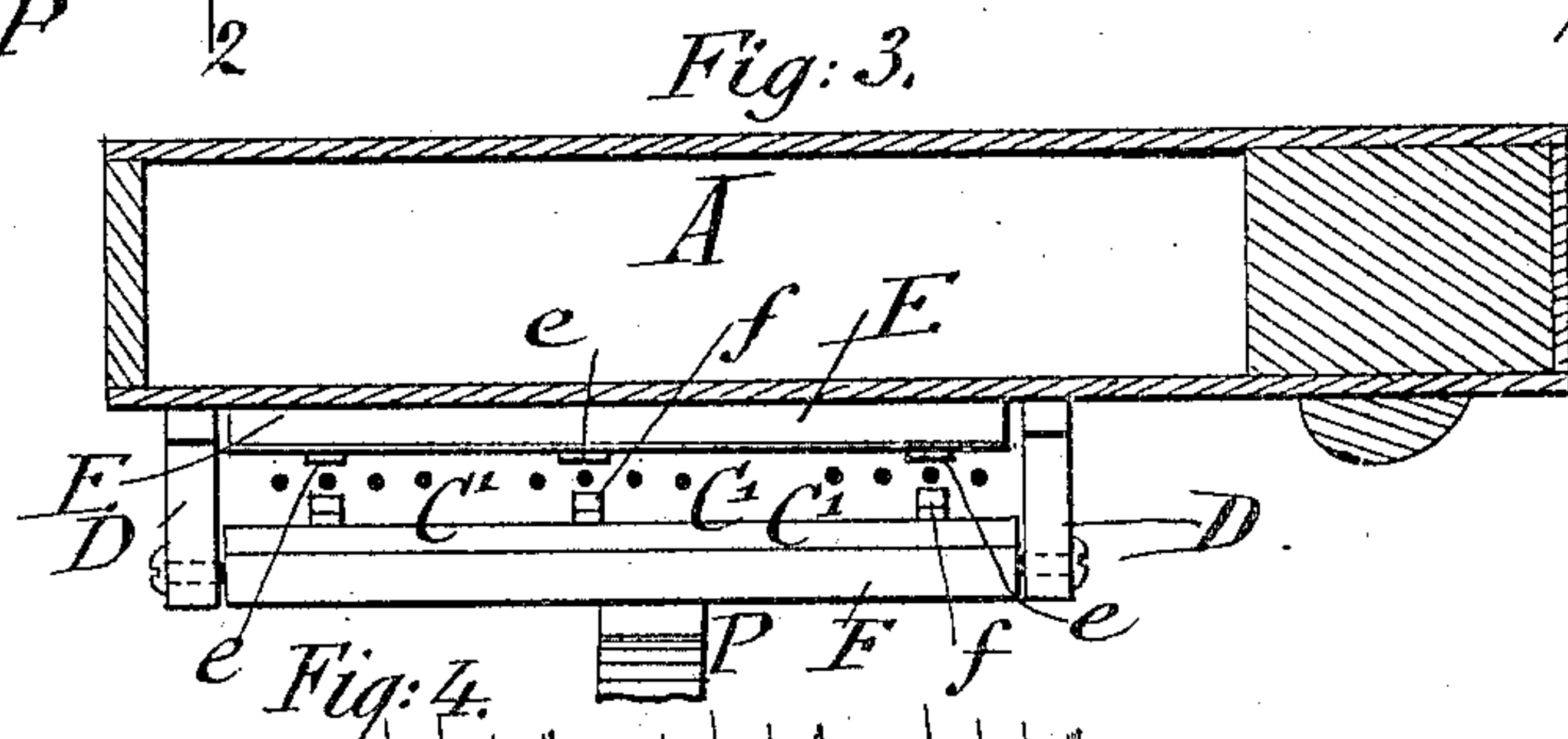
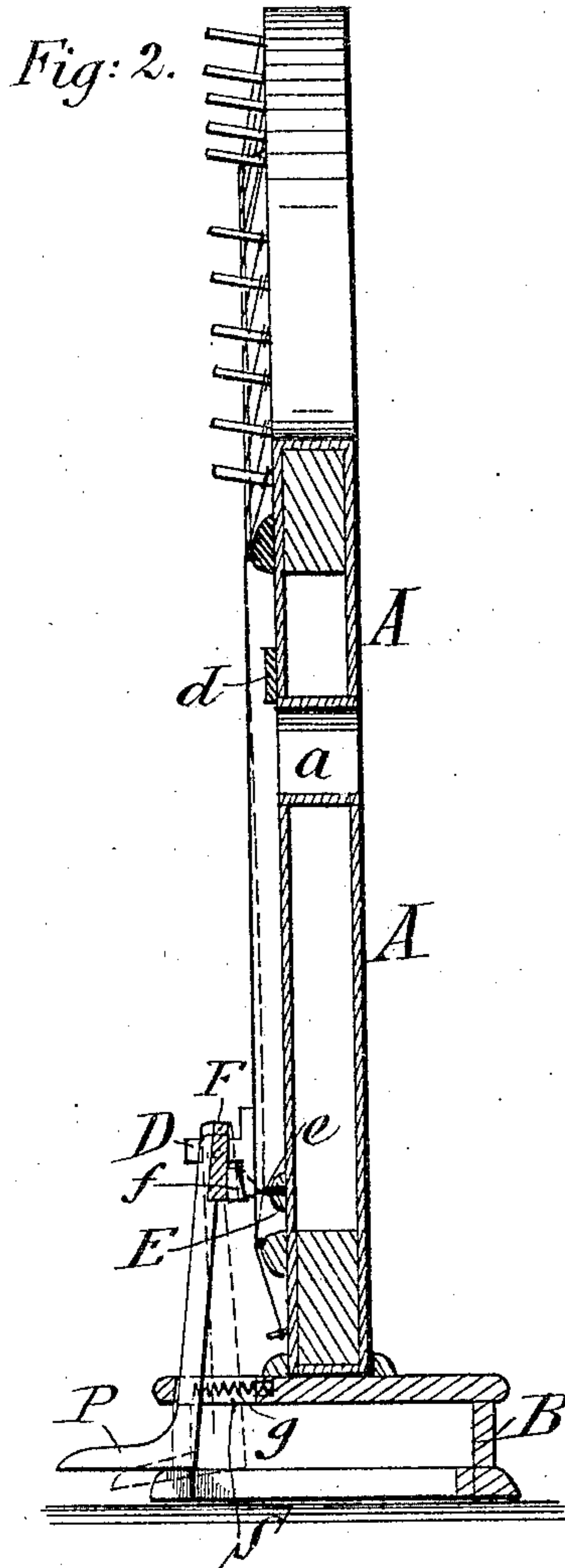
