

(No Model.)

2 Sheets—Sheet 1.

F. MENZENHAUER. GUITAR ZITHER.

No. 520,651.

Patented May 29, 1894.

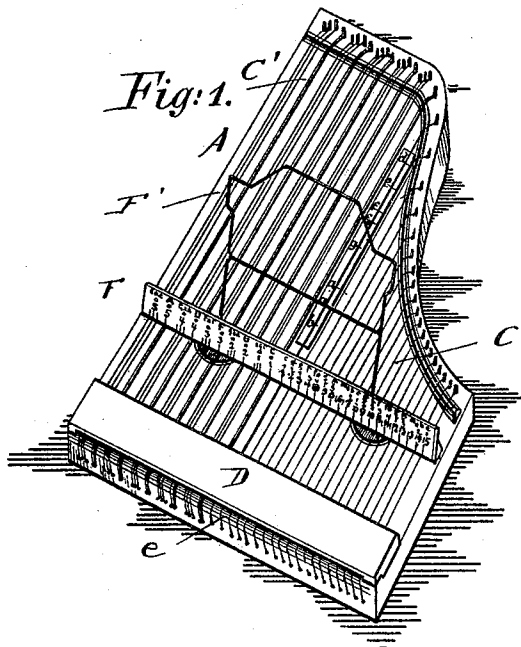
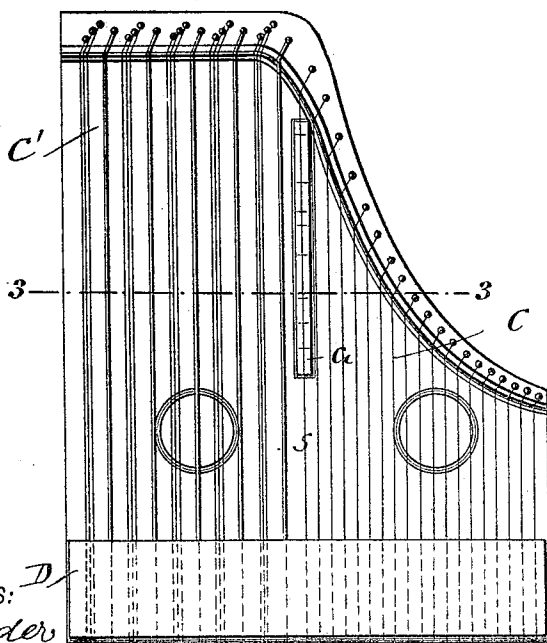


Fig. 2.



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Fig. 3.



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Fig. 4.

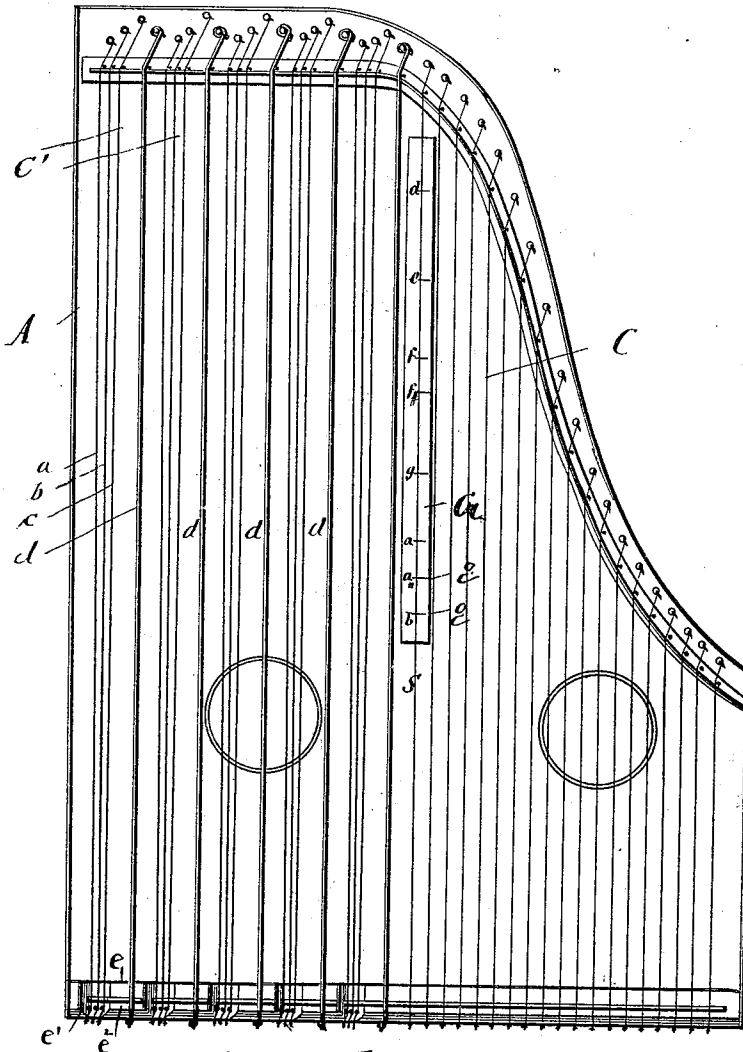
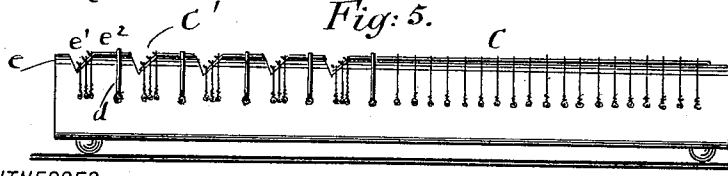


