

No. 654,360.

Patented July 24, 1900.

E. SCHOPF.
SOUNDING BOARD SUPPORT.

(Application filed Feb. 12, 1900.)

(No Model.)

FIG. I.

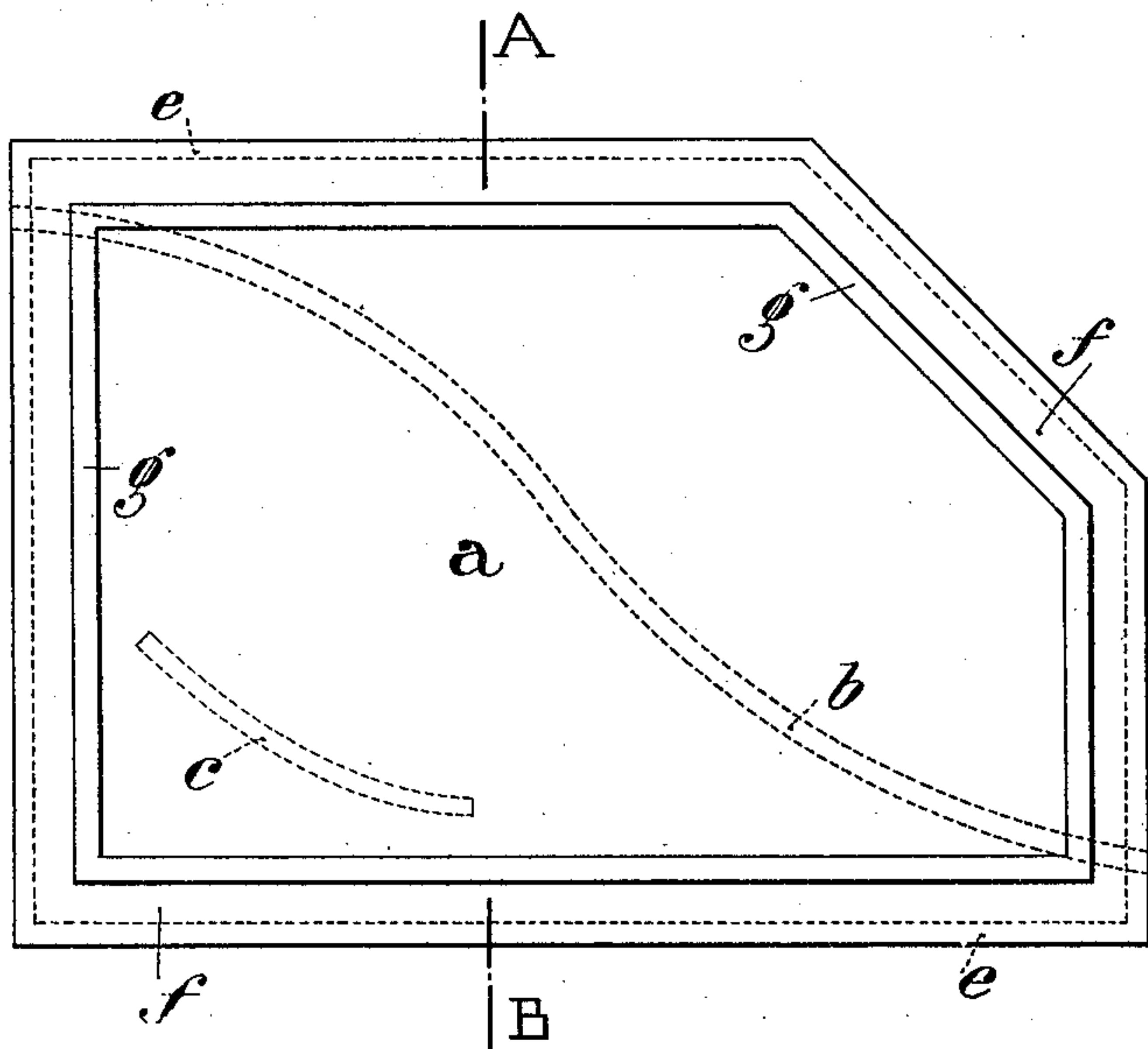
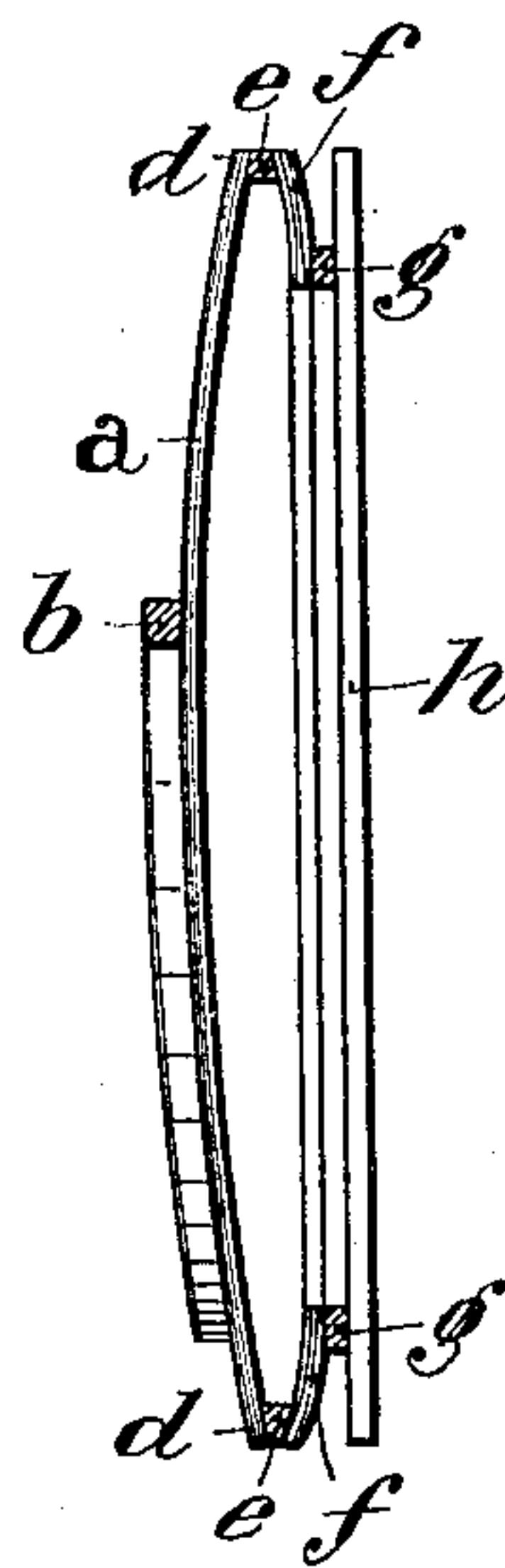