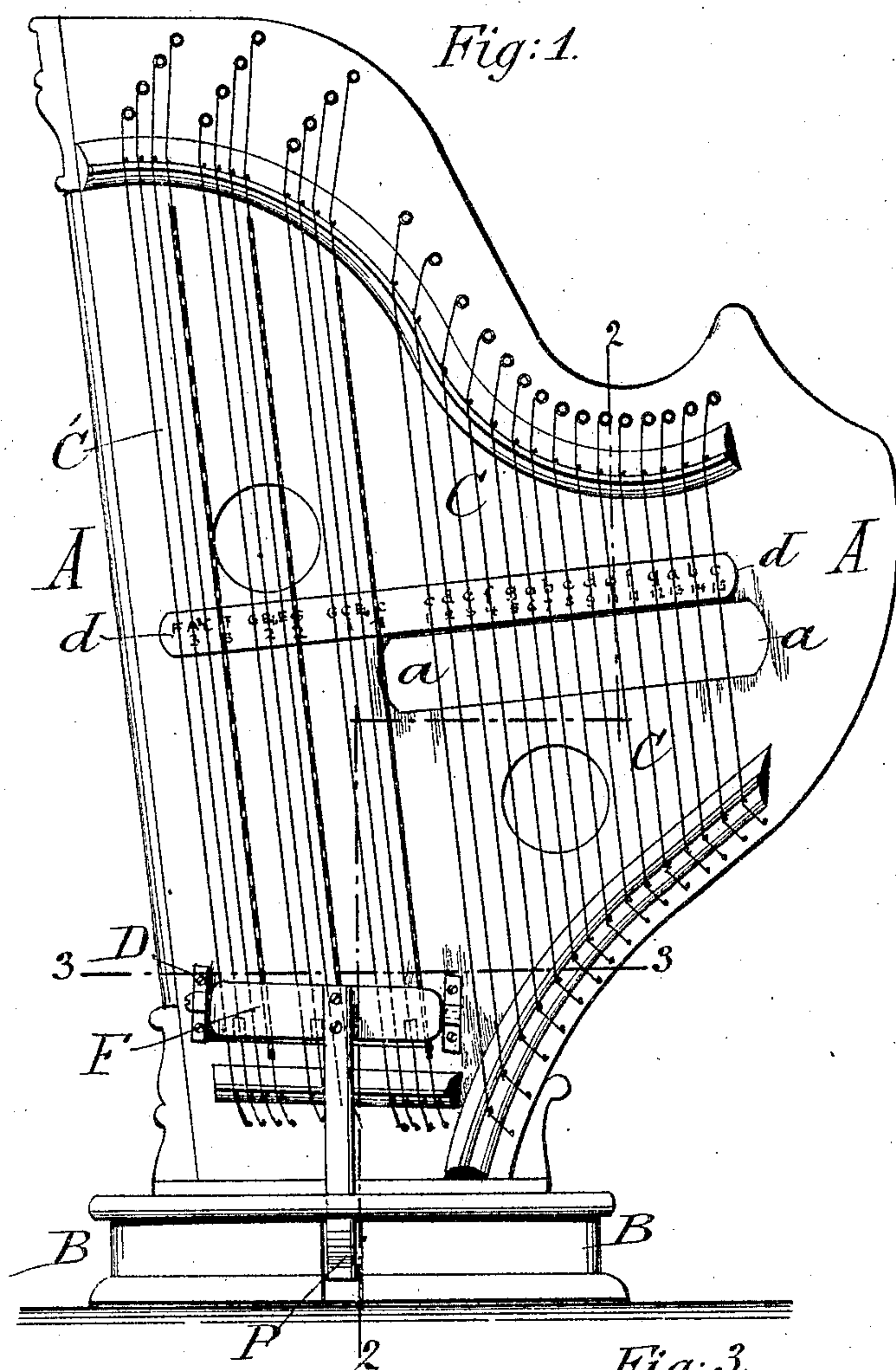


