

Ezra Durand's Imp^d Dulcimer.

72824

Fig: 1

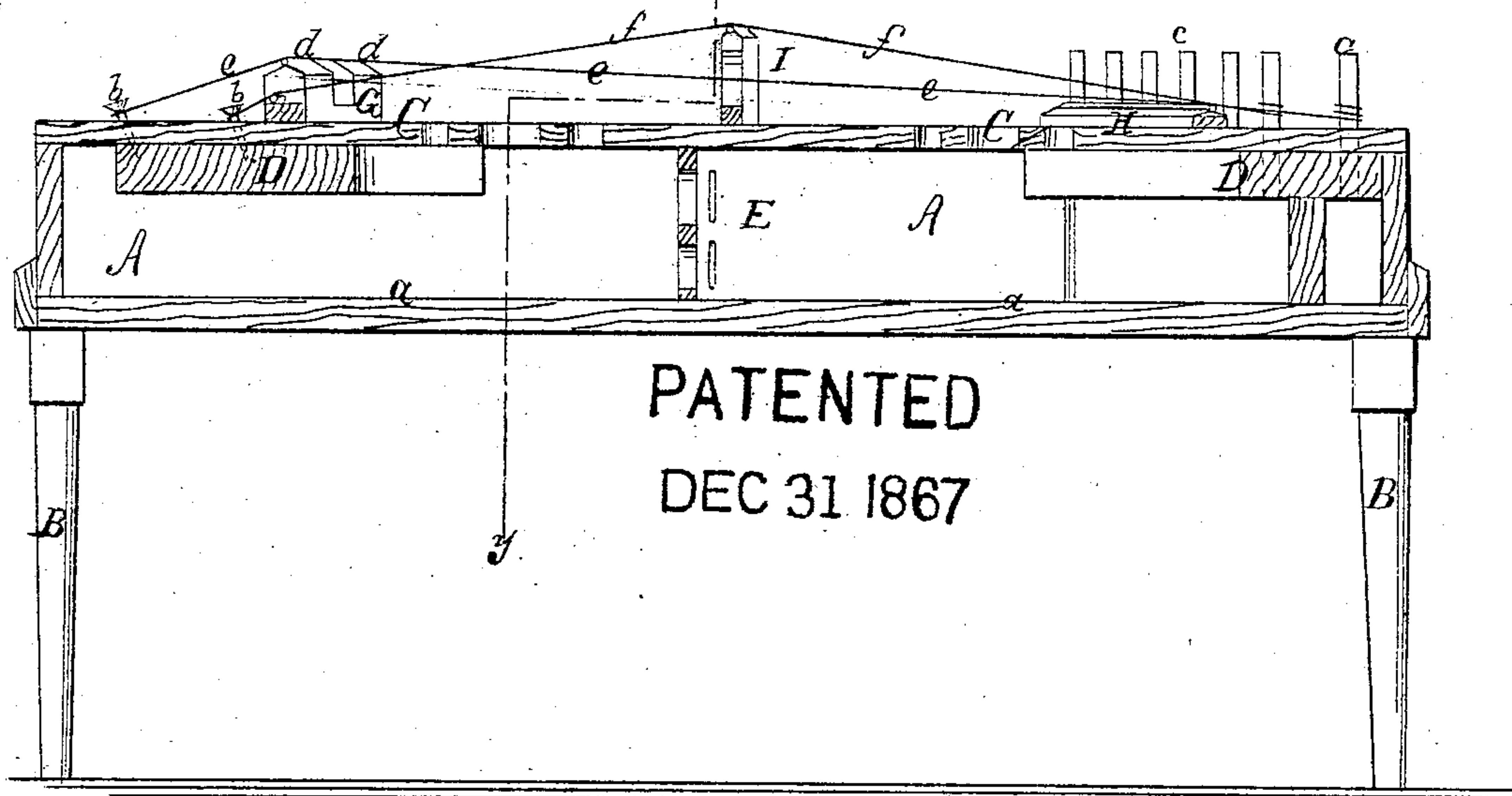
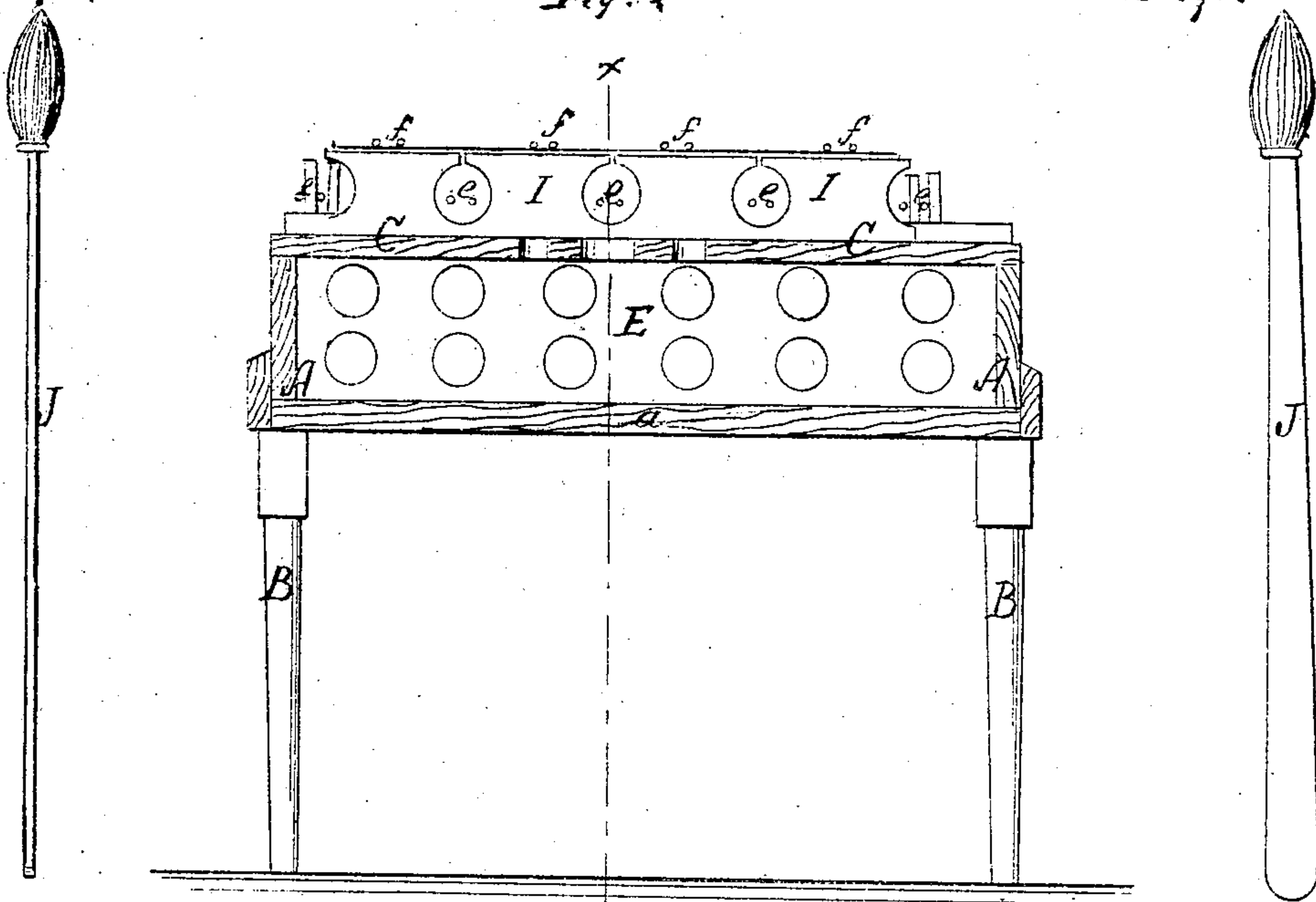


