

J. A. Gray,

Piano Frame,

N^o 28,137.

Patented May 1, 1860.

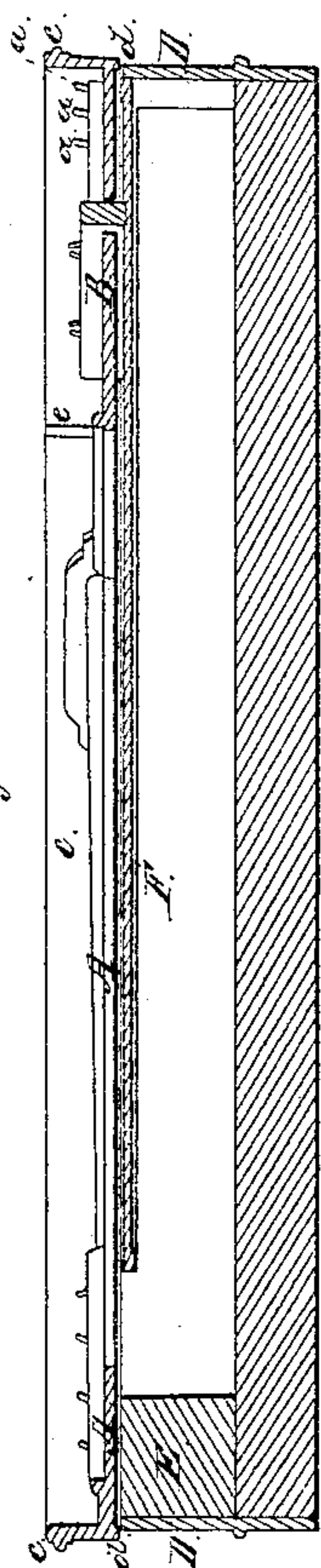
