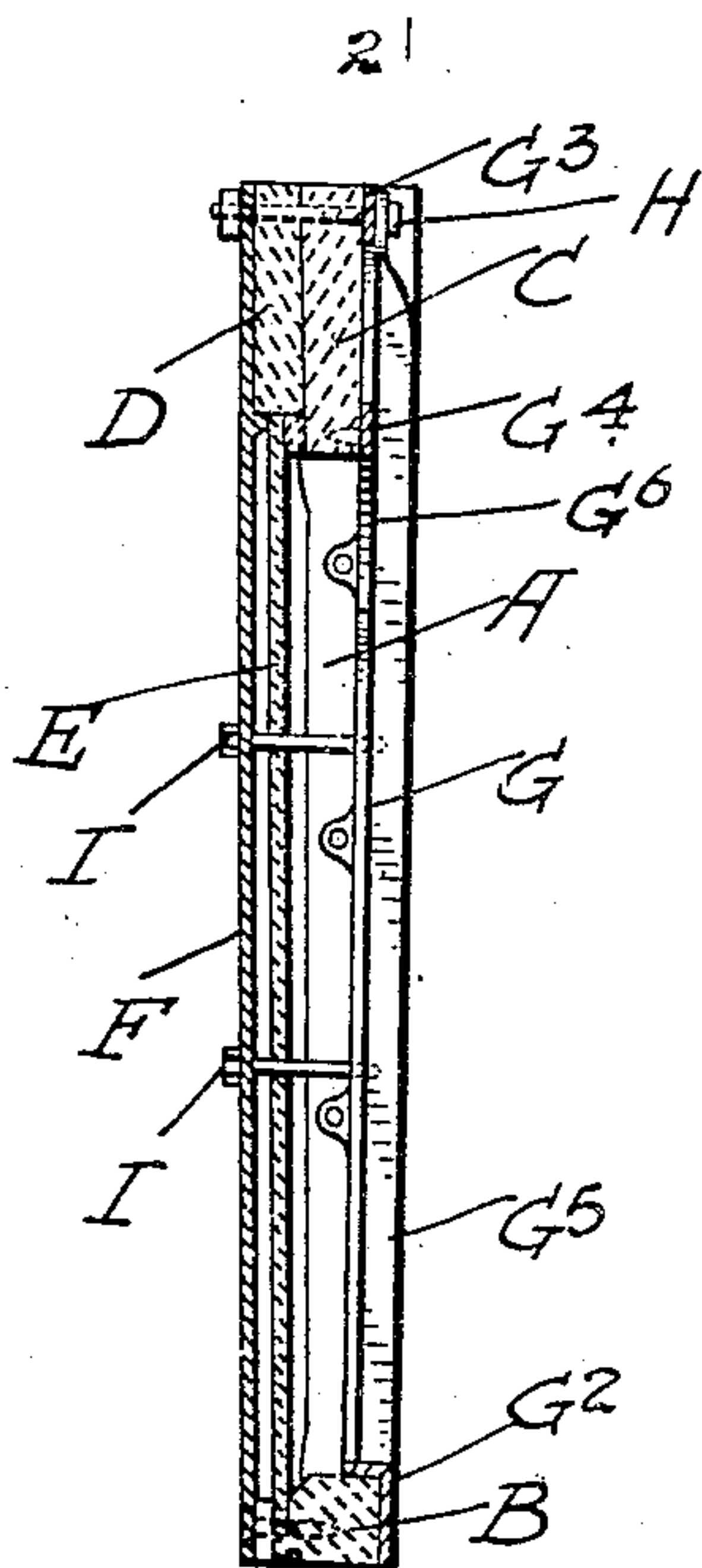