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRED MENZENHAUER, OF JERSEY CITY, NEW JERSEY.

GUITAR-ZITHER.

SPECIFICATION forming part of Letters Patent No. 520,651, dated May 29, 1894.

Application filed April 20, 1893. Serial No. 471,147. (No model.)

To all whom it may concern:

Be it known that I, FRED MENZENHAUER, a citizen of the United States, residing in Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Guitar-Zithers, of which the following is a specification.

This invention has reference to an improved musical instrument, which combines to some extent the advantages of a guitar and a zither, and which can be played with great facility without special knowledge of the ordinary notation of music, the accompaniment being played in the nature of a guitar while the tune is played on an open scale of strings.

The invention consists of a zither-like instrument, in which an open scale of strings are arranged, and a number of strings arranged in groups so as to produce the corresponding chords for the strings of the open scale. At the front end of the instrument is arranged a rest-board for the hands while across the strings extends an inclined detachable bracket on which the numbers of the strings of the open scale and the numbers of the groups of strings playing the chords corresponding to the same are placed. A music-rack is attached to the inclined bracket for supporting the music of the instrument.

The invention further consists of the arrangement in connection with the sounding board of the instrument, of a separate tuning string and a fret-board below the same, said fret-board being provided with frets, on which the tuning string is pressed, so as to give thereby the different tones to which the strings of the open scale are to be tuned, whereby the tuning of said strings is greatly facilitated.

In the accompanying drawings, Figure 1 represents a perspective view of my improved guitar-zither. Fig. 2 is a top view of the same, drawn on a larger scale. Fig. 3 is a vertical transverse section on line 3 3, Fig. 2. Fig. 4 is a top view of the same on a larger scale the rest-board being omitted, and Fig. 5 is a front end view of the same.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the sounding-board of my improved musical instrument, to which I have given the name of guitar-zither, because it partakes to some extent of the character of both the guitar and zither. The general shape of the sounding-board and its supporting-frame is like that of a harp. An open scale of strings is arranged at the right hand side of the instrument, while a number of strings C' are arranged according to a number of chords, in groups of four at the left hand side of the instrument. The strings of each chord are tuned so as to be in harmony with the corresponding strings C of the open scale. The different groups of strings C' furnish the accompaniment for the strings of the open scale and produce by vibrating of any one group a full and harmonious accompaniment to the strings of the open scale. The chord-strings C' are arranged as stated, in groups, there being four strings *a b c d* in each group, of which the string *d* is the leading string or lowest in tone of each group. The several strings *d* are all located in the same plane above the sounding-board and the strings *c b a* of each group are arranged one slightly lower than the one preceding it, as shown in Fig. 5, the bridge *e* being provided with triangular recesses *e'* for receiving said strings and with straight portions *e²* for the leading strings. Above the bridge *e* at the front end of the sounding-board is arranged a rest-board D which extends transversely over the ends of the strings, so that it does not touch the strings. The rest-board D serves to support the hands while in the act of vibrating the strings. The thumb of the right hand sounds the strings of the open scale, while the fingers of the left-hand vibrate the chord-string. A detachable bracket F with an inclined face is attached by means of dowels into mortises or socket-holes of the sounding-frame, said bracket extending transversely across the strings and being provided with the numbers of the strings of the open scale and with the numbers of the groups composing the different chords, the numbers of the chords corresponding to the strings of the open scale being placed above the same so as to readily indicate thereby what corre-

