

S. MOORE.
PIANO.

(Application filed Oct. 11, 1900.)

(No Model.)

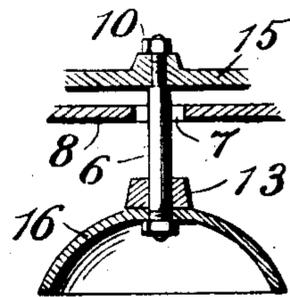
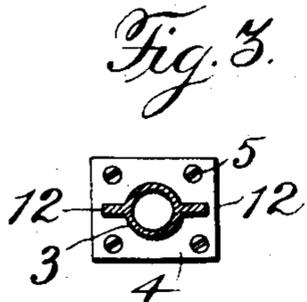
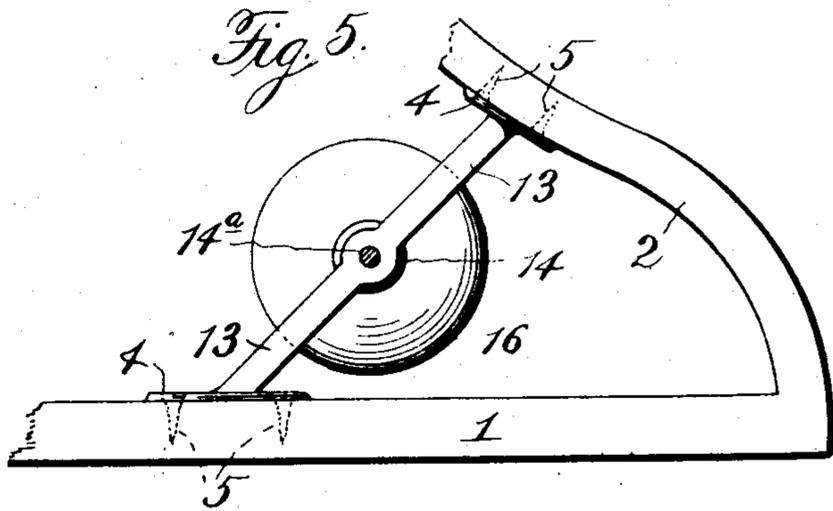
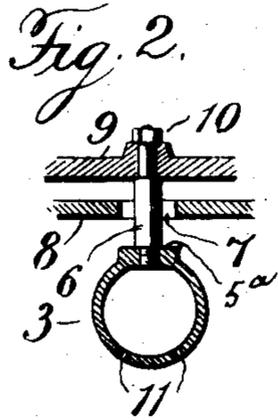
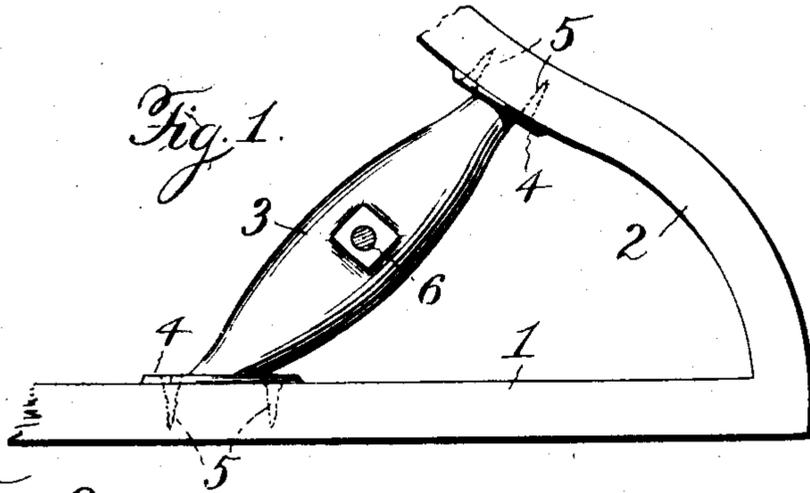


Fig. 6

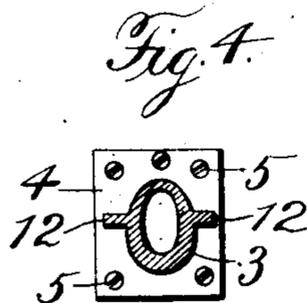


Fig. 4.