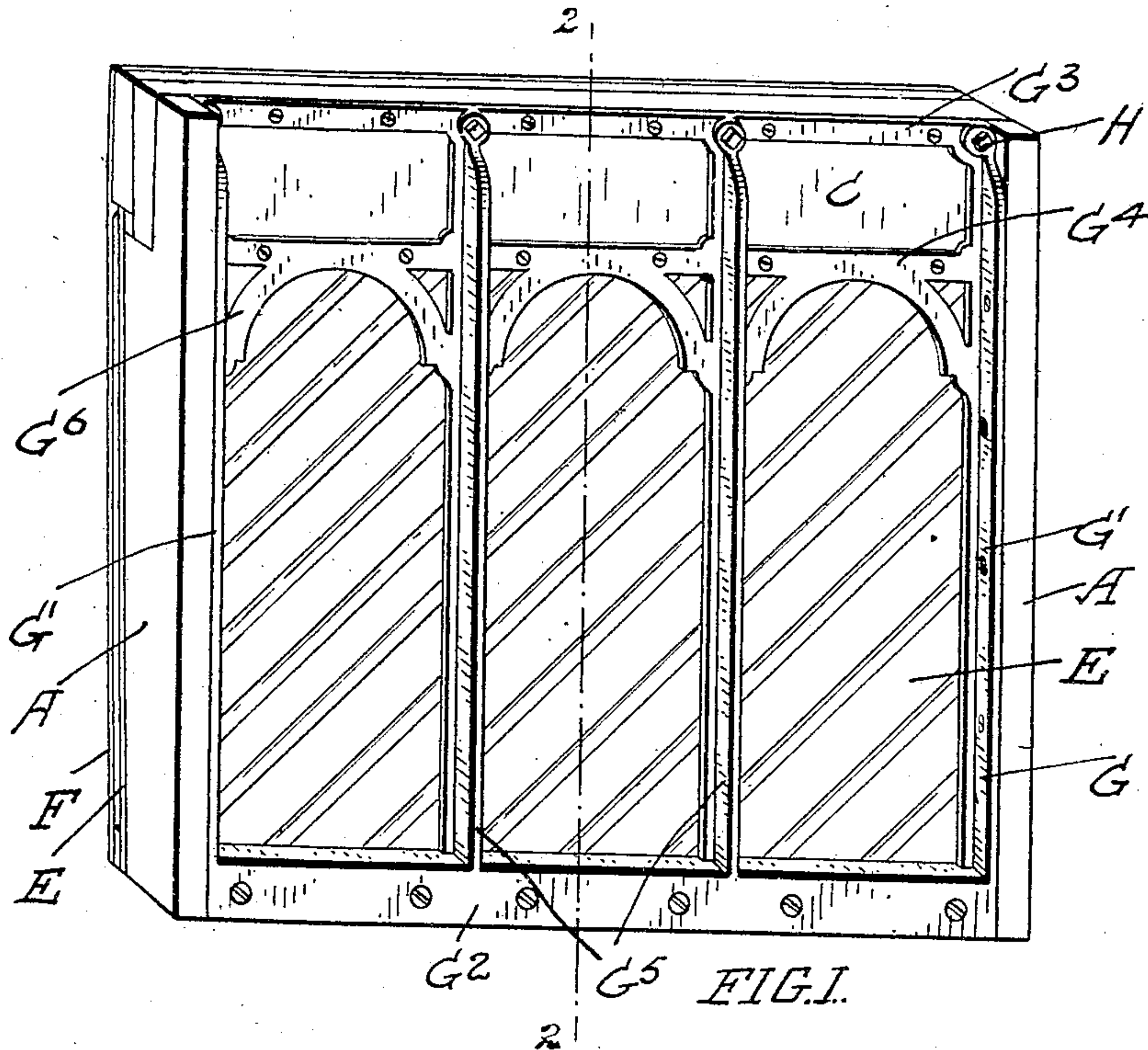


