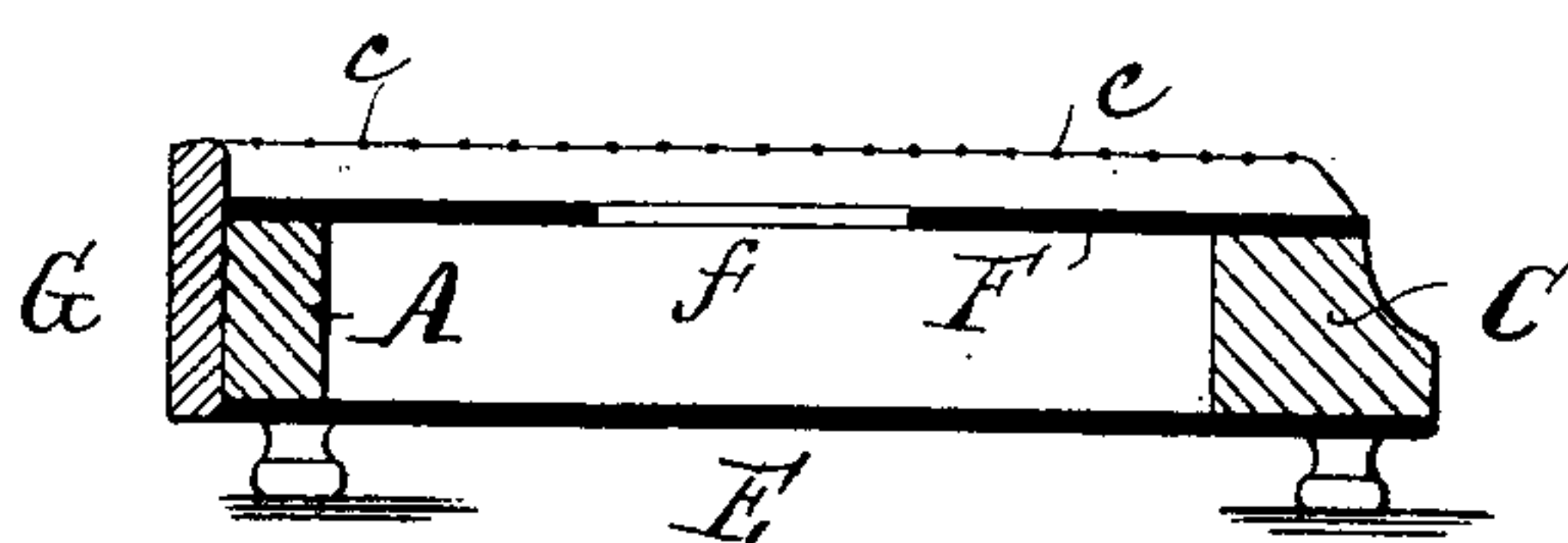
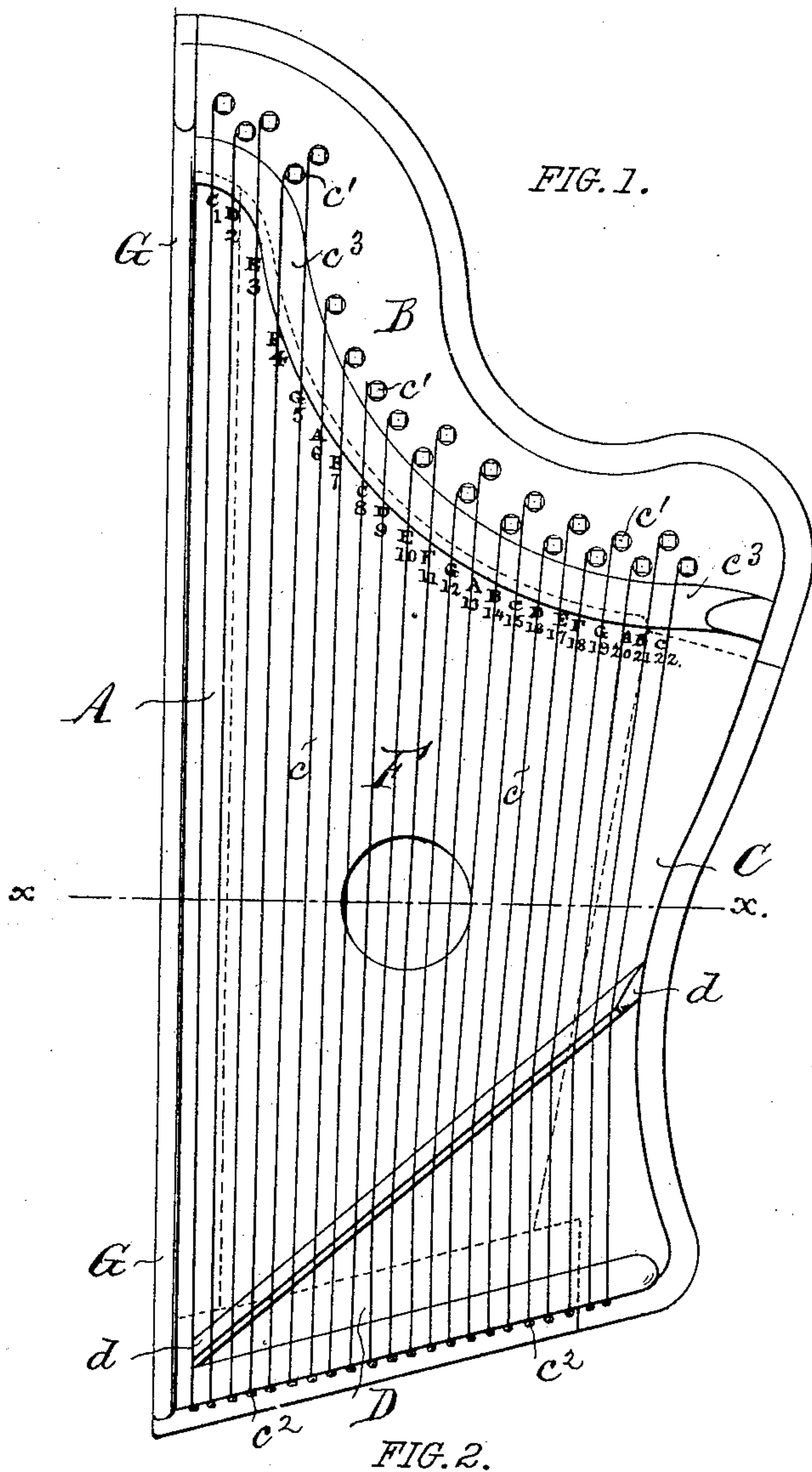