FIG. II.



Witnesses:
C. Schmidlein
W. Wenter

Inventor:
Emil Schopf

UNITED STATES PATENT OFFICE.

EMIL SCHOPF, OF BERLIN, GERMANY.

SOUNDING-BOARD SUPPORT.

SPECIFICATION forming part of Letters Patent No. 654,360, dated July 24, 1900.

Application filed February 12, 1900. Serial No. 4,934. (No model.)

To all whom it may concern:

Be it known that I, EMIL SCHOPF, piano-forte manufacturer, a subject of the German Emperor, residing at Markusstrasse 18, Berlin, Germany, have invented certain new and useful Improvements in Sounding-Board Supports, of which the following is a specification.

Sounding-boards for musical instruments as generally used rest around their rim on a frame wherewith they are firmly connected. By this firm connection of the sounding-board with a stationary frame the sounding-board around about the edges up to a pretty considerable distance cannot vibrate and only the middle part of the sounding-board is able to make vibrations of an amplitude necessary to obtain a perfect sound. This disadvantage is especially perceptible in the shorter treble-strings of an upright piano or horizontal piano, which lie near to that part of the sounding-board which is close to the supporting-frame. The sound of these strings is not reinforced by the vibrations of the sounding-board in comparison with that of the middle strings, so that the difference between the beauty of the sound of the upper octave of a piano and the middle octaves is thus explicable. In order to do away with these disadvantages, the absolutely stationary fixing of the rim of the sounding-board is avoided in the present construction, so that the whole sounding-board can freely vibrate.

Figure I of the annexed drawings is an under plan view of the sounding-board shown separate from its seat, the seat being omitted in order to make the drawing clearer. Fig. II is a section on the line A B, Fig. I, showing also the seat.

The real sounding-board *a*, which can be made of usual sounding-board wood, receives its tension by the two bridges *b* and *c*.

To enable the sounding-board to vibrate to the border, the outermost border *d* of the sounding-board is provided with an edging-fillet *e*, extending around its circumference and firmly connected on the one side with the sounding-board and on the other side with a wooden plank *f*, also extending around the circumference of the sounding-board. This wooden plank *f* is again provided along the edge opposite that by which it is attached to the sounding-board proper with a resting-fillet *g*, fastened on the support *h*, by which it is fastened in the instrument. The wooden plank *f* is made of hard wood, while for the sounding-board proper soft wood is used, as is well-known. The reason is the same as in violins—that is, to enable the sound-waves to rebound on this part *f*, so that only the real sounding-board *a* comes into vibratory effect. In this manner the sounding-board is able to swing like a spring of similar cross-section—that is, the sounding-board is able to swing also at its edges because direct fastening of the edges is avoided by the use of the intermediate support, consisting of the plank *f*.

I declare that what I claim is—

The combination with a sounding-board *a* of a fillet *e* having one of its faces glued to the under face of the sounding-board at its edge, a hard-wood-plank frame *f* having the same shape exteriorly as the sounding-board glued at the outer edge of one of its faces to the under face of said fillet *e* and a fillet *g* glued to the under face of said plank frame *f* at the inner edge thereof.

In witness whereof I have signed this specification in the presence of two witnesses.

EMIL SCHOPF.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.