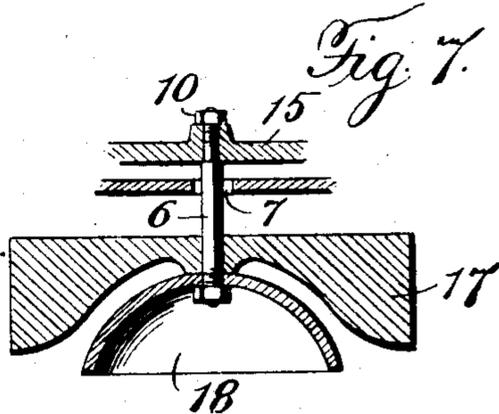


Fig. 7.

WITNESSES

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UNITED STATES PATENT OFFICE.

SAMUEL MOORE, OF NORWALK, OHIO.

PIANO.

SPECIFICATION forming part of Letters Patent No. 682,335, dated September 10, 1901.

Application filed October 11, 1900. Serial No. 32,755. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL MOORE, a resident of Norwalk, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Pianos; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in pianos, and more particularly to piano-frames, the object of the invention being to provide a piano with a metal brace which will constitute a sound-amplifier and greatly increase the volume and improve the tone of the instrument.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view showing my improvements attached to a grand piano. Fig. 2 is a view in section, and Figs. 3, 4, 5, 6, and 7 are views of modified forms of my invention.

1 represents the front, and 2 the rear, members of the frame of a grand piano, and 3 my improved metal brace or sound-amplifier, having flanged ends 4, provided with screw-holes for the reception of screws 5 to secure the respective ends of brace 3 to the members 1 and 2. The brace 3 is preferably made hollow and widest at its center, gradually tapering to its ends and provided centrally on its upper face with a flattened enlargement 5^a, made with a screw-threaded hole for the reception of the threaded end of a vertical bolt or rod 6, which latter is passed through a hole 7 in the sounding-board 8 and contracted at its upper end and passed through a hole in the metal plate 9 of the piano and secured therein by a nut 10, thus uniting the metal plate, brace, frame, and sounding-board and greatly increasing the volume of and improving the tone of the instrument. To further improve the tone, I provide one or more openings 11 in the lower face or wall of brace 3, as clearly shown in Fig. 2. If desired, the brace may be provided on opposite sides with ribs or flanges 12, as shown in Fig. 3, or it may be made approximately egg shape in

cross-section and provided with ribs, as shown in Fig. 4, or I might construct the brace as shown in Figs. 5 and 6. In this form of my invention the brace comprises a solid rod 13, secured at its ends to the piano-frame and made with a central enlargement 14, having a hole therein for the passage of rod 14^a, secured to metal plate 15 at its upper end and projecting through the brace 13, and has secured on its lower end beneath the brace 13 a semispherical bell or disk 16, which will greatly add to the tone of the instrument, the parts 13 to 16 in this case constituting the amplifier, or I might make the brace 17 concave on its under face and secure in the concavity a bell or concave plate 18, as shown in Fig. 7.

In the above description and accompanying drawings I have disclosed the brace in connection with a grand piano; but it is evident that it is equally applicable to an upright piano, and hence I do not wish to be limited to the use of the same on grand pianos.

Various other slight changes might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not wish to limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In a piano, the combination with two members of the frame and the metal string-plate, of a sound-amplifier disposed between said members of the frame, means rigidly connecting said amplifier with both of said members of the frame and a rigid bar connected at one end to the center of the amplifier and at the other end to the string-plate.

2. In a piano, the combination with two members of the frame and the metal string-plate of the piano, of a hollow body connected rigidly with said members of the frame and a bar rigidly secured at one end to said hollow body and at its other end to said metal string-plate.

3. In a piano, the combination with two members of the frame and metal string-plate

of the piano, of a hollow body bulged at its center and secured at its respective contracted ends to said members of the frame, and a rod or bar secured at one end to the bulged central portion of the hollow body and at its other end to said metal string-plate.

4. In a piano, the combination with the metal string-plate thereof, two fixed members of the frame of the piano and a sounding-board parallel with said metal plate, of a hollow body fixed at both of its ends to said

fixed members of the piano-frame, and a rigid device fixed to said hollow body and string-plate and passing through the sounding-board without contact therewith.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

SAMUEL MOORE.

Witnesses:

T. M. EDSALL,
S. I. A. VAN SCIVER.