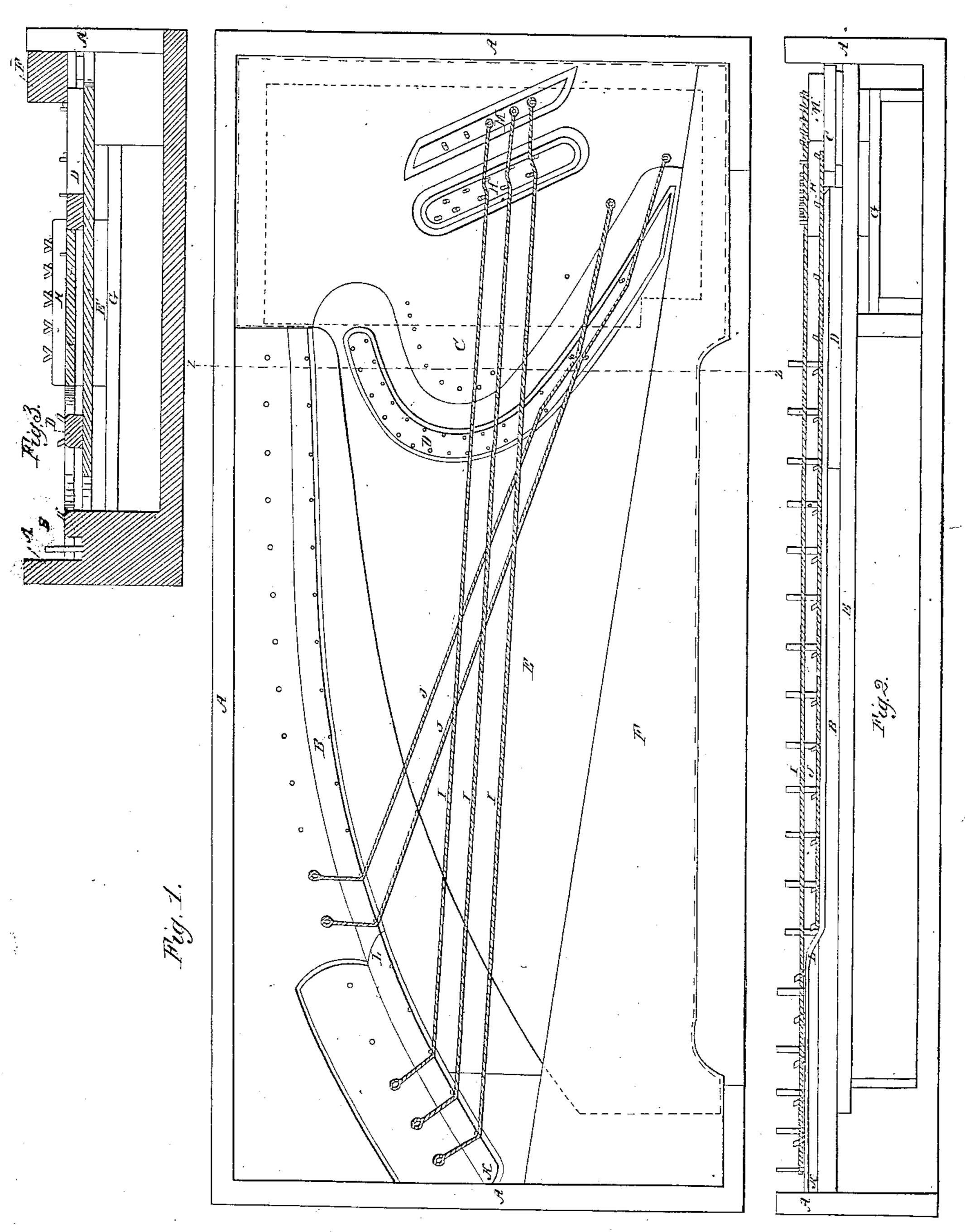
J. Menning,

Piano Sounding Board, Palented Syn.7, 1857.

M⊈/6,990,



UNITED STATES PATENT OFFICE.

JOSEPH NEWMAN, OF BALTIMORE, MARYLAND.

SOUNDBOARD OF PIANOFORTES.

Specification of Letters Patent No. 16,990, dated April 7, 1857.

To all whom it may concern:

Be it known that I, Joseph Newman, of the city of Baltimore and State of Maryland, have invented certain new and useful 5 Improvements in Pianofortes; and I do hereby declare that the same are described and represented in the following specifications and drawings.

To enable others skilled in the art to make 10 and use my improvements I will proceed to describe their construction and use referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is a plan of the interior of a 15 piano forte with my improvements. Fig. 2, is a front elevation of the same the front portions of the casing N. N. and the bar F. being omitted. Fig. 3, is a sectional elevation of Fig. 1 to the right of the line z, z.

The nature of my invention and improvements in piano fortes and other musical instruments having two or more sounding boards consists in making bridges upon the lower sounding board or boards to protrude 25 through or rise beyond the sounding board or boards above them.

In the accompanying drawings the case of the piano forte is shown at A, A, A. B, is the tuning block bridge; C, the hitch-pin 30 plate and D the sounding board bridge all of which may be made in the form shown in the drawing or in such other form as may be preferred.

The sounding board E, extends under the 35 front bar F, and sounding board bridge D, to the case at the right hand end as shown by broken lines in Fig. 1. At the right hand end of the instrument, and at a little distance below the sounding board E I ar-40 range another or second sounding board G. as shown in Figs. 2, and 3, and by broken lines in Fig. 1. To this sounding board G, I fasten the bridge H, which extends up foregoing specification. through apertures made for it in the sound-45 ing board E, and hitch pin plate C, and is made to rise so much higher than the plate

C, and bridge D, that the strings I, I, which

rest upon the bridge H, will lay over or across the strings J, J, which rest on the bridge D without interfering with them as 50 shown in Fig. 2; that portion of the bridge B, from K, to L, which the strings I, I, rest upon and to which they are fastened being made higher than the other portion which the strings J, J, rest upon and to which 55 they are fastened, as shown in the elevation Fig. 2. The strings I, I, which lie across the bridge H are fastened to the raised bar M on the plate C, as shown in Fig. 1.

The above described construction and ar- 60 rangement enables me to make a larger amount or area of available and effective sounding board, in an instrument of a given size, than has been done heretofore; as the sounding boards E, and G, are entirely sepa- 65 rate and distinct, one from the other, and the strings which lie across and rest upon the bridges of each board, are also separate and distinct from each other I contemplate that musical instruments may be made with two, 70 three or more sounding boards arranged one above another in succession; and that the bridges from the lower ones may extend up through apertures in the boards above them, or rise beyond the ends of the sounding 75 boards above in succession as may be preferred by the maker or user.

I believe I have described and represented my improvements in pianofortes so as to enable any person skilled in the art to make 80 and use them and I will now state what I desire to secure by Letters Patent, to wit:

I claim in pianofortes and other musical instruments having two or more sounding boards, making the bridges upon the lower 85 sounding board or boards, to protrude through or rise beyond the sounding board or boards above them substantially as described for the purposes set forth in the

JOSEPH NEWMAN.

Witnesses:

L. JEWETT GROVE, James Busey.