

R. M. BENT.

PIANO.

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946,320.

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Fig. 1.

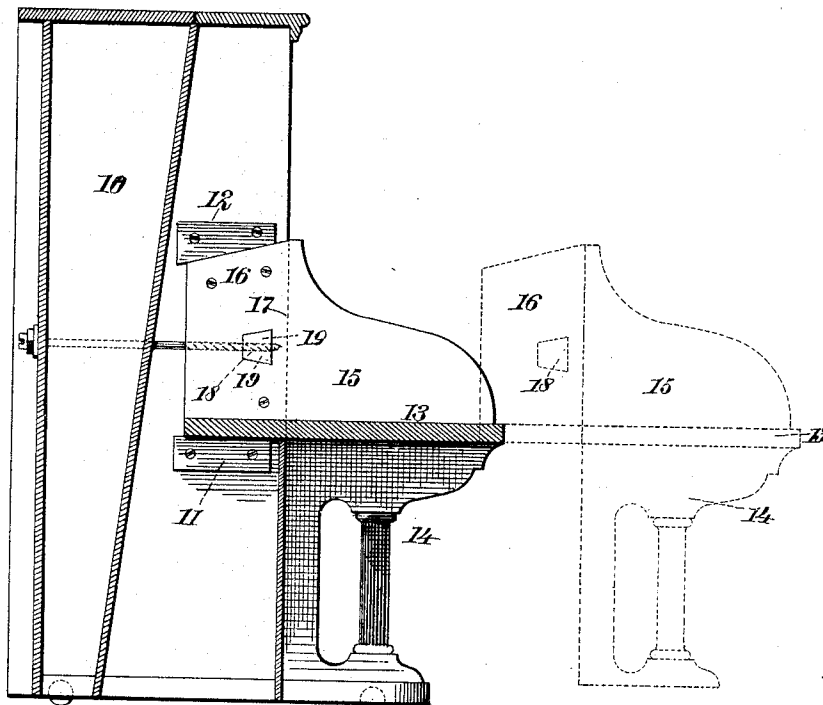


Fig. 2.

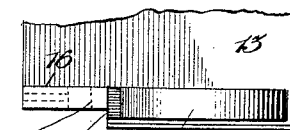
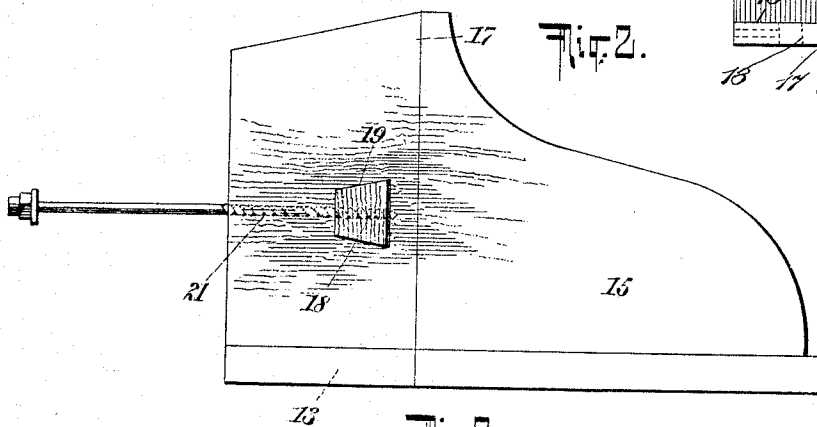
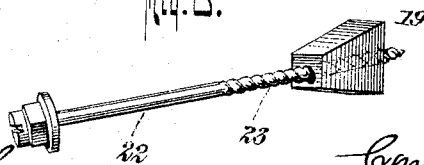


Fig. 4.

Fig. 3.



WITNESSES:

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RICHARD M. BENT, OF NEW YORK, N. Y.

PIANO.

946,320.

Specification of Letters Patent.

Patented Jan. 11, 1910.

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To all whom it may concern:

Be it known that I, RICHARD M. BENT, a citizen of the United States, residing at the city of New York, borough of Manhattan, in the county and State of New York, have invented certain new and useful Improvements in Pianos, of which the following is a full, clear, and exact specification.

My invention relates to improvements in musical instruments, and the same has for its object more particularly to provide a simple, efficient and easily removable key-board bed for pianos, organs and similar instruments so as to permit of said instruments being readily moved or carried through narrow passages or stairways.

