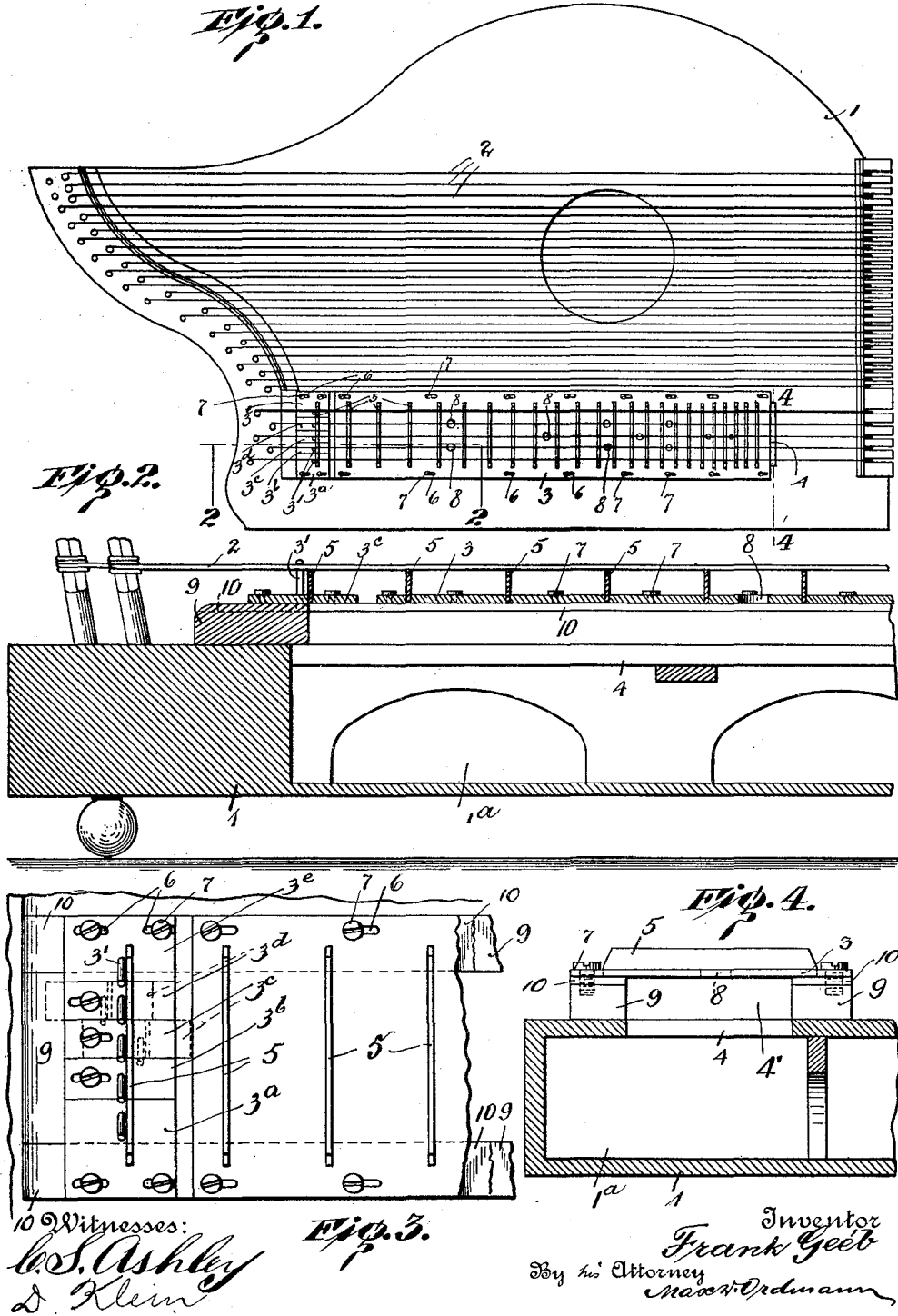


F. GEÉB.
 MUSICAL INSTRUMENT.
 APPLICATION FILED MAY 20, 1914.

1,111,256.

Patented Sept. 22, 1914.



10 Witnesses:
W. S. Ashley
D. Klein

Fig. 5.

Inventor
Frank Geéb
 By his Attorney
Max & Ordmann

UNITED STATES PATENT OFFICE.

FRANK GEÉB, OF LONG ISLAND CITY, NEW YORK.

MUSICAL INSTRUMENT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK GEÉB, a subject of the Emperor of Austria-Hungary, residing at Long Island City, in the county of Queens and State of New York, have invented certain new and useful Improvements in Musical Instruments, of which the following is a specification.

The present invention relates to musical instruments, such as zithers, and has for its object to provide a construction that will render the instrument more durable, enable the adjustment of the finger board to compensate for changes due to atmospheric or other external influences, the adjustment of the tension of the strings above the finger board to allow of their proper tuning and that will produce a fuller and richer tone. With this object in view I provide a longitudinal opening in the top of the resonant body extending below the strings on which the melody is played and arrange my finger board over said opening in such a manner that the same can be easily adjusted longitudinally and readily removed. I also provide the finger board with removable frets and with sound holes communicating through the above-named opening with the interior of the resonant body. Furthermore, I construct the finger board in sections so that in case repair is required, not the entire board, but only a part needs to be removed.

My invention will be more fully understood by reference to the accompanying drawing, in which similar reference characters denote corresponding parts and in which—

Figure 1 is a top plan view of my improved instrument; Fig. 2 is a longitudinal section on line 2—2 of Fig. 1; Fig. 3 is an enlarged top plan view of a part of the finger board and Fig. 4 is a cross section on line 4—4 of Fig. 1.

