

(No Model.)

F. PITT.

SOUNDING BOARD FOR UPRIGHT PIANO FORTES.

No. 258,670.

Patented May 30, 1882.

Fig 2.

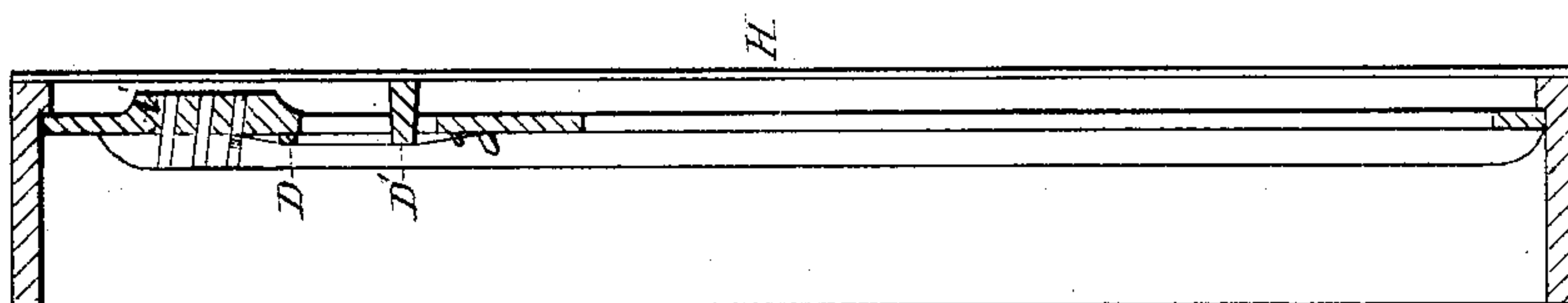
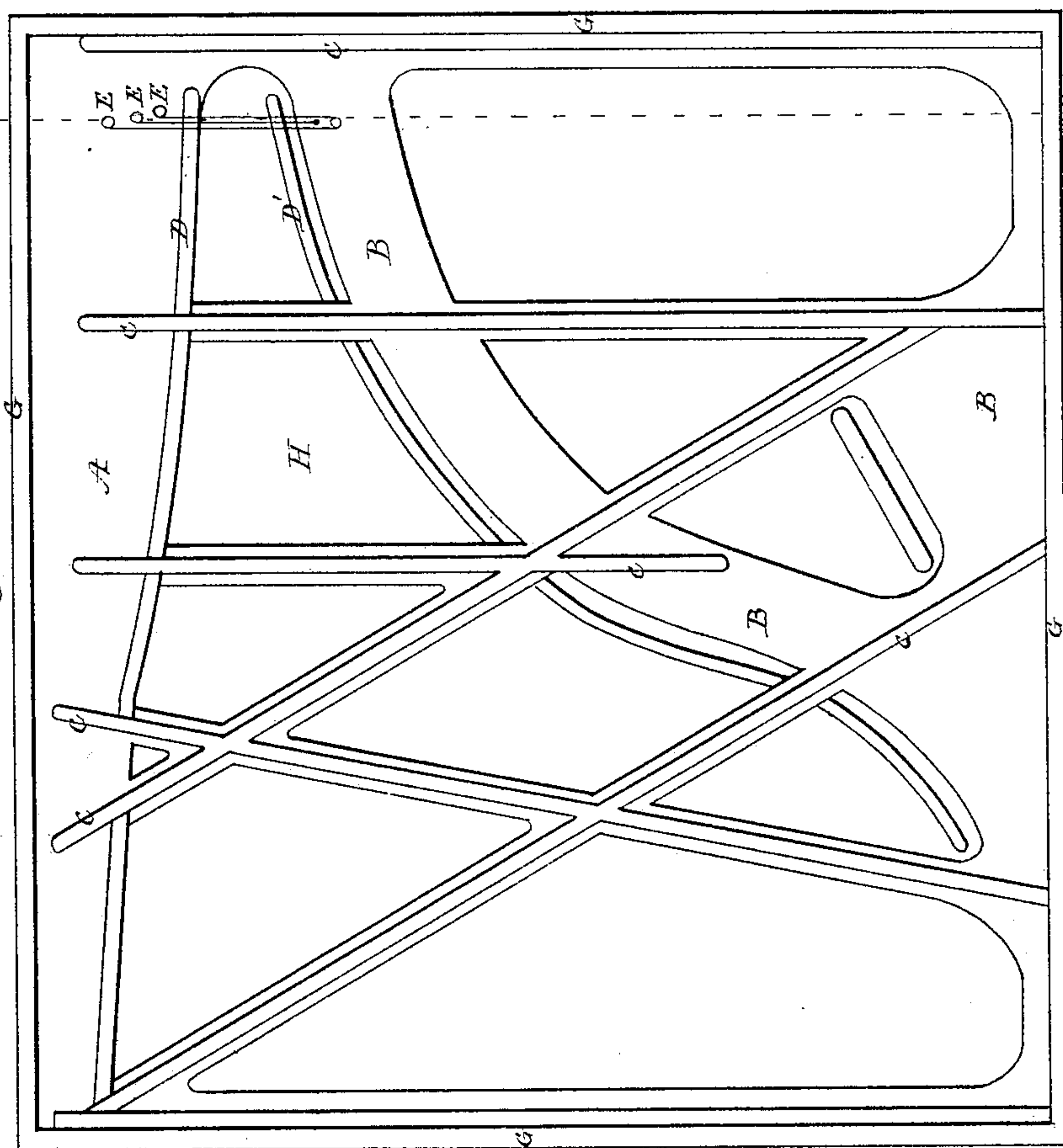


