groups will play in proper sequence the three major chords; the fourth, fifth, and sixth groups, the modulation to the three minor chords; the seventh and eighth, two chords of G-major modulation; the ninth and tenth, two chords of E-minor modulation; the eleventh, the modulation key of F; the twelfth, the

modulation key of D minor; the thirteenth, 50 fourteenth, and fifteenth groups successively the diminished seventh of the three major keys above—to wit, the key of C, the key of G, and the key of F. In all fifteen chords, each of which consists of the bass and of the 55 corresponding triad in the treble, may be struck on the open strings. With the capo tasto in position the pitch of all the strings is changed at once, while the harmonic chord relation is still preserved. By this string ar- 60 rangement all the strings necessary to produce any desired chord are consecutively placed so that it is not necessary to seek all over the keyboard to find the notes, it being possible to strike all the notes of any chord by 65 a single sweep of the pick or plectum. This string arrangement whereby the strings are grouped according to the several chords is in marked distinction to the melodic arrangement of the ordinary zither. This zither is 70 not designed for the playing of melodies.

To illustrate the string arrangement more clearly, starting on the side of the instrument nearest the player the strings in open position are tuned in the following sequence, as shown 75 in chart 6 on the sounding-board: The first group of four strings run C in bass and G C E in treble, which is the chord of the tonic in key of C. The second group has F in bass and A C F in treble, the chord of the subdominant 80 key of C. The third group has G in bass and G B F in treble, the chord of the dominant. These three chords and the next three follow each other in sequence, since they are the most used. From key of C the natural change is 85 into key of A minor, and here the first chord, which corresponds to group 4, is A in bass and A C E in treble or chord of the tonic. The fifth group is D in bass and A D F in treble or chord of the subdominant. The sixth is E 90 in bass and G sharp B E in treble or chord of the dominant. The seventh passes again from the key of A minor into key of G major, and the chord is G in bass and G B G in treble or chord of the tonic. The eighth chord in se- 95 quence or the chord of the subdominant to G major is the same as the first chord of our series or the chord of the tonic key of C, and

hence is omitted. The progression of the chords proceeds as shown on chart 6, and so need not be specifically detailed here, as it is merely such chord arrangements as enter into all musical composition. It may be stated that what would correctly be the eleventh chord of the order here shown is the same as the fourth of our series or the tonic of A minor, and so is not duplicated.

For the convenience of the learner the chords on chart 6 are numbered consecutively, as shown from "1" to "17", omitting "8" and "11," which, as we have just seen, are duplicated in 1 and 4. These figures bear a definite relation to the book of songs which accompany the zither.

Instead of using ordinary music represented by notes, the staff, &c., the chords of the accompaniment to the piece to be sung are represented by figures. Thus, for instance, the song "Alice, Where Art Thou?" the first two lines, words and music, would be written thus: The (1) birds sleeping (3) gently (2) Sweet Lyra gleameth (1) bright; Her (14) rays tinge the (5) forest, and (3) all seems glad to (1) night.

The figures in the song tell which chords to play while singing, the chords being numbered correspondingly with the chords on the zither. When one comes to a number in the song, the player strikes by means of a plectum or pick the bass once and the three accompanying treble-strings together once, twice, or thrice, according to the designated tempo.

Any suitable means may be employed for attaching the capo tasto. In the present instance the bar 5 has an adjustable hook member 7 at one end adapted to engage a flange 8 on one side of the body A. The other end of the bar carries a toggle locking device consisting of two members 9 10, hinged together, one member, 9, having a hook portion to engage a ledge or flange 11 on the side of the body opposite to flange 8 and the other member pivoted to the bar, as at 12. In operation the hook 7 being engaged with its ledge 8, locking member 10 is thrown forward and downward to carry the pivot of member 9 below the fulcrum 12. This allows the hook of member 9 to be engaged with its ledge 11. By lifting and pulling back on member 10 the pivot of member 9 is carried up over and beyond fulcrum 12, which thereby causes the bar to press down on the strings between the frets. To prevent the capo tasto from springing, which it is liable to do, owing to the wide expanse of strings across which it extends, I employ a bar 13, pivoted to the rear end of the zither on a standard 14 and held down on bar 5 by suitable locking means, as shown at 15. With the capo tasto bridging the strings behind the first fret the zither will be pitched to play in five flats, between the first and second frets to two sharps, between the second and third to three flats, and so on, as

shown by the notation on the farther side of the finger-board.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. An accompaniment-zither having in combination a fretted sounding-board, a capo tasto having means of attachment with said board, groups of strings arranged in sequence to produce successively when in open position the principal triad chords of the key of C major, A minor, G major, E minor, F major, and D minor as the same may occur as modulations of the key of C, and a series of consecutive numbers, one for each group of strings, and arranged in succession across the instrument.

2. An accompaniment-zither having in combination a fretted sounding-board, a series of strings arranged progressively across the board, from the lower to the upper side in the following order: tonic of C major; subdominant of C major; dominant seventh of C major; tonic of A minor; subdominant of A minor; dominant seventh of A minor; tonic of G major; tonic of E minor; dominant seventh of E minor; dominant seventh of key of F major; dominant seventh of key of D minor; diminished seventh of key of C major; diminished seventh of key of G major and diminished seventh of key of F major; a series of numbers one for each group of strings and arranged in consecutive order from the lower to the upper side of the board, and a capo tasto and means for attaching it to said board.

3. The combination with a zither having a fretted finger-board, of a capo tasto having means at each end to engage the body of the zither, said means including an adjustable member as 7.

4. The combination with a zither having a fretted finger-board, of a capo tasto, and means thereon for locking it in position on the strings, said means including a toggle locking member at one end of said capo tasto substantially as described.

5. The combination with a zither having a fretted finger-board, of a capo tasto, hook members carried by said capo tasto and means including a flanged member on each side of the zither adjacent to the finger-board with which the said hook members may be engaged.

6. The combination with a zither having a fretted finger-board, of a capo-tasto attachment, and a hinged bar 13 and locking means therefor arranged to prevent vibration of the capo tasto.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MAX KOLANDER.

Witnesses:

CHAS. E. TOWNSEND,
S. H. NOURSE.