(No Model.)

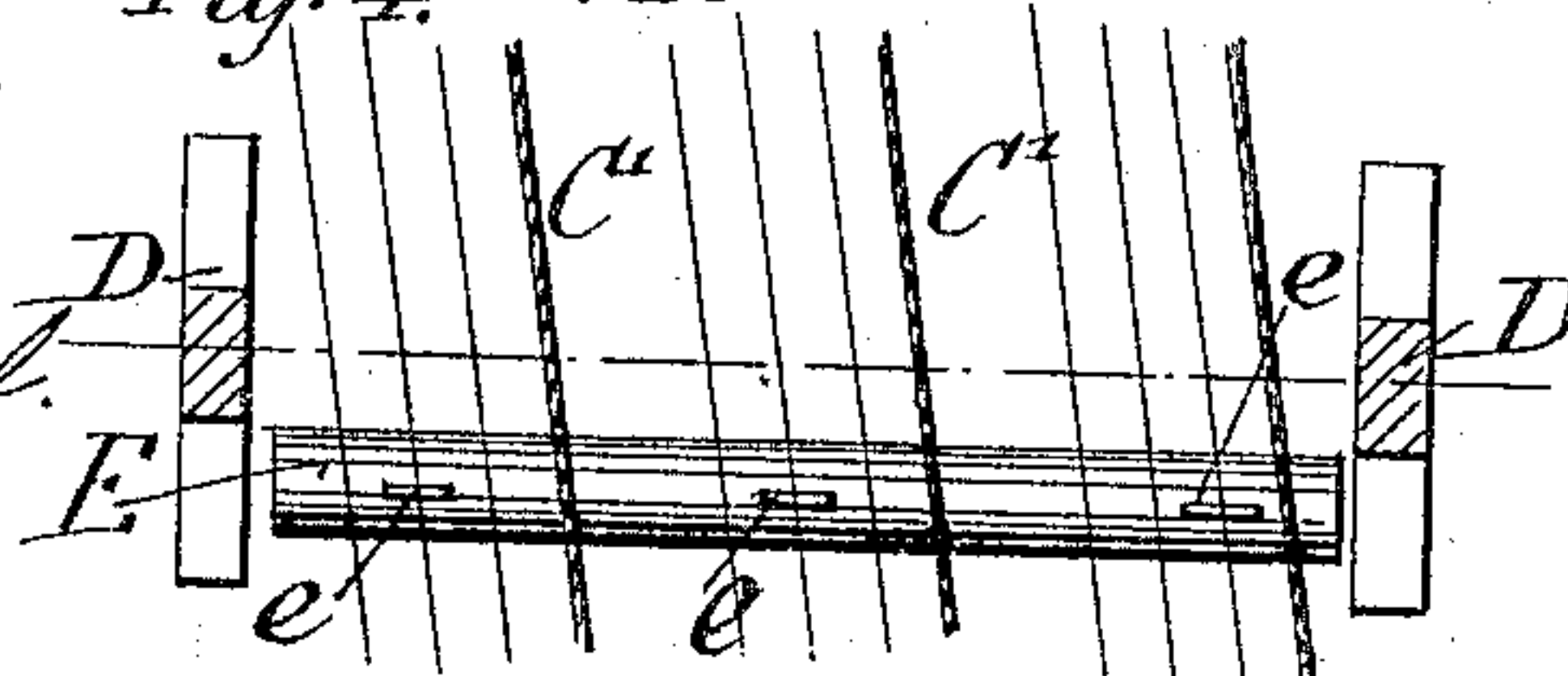
F. MENZENHAUER.
HARP CITHERN.