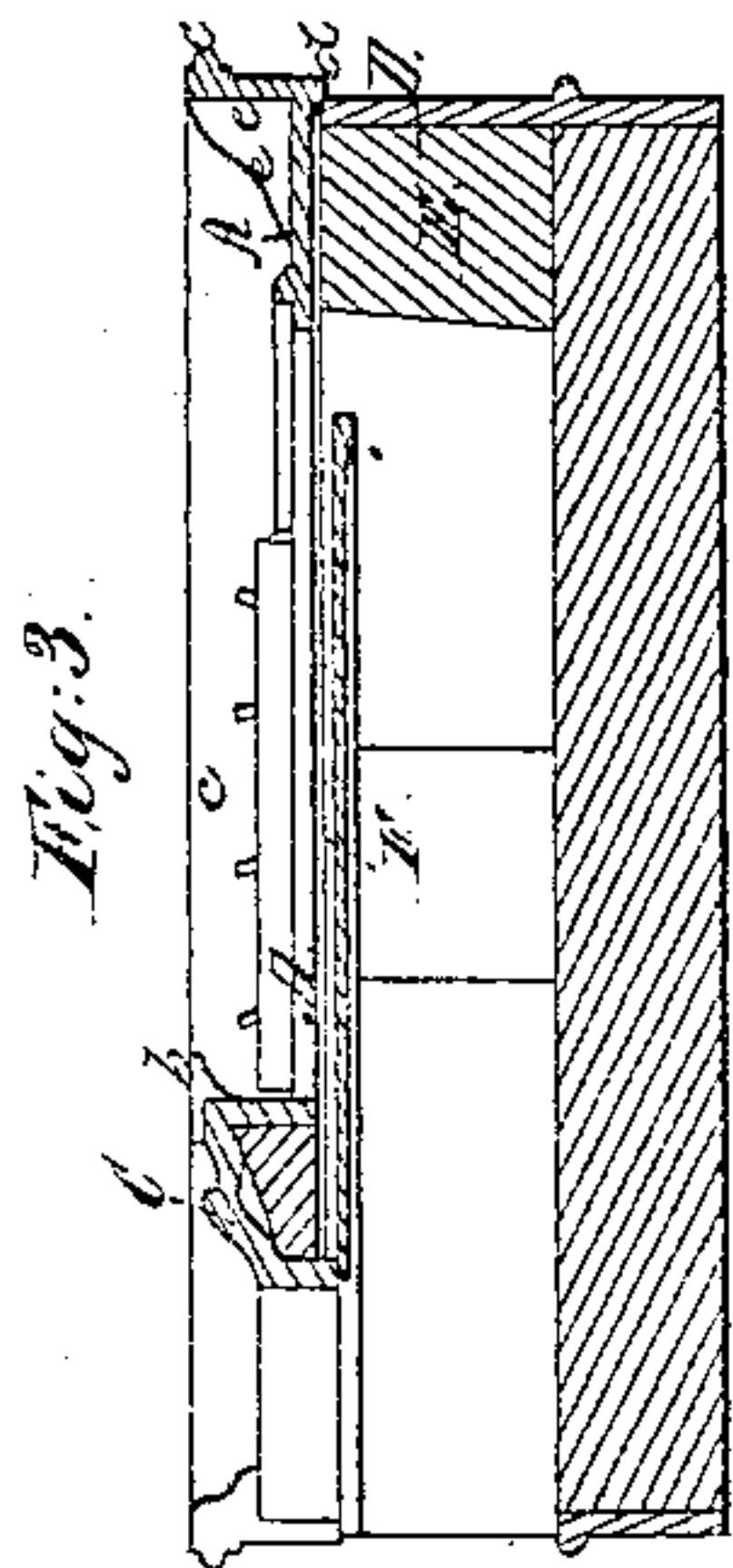
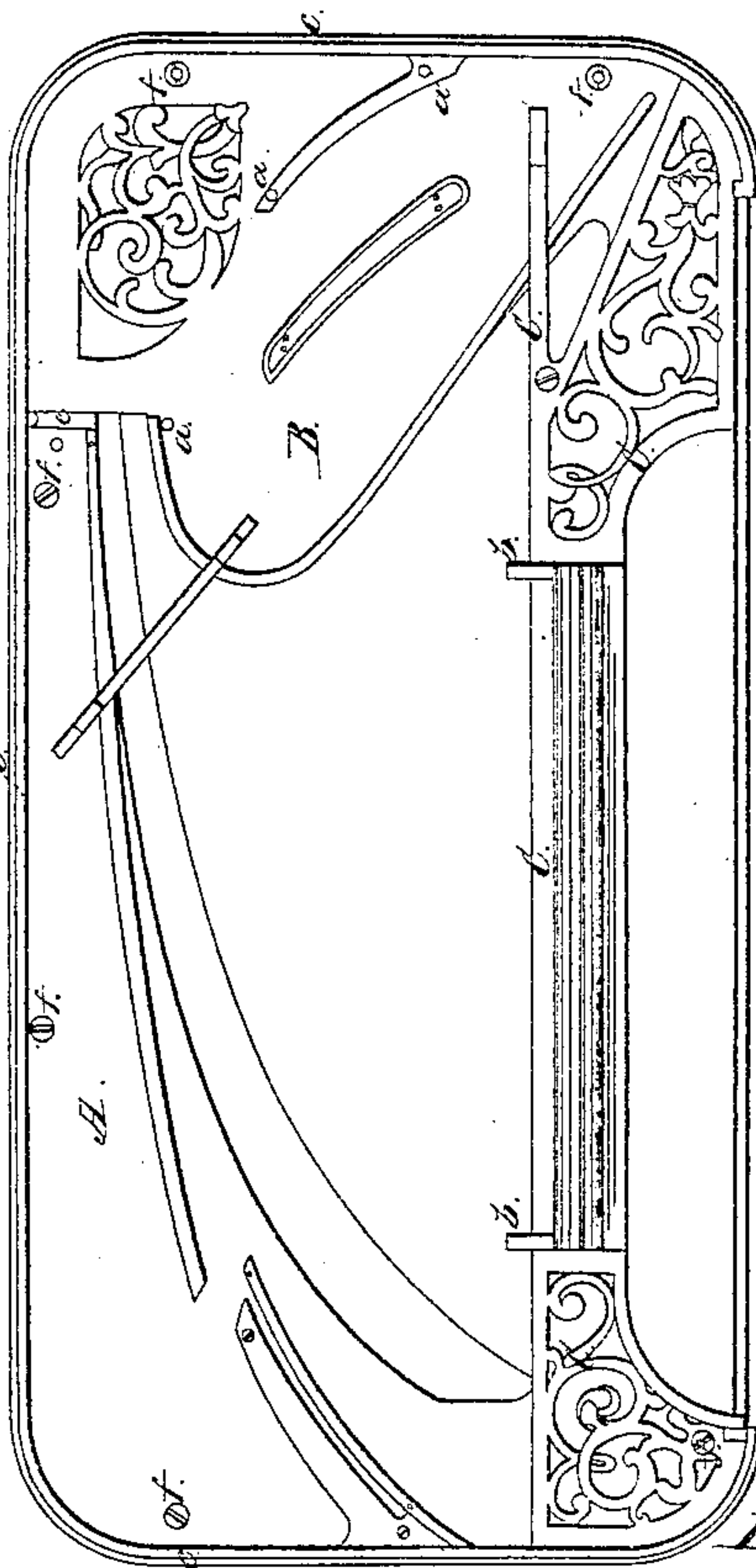