sponding chord is to be sounded in connection with any one of the strings of the open scale. Besides the number representing the value of the string, the pitch of the string may be indicated on the bracket F. The bracket also forms a support for the music-rack F' which is preferably bent of wire and inserted detachably into socket-holes of the brackets. The lower ends of the music-sheets rest against the projecting portion of the bracket F. The pieces of music are not printed in the ordinary musical notation, but are printed so as to indicate the number of the string of the open scale, and the number of the corresponding chord, and are produced simply by printing the numbers of the chords above the corresponding strings C. In this manner the art of playing on this musical instrument can be soon acquired with comparatively little practice and without study of the ordinary musical notation.

At the point where the strings of the open scale and the strings of the chords meet, is interposed an independent string S which serves as a so-called tuning-string. This string extends over a fret-board G which is located on the sounding-board and provided with frets *g* for the leading strings of the open scale. By pressing the tuning-strings with the fingers on the different frets of the fret-board G and then vibrating the corresponding string C, a sound is produced which corresponds to the sound of the corresponding string C, so that the latter when out of tune can be readily retuned by means of the tuning-string in connection with the tune fret-board. This is an important accessory to my improved musical instrument, as thereby the tuning of the leading strings of the open scale, which always is a difficult thing for an inexperienced player, is rendered comparatively easy, so that the instrument can be kept properly tuned. The strings of the chords are tuned in harmony with the leading strings of the open scale, so that the music played on the instrument is of a pleasant character and devoid to some extent of the harshness of the sound of the zither, while possessing the soft full tone of the guitar.

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

1. A musical instrument or guitar-zither, provided with an open scale of leading-strings at one side of the sounding-board, and a number of groups of strings arranged at the other side of the sounding-board, the strings of each group being tuned to the intervals of separate harmonic chords for the leading strings, and each group being composed of a bass-string and additional strings tuned in a harmonic chord with the bass-string, substantially as set forth.

2. The combination, with the sounding-board of a musical instrument or guitar-zither, of an open scale of strings, and groups of strings for playing chords in harmony with the string of the open scale, each group being formed of a leading string and three chord-strings, all the leading strings being arranged in one plane while the chord-strings of each group are arranged successively below the preceding string, substantially as set forth.

3. The combination, with the sounding-board of a musical instrument or guitar-zither, having a bridge with straight portions and inclined recesses, and groups of strings for playing chords, the leading strings being stretched over the straight portions, and the chord-strings on the inclined portions of the recesses, substantially as set forth.

4. The combination, with the sounding-board of a musical instrument or guitar-zither, and a rest-board above the front end of the same, an open scale of strings arranged at one side of the sounding-board and a number of groups of strings for playing chords corresponding to the several strings, of the open scale, substantially as set forth.

5. The combination, with a musical instrument or guitar-zither having an open scale of strings and a number of groups of strings for playing chords corresponding to the strings of the open scale, of a bracket extending across the strings and provided with characters indicating the numbers of the strings and chords so as to indicate the chords to be played with the strings of the open scale, substantially as set forth.

6. The combination, with a musical instrument having an open scale of strings at one side and a number of groups of strings for playing chords corresponding to the strings of the open scale, a transverse bracket extending bridge-like across all the strings, and a music-rack attached to said bracket, substantially as set forth.

7. The combination of a musical instrument having an open scale of strings and a number of corresponding groups of strings for playing chords, a tuning-string interposed between the strings of the open scale, and groups of chord strings and a fret-board below said tuning-string, so as to produce different tones corresponding to the leading strings of the open scale and permit thereby the easy tuning of the latter, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRED MENZENHAUER.

Witnesses:

PAUL GOEPEL,
H. WILLARD GRIFFITHS.