No. 574,746.

Patented Jan. 5, 1897.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FREDERICK MENZENHAUER, OF JERSEY CITY, NEW JERSEY.

HARP-CITHERN.

SPECIFICATION forming part of Letters Patent No. 574,746, dated January 5, 1897.

Application filed October 28, 1896. Serial No. 610,292. (No model.)

To all whom it may concern:

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

This invention relates to an improved musical instrument which combines to some extent the advantages of a harp and a cithern and which can be built in larger sizes and played with great facility without any special knowledge of the ordinary notation of music, as the melody is played on a group of leading-strings and the accompaniment is played on a group of accompaniment-strings in the nature of a harp; and the invention consists of a musical instrument or harp-cithern comprising an upright sounding-board arranged on a suitable base, an open scale of strings arranged to extend over the rear part of the sounding-board, which is in turn provided with an opening extending transversely across the group of leading-strings, and a number of accompaniment-strings arranged at the fore part of the sounding-board, said accompaniment-strings being arranged in groups which are tuned to the intervals of separate harmonic chords for the leading-strings.

The invention consists, further, of a musical instrument or harp-cithern in which, across the lower part of the groups of accompaniment-strings, is arranged a transverse fret-board provided with frets, so that one string of each group can be acted upon by a pivoted presser-bar actuated by a pedal connected thereto, thereby enabling the accompaniment-chords to be played either in major or minor key, as required by the melody played on the leading-strings.

In the accompanying drawings, Figure 1 represents a side elevation of my improved harp-cithern. Fig. 2 is a vertical transverse section of the same on line 2 2, Fig. 1. Fig. 3 is an enlarged horizontal section on line 3 3, Fig. 1; and Fig. 4 is a detail front view of the transverse fret-board, showing the individual frets for changing one of the strings of each chord to the major or minor key, as required.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the sounding-board of my improved musical instrument, which I have given the name "harp-cithern" because it partakes of the character of both the harp and cithern. The general shape of the sounding-board A is like that of a harp, being highest at its front part and diminished in height at its rear part and supported in upright position on a base B, so that it can be placed like a harp between the feet of the player and played by the hands in the nature of a harp.

The harp-cithern can be made in any desired size from instruments of smaller size, adapted for the use of children, to instruments which correspond to the size of an ordinary harp.