No. 878,025.

PATENTED FEB. 4, 1908.

J. J. THOMAS.  
UPRIGHT PIANO.

APPLICATION FILED JUNE 22, 1907.



WITNESSES.

*A. Young*  
*Albert H. Vaisey*

FIG. 2.

INVENTOR.

*John Joseph Thomas*  
By *J. B. Leatherstocking*  
*att'y*



# UNITED STATES PATENT OFFICE.

JOHN JOSEPH THOMAS, OF GUELPH, ONTARIO, CANADA.

## UPRIGHT PIANO.

No. 878,025.

Specification of Letters Patent.

Patented Feb. 4, 1908.

Application filed June 22, 1907. Serial No. 380,335.

*To all whom it may concern:*

Be it known that I, JOHN JOSEPH THOMAS, of Market street, of the city of Guelph, in the county of Wellington, in the Province of Ontario, Canada, piano-builder, have invented certain new and useful Improvements in Upright Pianos, of which the following is the specification.

My invention relates to improvements in upright pianos, and particularly to a metal sustaining frame for the same, and the object of the invention is to devise a means for strengthening, sustaining and reinforcing the ordinary wooden frame carrying the sounding board, in which the ordinary wooden upright will be dispensed with and the frame rendered less bulky and at the same time completely independent of the casing, which may be attached to the wooden frame in the usual manner.

A further object is to produce a clear and ringing tone in the piano.

The invention comprises a substantially rectangular frame having the end and intermediate uprights and top intermediate and bottom cross bars, the bottom cross bar being of angle iron and the end bars being secured to the wooden end posts and the top and intermediate bars being secured to the head block, and the bottom bar secured to the bottom horizontal block all in such a manner that the frame is contained within the plane passing through the outside edge faces of the end posts as hereinafter more particularly explained.

Figure 1, is a perspective rear view of the interior wooden frame showing my metal sustaining frame affixed thereto. Fig. 2, is a vertical section on the line 2—2 Fig. 1.

In the drawings like letters of reference indicate corresponding parts in each figure.

A are the end posts, B the bottom horizontal block, C the head block, D the wrest plank, E the ordinary sounding board and F the string plate. The disposition of the sounding board and the string plate is not novel.

G is the back plate in which resides the chief novelty of my invention.

The back plate G comprises the end flange or angle bars G', the bottom flange or angle bar G<sup>2</sup>, the top flat bar G<sup>3</sup> and the intermediate flat bar G<sup>4</sup> and the intermediate ribbed vertical bars G<sup>5</sup>. The bar G<sup>4</sup> has formed underneath it the arches G<sup>6</sup> forming part of the plate and extending between the

vertical and intermediate bars as indicated.

The top flat bar G<sup>3</sup> and intermediate horizontal bar G<sup>4</sup> are secured by screws or other suitable fastenings to the head block C and the bottom bar G<sup>2</sup> is secured by screws or other suitable fastenings to the bottom bar B. The end bars G' are secured by screws through the projecting flanges to the end posts A.

H are bolts, which extend through the top bars G<sup>3</sup>, head block and wrest plank and string plate. I are bolts which extend through the string plate and sounding board into the intermediate vertical rib bars G<sup>5</sup>. The ribs or flanges of the vertical bar are flush with the outer face of the bottom bar G<sup>2</sup>.

From this description it will be seen that I have provided a very simple means for strengthening and sustaining the ordinary wooden frame of pianos, whereby the ordinary upright wooden posts are dispensed with, and which I find in practice serves to make the wooden frame, to which the case is glued, much more compact and allows of more room in the case for the action, as well as allows of a clear ringing tone to the piano as all the parts are very solid and equally sustained.

What I claim as my invention is:

1. In an upright piano, the combination with the interior wooden piano frame comprising the side posts, bottom block head block and wrest plank and sounding board suitably disposed and held thereby, of a sustaining frame comprising the end vertical bars held on the inside of the posts, the intermediate vertical bars, the top and intermediate horizontal plates secured to the head block and the bottom horizontal plate secured to the bottom block as and for the purpose specified.

2. In an upright piano, the combination with the interior wooden piano frame comprising the side posts, bottom block, head block and wrest plank and sounding board suitably disposed and held thereby, of a sustaining frame comprising the end vertical angle bars held on the inside of the posts, the intermediate vertical rib bars, the top and intermediate horizontal plates secured to the head block and the bottom horizontal angle plate secured to the bottom block, the vertical bars and bottom plate having their rear sides lie flush with the rear sides of the wooden posts of the wooden frame as and for the purpose specified.

3. In an upright piano, the combination with the interior wooden piano frame comprising the side posts, bottom block head block, and wrest plank and sounding board  
5 suitably disposed and held thereby, of a sustaining frame comprising the end vertical bars held on the inside of the posts the intermediate vertical bars, the top and intermediate horizontal plates secured to the head block and the bottom horizontal plate se- 10  
cured to the bottom block, the intermediate plate having downwardly depending portions forming arches extending between the vertical bars as and for the purpose specified.

JOHN JOSEPH THOMAS.

Witnesses:

JOHN J. DREW,

M. L. TRIBE.