C. E. HOLTZ.
Zithern.

No. 224,535.

Patented Feb. 17, 1880.



A T T E S T:

John H. Barthel
Chas. Barthel

INVENTOR:

INVENTOR:
Carl E. Holtz
per Herthel & Co

UNITED STATES PATENT OFFICE.

CARL E. HOLTZ, OF ST. LOUIS, MISSOURI.

ZITHERN.

SPECIFICATION forming part of Letters Patent No. 224,535, dated February 17, 1880.

Application filed June 25, 1879.

To all whom it may concern:

Be it known that I, CARL E. HOLTZ, of St. Louis, Missouri, have invented an Improved Zithern, of which the following is a specification.

This invention relates to the class of musical instruments known as "zitherns."

My improvement and its advantages will first be fully described, and the novel features thereof pointed out in the claim.

Of the drawings, Figure 1 is a plan view; Fig. 2, a sectional elevation taken on line *x x*.

A B C D constitute the main frame-work, each part being solid pieces of wood cut or shaped and united together, as shown in figures. The dotted lines indicate how far each of said pieces extends into the body of the instrument. E is the bottom board, which fits flush over the bottom of the frames. F is the sounding-board, having the opening at *f*. Said board is united over the top of A C D, so as to fit flush with the top of B at the curved dotted line. G is a front facing.

I prefer to construct the instrument to have the shape or design as shown, so as to present its greater area with the bass strings closest to the player, while the treble strings and less area of the instrument exist farthest away from the player.

The strings *c* are, therefore, all passed over the sounding-board from the tuning-keys *c'* (inserted in B) to the fastening edge, at *c''* of D. I use, by preference, metal strings, (brass and steel.) Near to the keys exists the ordinary bridge or rest *c''*, in my case shaped as shown in Fig. 1.

d represents the bridge I have provided to obtain stronger, clearer, and more melodious sounds. Also, the benefit of full resonance is had, since only the ends of the bridge *d* are supported on the solid frames of A and C. The arrangement of the bridge *d* is such as to incline across the top of the sounding-board, as shown, to suit the basso and treble nature of the strings or graduate the distance of each string between both bridges. Each string can have a musical character or be numbered.

My instrument thus constructed is used by placing it so that the basso strings are closest to while the remaining strings are farthest from the player. The left hand can play upon the basso strings while the right plays upon the treble strings, the strings in my case being vibrated. The addition of one or more bridges, *d*, gives greater strength and purer quality of tone.

What I claim is—

The combination of the parts A B C D, the bottom E, sounding-board F, bridges or rests *c'' d*, tuning-keys, and strings, all said parts being constructed and arranged as shown and described, to form the improved musical instrument, as and for the purposes set forth.

In testimony of said invention I have hereunto set my hand.

CARL E. HOLTZ.

Witnesses:

JOHN W. HERTHEL,

WILLIAM W. HERTHEL.