At the rear part, at the right-hand side of the sounding-board A, is arranged an open scale of strings C, while at the front part of the instrument is arranged a number of accompaniment-strings C', which are arranged in groups, from three groups upward, the strings of each group being tuned to the intervals of separate harmonic chords of the corresponding leading-strings in the open scale of strings C. The groups of strings C' furnish the accompaniment-chords for the strings of the open scale C and produce by vibrating in one group a full harmonic accompaniment to the leading or melody strings. The chord-strings C' are preferably arranged in groups of four strings each, one of the strings being the lowest or base string of the group.

In the rear part of the sounding-board A is arranged transversely to the leading strings an opening *a* of sufficient width to permit the fingers of the right hand to pass through the opening and sound the leading-strings, while the left hand is used for sounding the groups of accompaniment or chord strings. Above the transverse opening *a* in the sounding-board A is arranged, below the strings, a so-called "musical slip" *d*, on which are the names corresponding to the leading and accompaniment strings and figures which indicate the leading strings and chords, so that the piece of music can be played from music-sheets which are not printed in the ordinary

musical notation, but so as to indicate the numbers of the leading-strings and the numbers of the corresponding chords of the accompaniment-strings, whereby the art of playing on this musical instrument can be acquired with comparatively little practice and without studying the ordinary musical notation.

Below the lower ends of the different chords of accompaniment-strings is arranged a stationary fret E, which is provided with individual frets *e*, one for each chord, said frets being located below that string of the accompaniment-chord by which the change of the chord from the major to the minor key is obtained. Above the fret-board and in front of the strings is arranged a centrally-pivoted and oscillating presser-bar F, the pivots of which turn in suitable bearings D, attached to the sounding-board at the ends of the presser-bar, and which is provided in front of each individual fret *e* with a presser-finger *f*. The fingers *f* of the presser-bar are pressed against the individual string of each chord, below which the fret *e* is arranged, by means of a pedal P, that is attached to the presser-bar F and which is guided in a slot S in the base B, the lower part of the pedal-shank being actuated by a helical spring *g*, that is interposed between the shank of the pedal and the socket for the same in the base, as shown in Fig. 2. The spring *g* presses the pedal in outward direction and thereby the presser-bar with its fingers away from the frets, so that the minor key is sounded when the pedal is not depressed.

Whenever the melody requires that a major key be sounded for one of the leading-strings, the pedal is depressed and thereby the presser-bar and its fingers moved against the strings, so that then either one of the groups of accompaniment-strings may be sounded in the major key. As the pedal is operated by the feet the playing of the accompaniment-chords in the major or minor key is in full control, and thereby the range and charm of my improved instrument is considerably enhanced.

Having thus described my invention, what I claim is—

1. A musical instrument or harp-cithern, consisting of a sounding-board provided with a transverse opening in its middle rear por-

tion; an open scale of leading-strings arranged on the rear portion of the sounding-board, and extending across the opening, and a number of groups of accompaniment-strings arranged at the front portion of the sounding-board, the strings of each group being tuned to the intervals of separate harmonic chords of the leading-strings, substantially as set forth.

2. A musical instrument or harp-cithern, consisting of an upright sounding-board made in the form of a harp and provided with a transverse opening in the middle rear portion of the same, a base for supporting the sounding-board in upright position, an open scale of leading-strings on the rear part of the sounding-board extending across the transverse opening in the same, and a number of groups of accompaniment-strings arranged on the front part of the sounding-board, each group of accompaniment-strings being tuned to the intervals of the separate harmonic chords of the leading-strings, substantially as set forth.

3. A musical instrument or harp-cithern, composed of an upright sounding-board in the form of a harp and provided with a transverse opening at the middle rear portion of the sounding-board, an open scale of leading-strings arranged at the rear portion of the sounding-board, a number of groups of accompaniment-strings arranged on the front part of the sounding-board, the strings of each group being tuned to the intervals of separate harmonic chords of the leading-strings, a fret-board provided with individual frets below one of the strings of each group of accompaniment-strings, a pivoted presser-bar provided with fingers in front of the strings adjacent to which the frets are arranged, and a spring-actuated pedal applied to the presser-bar and adapted to actuate the presser-bar so as to be pressed on the strings or moved away therefrom and produce thereby the play of the groups of accompaniment-strings in the major or minor key as required, 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.

FREDERICK MENZENHAUER.

Witnesses:

PAUL GOEPEL,
GEO. W. JAEKEL.