Further, said invention has for its object to provide means for securely attaching the key-board bed to the casing in such a manner as to prevent the parts becoming accidentally loose and causing vibration or rattling and thus interfere with the operation of the instrument.

Further, said invention has for its object to provide the key-board with means to be engaged by a bolt extending through said casing which means may be firmly secured to and within said key-board bed.

To the attainment of the aforesaid objects and ends my invention consists in the novel details of construction, and in the combination, connection and arrangement of parts hereinafter more fully described and then pointed out in the claims.

In the accompanying drawings forming part of this specification wherein like numerals of reference indicate like parts, Figure 1 is a vertical section showing one form of piano case constructed according to and embodying my said invention; and in dotted lines, the key-board bed and attached parts being shown detached from said case, and Fig. 2 is an enlarged detail side view showing one of the ends of the key-board bed; Fig. 3 is a detail perspective view of a bolt, and the part to be engaged thereby; the latter being shown before the same is secured in said end, and before the key-board bed is secured to the case, and Fig. 4 is a detail plan view showing a portion of the key-board bed and one of the ends thereon.

In said drawing 10 designates a piano case of the upright type, provided upon the inner side of each of its opposite ends with a lower horizontal guide 11, and an upper

guide 12, having an inwardly and downwardly inclined lower edge.

13 denotes the key-board bed which is constructed essentially in the usual manner, and provided with a bracket 14 at each end. At each end of the key-board bed 13 is secured a vertical end 15 provided with a rearwardly extending portion 16 which is partly cut away to form a shoulder 17, and the upper edge of each end is beveled rearwardly and downwardly, so as to cause the rearwardly projecting portion 16 to engage the guides 11 and 12 and be held in wedging engagement intermediate the same. Each of the ends 15 of the key-board bed is provided in its rearwardly extending portion 16 with an opening 18, having straight front and back edges and its upper and lower edges tapering rearwardly, and 19 denotes a tapering block which corresponds in outline substantially with the opening 18 in the end portion 16 and is adapted to be secured within said opening by gluing or other suitable means. Each of said blocks 19 is provided with a central, longitudinal opening which registers with a horizontal opening 21 provided in the rearwardly extending portion 16 of each end 15.

22 denotes a bolt having slotted head which extends into the casing 10 from the rear thereof, and into the opening 21 in the rearwardly projecting portion 16 of the end 15 and is provided at its forward end with a tapering end having coarse wood screw-threads 23 adapted to engage the opening in the block 19 whereby to draw the ends 15 of the key-board bed firmly into the guides 11 12 and the shoulders 17 17 against the front of said case 10 when said bolts 22 are screwed home.

In order to obtain the best results, I preferably construct the ends 15 of the key-board bed with the grain arranged horizontally, and construct the blocks 19 with the grain thereof arranged transversely or at right angles to the direction of the grain of said ends and just before the said blocks 19 are placed into the openings 18 18 I apply glue to the edges thereof, and to the edges of said openings 18 18 in order to firmly unite said blocks in wedging engagement with said ends when the same are brought fully into contact by the bolts 22 22. In this way I am enabled to provide a fastening means which will not work loose and

cause undue rattling or vibration which occurs where metal parts are used and merely inserted into the parts or ends to be united without positively securing said metal parts thereto.

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

1. The combination with a piano case and guides secured therein, of a detachable key-board bed having ends secured in said case within said guides, said ends having the grain thereof disposed horizontally and provided with rearwardly tapering openings, tapering blocks wedged in said openings and secured to said ends and having the grain thereof disposed at right angles to that of said ends, and said blocks provided with threaded openings, and bolts extending through said case and ends, and engaging the tapering blocks secured therein, substantially as specified.

2. The combination with a piano case and

guides secured therein, of a detachable key-board bed having ends secured to said case within said guides, said ends having the grain thereof disposed horizontally and provided with rearwardly tapering openings, tapering blocks wedged in said openings and rigidly secured to said ends and having the grain thereof disposed at right angles to that of said ends, and said blocks provided with threaded openings, and bolts extending through said case and ends, provided at their outer ends with transversely slotted heads, and at their inner ends with wood screw threads adapted to engage the tapering blocks secured in the ends of said key-board bed substantially as specified.

Signed at the city of New York, in the county and State of New York, this day of March 1909.

RICHARD M. BENT.

Witnesses:

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