Fig 1.



WITNESSES

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# UNITED STATES PATENT OFFICE.

FREDERICK PITT, OF IONIA, MICHIGAN.

## SOUNDING-BOARD FOR UPRIGHT PIANO-FORTES.

SPECIFICATION forming part of Letters Patent No. 258,670, dated May 30, 1882.

Application filed October 21, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK PITT, of Ionia, in the county of Ionia and State of Michigan, have invented an Improvement in Sounding-Boards for Upright Piano-Fortes, of which the following is a specification.

The object of this invention is to secure a larger surface of sound-board than has heretofore been obtained, more particularly in the treble, where only about one and three-quarters inch is the usual amount. By my improvement I obtain about eleven inches, giving a remarkable increase of sustaining power and tone in the treble; and it consists in constructing the iron frame so as to extend to the top of the casing, and providing it with a swell or thickened portion to receive the tuning-pins, instead of inserting them in an independent wooden frame outside of or beyond the iron frame, as heretofore practiced.

This invention is applicable only to upright pianos, or to such as have the action above the sound-board or in front of the wires, as, if beneath or behind them, the sounding-board must necessarily be divided to give passage to the hammers at their point of action on the wires, in which case all benefit of increased vibration must be lost, as in the invention of Wm. Bourne, patented February 17, 1863, No. 37,717, the peculiar construction of which I do not claim.

In the accompanying drawings, Figure 1 represents a face view of the iron frame with its sustaining wooden border-frame; and Fig. 2, a vertical section of the same, taken on the line *xx* on Fig. 1.

The same letters occurring on both figures indicate like parts.

I here represent the adaptation of my invention to an upright piano.

The iron wrest-plate A, holding the tuning-pins E, may be cast in one piece with the frame B; or, if found advisable on account of uneven shrinkage, due to its greater thickness, they may be cast separately and bolted together afterward. The tuning-pins E are driven tight in holes bushed with wood in the thickened portion A' of the wrest-plate, which is not liable to split nor the pins to get loose, or to be affected by heat or cold, as is the case with the wooden wrest-plank attached to either a wood or iron frame. C are front braces to sup-

port and stiffen the iron frame and wrest-plate. D D' are wooden bridges over which the wires pass, the one D on the wrest-plate and that D' on the sound-board. E E E are the tuning-pins, inserted in bushed holes in the thickened portion of the wrest-plate. This iron frame is connected in any suitable manner with a border-frame, G, of wood, to which also the sound-board is attached, the latter extending upward back and clear of the iron wrest-plate to the top of the case, thus giving considerable increase of sound-board surface, particularly in the treble, where most needed, and at the same time dispensing with all the wooden frame at the back that the wooden wrest-plank as heretofore constructed was attached to. Furthermore, it should be observed that in the upright piano a much greater extension of sound-board is attainable at the treble end of the frame than in a horizontal instrument, from the fact that the tuning-pin bar in the latter is the narrowest at that point, while in the upright it is the widest there, thus admitting of the greater extension of the sound-board, whereby an increased volume of sound is obtained where most needed.

The supporting-frame G may be rabbeted and secured to the iron frame and wrest-plate by screws entering the edge of the latter; or the screws may be passed through it from the back. The sound-board H in either case is to be glued to said frame G. The whole is then inserted and secured in the case by dowels and cleats in the usual manner.

What I claim as new, and desire to secure by Letters Patent, is—

1. An upright piano having the wrest-plate A constructed in one piece with the frame B, or rigidly attached thereto, in combination with an undivided sound-board extended above and beyond the range of the tuning-pins, substantially as described.

2. An upright piano-forte having an undivided sound-board extended above or beyond the range of the tuning-pins, in the manner and for the purpose substantially as specified.

In witness whereof I hereunto set my hand, before two subscribing witnesses, this 10th day of October, A. D. 1881.

Witnesses: FREDERICK PITT.  
C. O. THOMPSON,  
G. M. TABER.