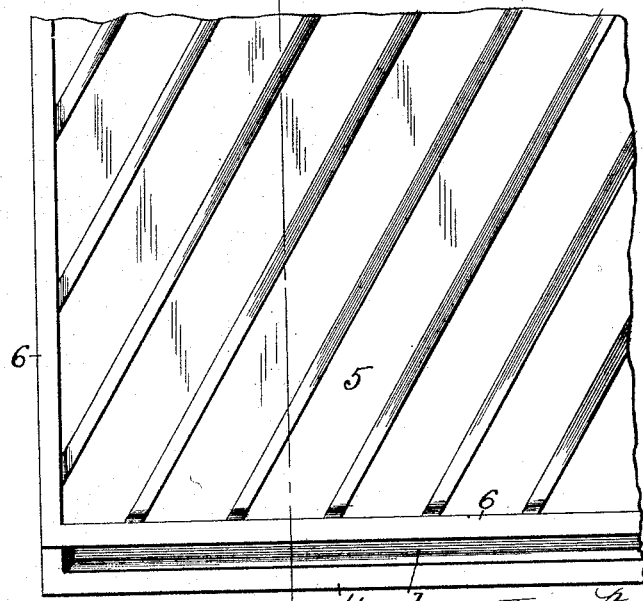
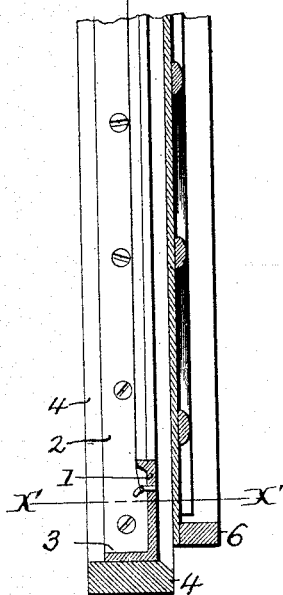
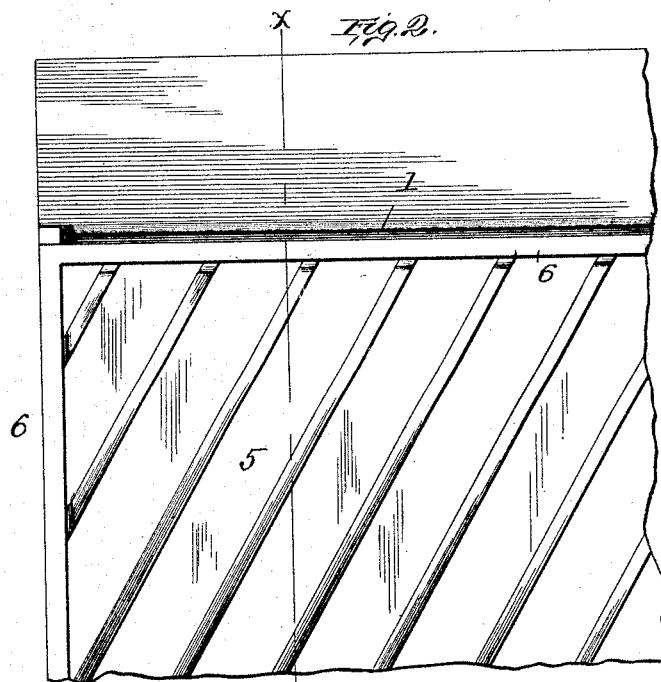
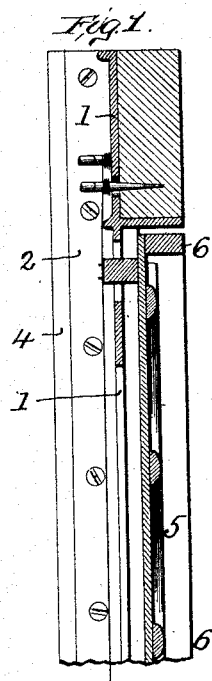


(No Model.)

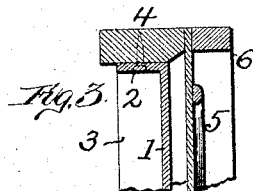
J. W. REED.  
UPRIGHT PIANO BACK.

No. 489,232.

Patented Jan. 3, 1893.



*Attest:*  
*Geo. H. Arthur*



*Inventor*  
*John W. Reed,*  
*By Robert A. Quinn*

# UNITED STATES PATENT OFFICE.

JOHN W. REED, OF CHICAGO, ILLINOIS.

## UPRIGHT-PIANO BACK.

SPECIFICATION forming part of Letters Patent No. 489,232, dated January 3, 1893.

Application filed September 12, 1892. Serial No. 445,697. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. REED, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have  
5 invented a certain new and useful Improvement in Upright-Piano Backs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings,  
10 forming part of this specification.

The present invention relates to certain improvements on the subject matter of Letters Patent No. 473,082, issued to me April 19, 1892; the object of the present improvements being  
15 ing to provide an improved arrangement of the sounding board of the above mentioned patented construction, by which the freedom to vibration is increased, and with a corresponding increase in the fullness of the tone  
20 of the piano. I attain such objects by the construction and arrangement of parts illustrated in the accompanying drawings in which:

Figure 1, is a vertical section at line  $x-x$ ,  
25 of the frame of an upright piano constructed in accordance with my present invention; Fig. 2, a rear elevation of a portion of the same. Fig. 3, a detail section at line  $x'-x'$ .

Similar numerals of reference indicate like  
30 parts in the different views.

As represented in the drawings, the general construction and arrangement of parts will be the same as in my former patented construction, 1, representing the metal string plate  
35 formed with the side and bottom flanges or cheeks 2 and 3, by which attachment is made in a firm and substantial manner to the main marginal wooden frame, 4, the rear edge of which projects backward clear of the plate 1,  
40 so as to afford means for the attachment of the sounding board 5.

In the present improvement the sounding

board is secured at its sides to the vertical wooden side bars of the main frame 4, the top and bottom edges of the sounding board being  
45 left free and unsupported, except by the marginal sounding board frame 6, as illustrated in Figs. 1 and 2. But while such is my preferred arrangement, in some cases it may be advisable to secure the bottom edge  
50 of the sounding board to the main marginal frame 4, in the same manner as its sides, and leave only the top edge free and unsupported, and it is accordingly within the province of  
55 my present invention to so modify and change the construction.

Having thus fully described my said invention what I claim as new and desire to secure by Letters Patent, is:

1. In a frame or back for pianos the combination of a piano string plate, an outer marginal wooden frame secured thereto so as to  
60 inclose the same and project rearwardly, and a sounding board secured to the back of the outer marginal frame, with its top edge left  
65 free and unsupported except by the marginal sounding board frame, substantially as set forth.

2. In a frame or back for pianos the combination of a piano string plate, an outer marginal wooden frame secured thereto so as to  
70 inclose the same and project rearwardly, and a sounding board secured to the back of the outer marginal frame, with its top and bottom edges left free and unsupported except by the  
75 marginal sounding board frame, substantially as set forth.

In testimony whereof witness my hand this 6th day of September, 1892.

JOHN W. REED.

In presence of—

ROBERT BURNS,  
GEO. H. ARTHUR.