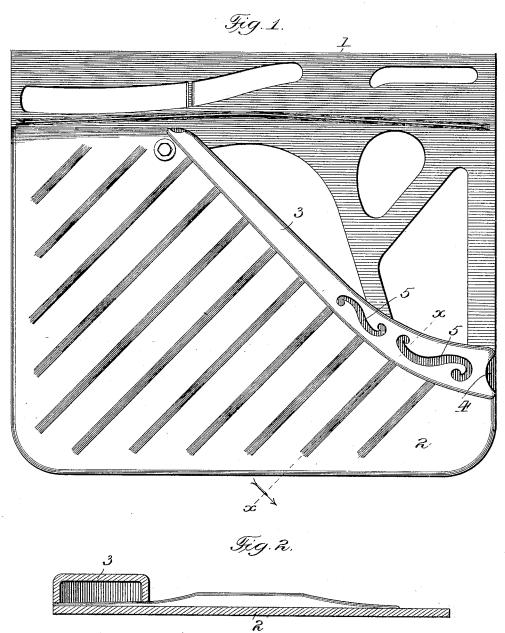
## J. W. REED. UPRIGHT PIANO.

(Application filed Feb. 10, 1900.)

(No Model.)



Attest: John Enders Jos Henry a Nott Inventor:

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## UNITED STATES PATENT OFFICE.

JOHN W. REED, OF CHICAGO, ILLINOIS.

## UPRIGHT PIANO.

SPECIFICATION forming part of Letters Patent No. 648,297, dated April 24, 1900.

Application filed February 10, 1900. Serial No. 4,914. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. REED, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and 5 State of Illinois, have invented certain new and useful Improvements in Upright Pianos, of which the following is a specification.

The present invention relates to the sounding-board construction of an upright piano, to an example of which forms the subject-matter of my prior Letters Patent, No. 489,232,

dated the 3d day of January, 1893.

The object of the present improvement is to provide a simple, durable, and efficient construction and arrangement of the sounding-board of an upright piano, with which the freedom of vibration is increased with a corresponding increase in the fullness of tone of the piano and without the production of any overtones, all as will hereinafter more fully appear and be more particularly pointed out in the claims. I attain such objects by the construction of parts illustrated in the accompanying drawings, in which—

Figure 1 is a rear elevation of the sounding-board and string-plate of an upright piano, illustrating the present improvement; Fig. 2, an enlarged detail section at line x x,

Fig. 1.

Similar numerals of reference indicate like

parts in both of the views.

As represented in the drawings, the general construction and arrangement of parts will be the same as in my aforesaid patented construction, 1 representing the string-plate, of any ordinary and usual construction, and 2 the sounding-board, supported in any usual manner in separated relation to the string-plate 1, as usual in upright-piano constructions.

In the present improvement one corner portion of the sounding-board is cut away diagonally and left free and unsupported at such edge, so as to be free to vibrate, and the margin of such unsupported portion of the sounding-board is strengthened against warping or bending by a tubular reinforce 3, secured to the back of the sounding-board, as shown.

In my preferred construction, as shown in the drawings, the unsupported margin of the sounding-board is of an ogee form approximating that of the string-bridge of the sounding-board, and the hollow reinforce 3 will be of a corresponding shape and of a tapering formation, as shown, with its extreme lower

end or corner beveled away at 4 to permit of the ready exit of the sound from the interior of such hollow reinforce.

5 represents one or more openings in the back of the reinforce to afford additional out- 60 lets from the hollow interior of the reinforce 3 for the sound.

Having thus fully described my said invention, what I claim as new, and desire to secure

by Letters Patent, is—

1. In an upright piano, the combination with the string-plate, of a sounding-board having a diagonally-cut-away corner portion that is left free and unsupported, and a tubular reinforce secured to the margin of such cut- 70 away portion of the sounding-board, substantially as set forth.

2. In an upright piano, the combination with the string-plate, of a sounding-board having a cut-away corner portion of an ogee form 75 approximating that of the string-bridge, and a tubular reinforce secured to the margin of such cut-away portion of the sounding-board,

substantially as set forth.

3. In an upright piano, the combination 80 with the string-plate, of a sounding-board having a diagonally-cut-away corner portion that is left free and unsupported, and a tubular reinforce secured to the margin of such cut-away portion of the sounding-board, with its 85 lower end cut away to form a sound-exit, substantially as set forth.

4. In an upright piano, the combination with the string-plate, of a sounding-board having a diagonally-cut-away corner portion that 90 is left free and unsupported, and a tubular reinforce secured to the margin of such cut-away portion of the sounding-board, said reinforce being cut away at its lower end to form a sound-exit, and provided with a sound-95 exit in its back, substantially as set forth.

5. In an upright piano, the combination with the string-plate, of a sounding-board having a diagonally-cut-away corner portion that is left free and unsupported, and a tapering 100 tubular reinforce secured to the margin of such cut-away portion of the sounding-board, substantially as set forth.

Signed by me at Chicago, Illinois, this 31st day of January, 1900.

JOHN W. REED.

Witnesses:

ROBERT BURNS, HENRY A. NOTT.