Fig. 2.



Witnesses:
R. S. Spence
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UNITED STATES PATENT OFFICE.

JAMES A. GRAY, OF ALBANY, NEW YORK.

PIANOFORTE.

Specification of Letters Patent No. 28,137, dated May 1, 1860.

To all whom it may concern:

Be it known that I, JAMES A. GRAY, of Albany, in the county of Albany and State of New York, have invented a new and useful Improvement in Pianofortes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of a square piano forte with my improvement. Fig. 2, is a plan of the same. Fig. 3, is a transverse section of the same.

Similar letters of reference indicate corresponding parts in the several figures.

The object of my invention is to simplify the construction of piano-fortes and at the same time to give increased firmness and durability and to allow a larger or more extended scale to be used in a given size; and to this end my invention consists in so constructing of a single casting and applying, what is termed the full iron plate as to make it constitute the upper part of the sides, back and front of the case.

To enable others skilled in the art to make and use my invention I will proceed to describe it with reference to the drawings.

The horizontal form of the plate represented in Fig. 2, is such that it conforms exactly to the horizontal form of the case of the piano-forte. The part A, which covers the tuning block and the part B, in which the hitch pins *a, a*, are secured are of the same form as in the full iron plates of other square piano fortes but the front part C, by which the said plates are united, instead of being a simple brace as in those plates is made of a form shown in Figs. 2 and 3 to complete the upper portion of the front of the case and to constitute the bottom of the music rack or desk, and has cast upon it the

two lugs or brackets *b, b*, to which to attach the sides of the said rack or desk. All along the back and sides and round the front corners of the plate there is formed an upwardly extended rim *c, c*, which is intended to form the upper part of the exterior of the case and along the same portion there is also a downwardly projecting rim *d, d*, to rest upon the lower wooden portion D, D, of the case as shown in Figs. 1 and 3. The rim *c, c*, and the portions A, B, of the plate may be united by as many corner brackets *e*, as may be considered desirable to strengthen and stiffen the plate, but these are more especially necessary at or near the treble bridge where one is shown in the drawing. To apply the plate thus constructed the wooden portion of the case is finished off flush with the top of the tuning block E, and the sound board F, is secured to this portion of the case, which is completed with the exception of the lid or cover by putting on the plate and securing it to the tuning block and the wooden sides and bottom by screws *f, f*.

What I claim as my invention and desire to secure by Letters Patent, is:

1. Casting what is termed the full iron plate of a piano forte with an upwardly projecting rim *c, c*, along its back and sides and round the front corners to form the upper portion of the exterior of the case substantially as herein described.

2. Casting the bottom C, of the music rack or desk and the brackets *b, b* to which its sides are attached with what is termed the full iron plate substantially as herein specified.

JAMES A. GRAY.

Witnesses:

I. O. COLE,
S. H. H. PARSONS.