Fig: 4

Fig: 2

Fig: 3



Witnesses.
 Theo. Truett
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EZRA DURAND, OF NORWICH, CONNECTICUT.

Letters Patent No. 72,824, dated December 31, 1867.

IMPROVEMENT IN DULCIMERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, EZRA DURAND, of Norwich, New London county, Connecticut, have invented a new and improved Dulcimer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical longitudinal section of my improved dulcimer, the plane of section being indicated by the line *x x*, fig. 2.

Figure 2 is a vertical cross-section of the same, the plane of section being indicated by the line *y y*, fig. 1.

Figure 3 is a side view of the hammer by which the instrument is played; and

Figure 4 is an edge view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a musical instrument which is known under the denomination of "dulcimer."

The same consists of a number of metal or other strings, which are stretched across a sound-board in a manner similar to that in which piano-strings are secured. It is played by means of hammers which are in the hands of the player, and by which the cords or strings are struck in the required succession.

The invention consists in the manner of constructing the sound-post by which the sound-board is supported, said sound-post being perforated, as well as the sound-board on each side of the post, for the purpose of allowing the vibrating air to pass through, thereby increasing the softness and distinctness of the sounds.

The invention also consists in the form and arrangement of the bridges, whereby a certain part of each string is elevated, for the purpose of separating and easily distinguishing the bass and treble-strings in the instrument.

A represents a case or box, which is made of wood, of suitable form and dimensions. The same may, if desired, be supported upon legs B, and be provided with lids, and be ornamented, or otherwise so arranged, that its outer appearance will be similar to that of a piano-forte. But these legs, lids, or ornaments, or any one of them, may, if desired, be omitted.

C is the sound-board, which is supported by brackets D, which are secured in the case A. Its central portion rests upon a sound-post, E. The latter is made of one board, which is perforated with a number of holes, and on each side of it the sound-board C is also perforated, as is clearly shown in fig. 1. The sound-post may, instead of being a perforated board, consist of two horizontal bars, arranged respectively below the sound-board and above the bottom-board *a* of the case A. Between these bars are upright pillars, far enough apart from each other to permit the circulation of the air through the holes in the sound-board and through the sound-post.

e and *f* are the strings, the former the bass, the latter the treble-strings. Their ends are secured around pins *b* and tuning-pins *c*, as shown.

The bass-bridge G is secured to the left-hand side of the sound-board, and is provided with vertical projections *d*, as shown in fig. 1.

The low bridge H is arranged on the right-hand side of the sound-board, and is of usual construction.

The centre bridge I is as high as the higher parts, *d*, of the bridge G, and is perforated with holes, as shown in fig. 2.

The bass-strings *e* are laid over the elevated portion, *d*, of the bridge G, and are passed through the holes in the bridge I. The treble-strings *f* are laid over the centre bridge I, as shown. Thus, the bass-strings are highest near the bass-bridge G, and the treble-strings near the centre bridge I; and as the highest portions only are struck by the soft ends of the elastic hammer J, the bass and treble-strings can be easily distinguished from each other.

The distance between the centre bridge and bass-bridge is smaller than that between the centre and low bridge H; and thus each treble-string has two tones, one on either side of the centre bridge.

The number of strings is unlimited, and can be increased or diminished at pleasure.

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

The combination of the perforated sounding-post E, perforated sounding-board C, perforated centre bridge I, and notched bass-bridge G, the whole constructed substantially as herein described, for the purpose specified.

EZRA DURAND.

Witnesses:

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