Referring specifically to the drawing 1 denotes the resonant body of the instrument and 2 the strings, of which the first five, beginning from the bottom of the figure, are those on which the melody is played; while the other strings serve for the accompaniment.

3 denotes my new finger board and 4 denotes an opening in the top of the resonant body, which opening extends substantially throughout the entire length of the finger board.

5 denotes the frets in the finger board.

It is well known that with zithers a tremulous tone is given by rubbing the stretched string on the frets by reason of which the frets become quickly worn or dented. To avoid this, the finger board and the frets are made of metal and the frets are fitted in slots provided in the finger board so as to be easily removable in case of any repair being required or in case it is desired to replace the worn out or dented frets by new ones.

The finger board is provided along its longitudinal edges and at both sides with longitudinal slots 6 through which screw bolts 7 are passed and whereby the finger board is capable of longitudinal adjustment in order to rectify the changes due to climatic or atmospheric influences. Suitably fixed to the top of the resonant body is a substantially U-shaped wooden base 9 which surrounds the longitudinal opening 4 on three sides. On this wooden base the finger board is mounted and is attached by the aforementioned screws 7 passed through the slots 6. Additional means to rectify changes consist in longitudinal shims or strips 10 interposed between the base 9 and the board and which allow of the latter being raised or lowered relatively to the resonant body.

Instead of the ordinary position dots the board is provided with sound holes 8 which communicate with the interior of the resonant body through the longitudinal opening 4 and which serve to produce superior tones. At the open end of the U-shaped base 9 a passage or sound hole 4' (Fig. 4) is formed between the finger board and the top of the resonant body which passage or sound hole communicates with the recess 4 and serve the same purpose as the sound holes 8.

As is customary, the strings stretched over the finger board are spaced by inclined pins 3' secured in the finger board. Owing to these spacers the removal of the finger board for repair or exchange would require the slackening of the strings. In order to avoid this and to obviate the necessity of removing the entire finger board I divide the latter transversely in sections.

In the present embodiment of my invention the finger board is shown divided into two sections, a shorter section 3^a on which the spacer pins 3' are fixed and which carries one fret, and a longer section 3 which carries the rest of the frets. Thus when some change is required on part 3, the latter

can be removed sidewise after unscrewing the screws 7 without slackening the strings, while the part 3^a need not be touched.

In addition to the aforementioned division of the board the part 3^a may be divided longitudinally in sections, such as 3^a, 3^b, 3^c, 3^d, 3^e, according to the number of strings used for playing the melody and the corresponding number of spacer pins. Owing to this arrangement the sections can be independently removed and adjusted longitudinally. The individual sections are secured to the base 9 in the same manner as the part 3 of the finger board, namely by providing longitudinal slots 6 through which screw bolts 7 are passed. The independent longitudinal displacement of the individual sections is required in order to allow of the strings being properly tuned, for the strings for playing the melody on a zither are generally of three different thicknesses which are not made to given measures. Therefore, there is different tension, which frequently causes disonance. This disonance can be easily rectified by the adjustment of the individual sections 3^a, 3^b, 3^c, 3^d, 3^e by moving them away from or nearer to the part 3 as indicated by dotted lines of parts 3^c and 3^d in Fig. 3.

What I claim and desire to secure by Letters Patent is:

1. In a zither, a resonant body, a finger board having longitudinal slots for the passage of screws into said body, and whereby said board is rendered adjustable on said resonant body.

2. In a zither, a resonant body, a wooden base fixed to the top thereof and a finger board removably and adjustably fixed to said base.

3. In a zither, a resonant body, a sectional finger board, each section being removably and adjustably fixed to said body.

4. In a zither, a resonant body, a finger board having removable frets and removably and adjustably fixed to said body.

5. In a zither, a resonant body, a sectional finger board thereon, the sections being capable of independent longitudinal adjustment and removal.

6. In a zither, a resonant body, a finger board divided transversely in sections, each section being removably and adjustably fixed to said body.

7. In a zither, a resonant body, a finger

board divided transversely and longitudinally in sections, each section being independently, removably and adjustably fixed to said body.

8. A zither, comprising a resonant body having a longitudinal opening and a finger board removably arranged over said opening and having holes communicating with the interior of said instrument.

9. A zither, comprising a resonant body having a longitudinal opening and a finger board removably arranged over said opening and removable frets in said finger board.

10. A zither, comprising a resonant body having a longitudinal opening, a metal finger board removably and adjustably mounted over said opening and having holes communicating with the interior of the resonant body and removable frets in said finger board.

11. A zither, comprising a resonant body having a longitudinal opening, a wooden U-shaped base fixed around said opening and a metal finger board mounted on said base to be capable of displacement and removal and having holes communicating with the interior of said resonant body and serving to give a clear resonance effect.

12. A zither, comprising a resonant body, a wooden base fixed thereto, a metal finger board having marginal longitudinal slots and screws passed through said slots and screwed into the wooden base, said slots permitting a displacement of the said board.

13. A zither, comprising a resonant body, a U-shaped base fixed thereto, longitudinal shims on said base and a finger board removably and adjustably mounted on said shims.

14. A zither, comprising a resonant body having a longitudinal opening, a base fixed to said body and surrounding said opening on three sides, and a finger board fixed on said base, there being a sound hole formed at one end of said base between said body and said finger board, which hole communicates with the interior of the body through said longitudinal opening.

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

FRANK GEËB.

Witnesses:

E. D. JUNIOR,
D. KLEIN.