

L. W. NORCROSS.
 COMBINED MUSIC RACK AND FRONT PANEL FOR PIANOS.
 APPLICATION FILED FEB. 16, 1909.

949,806.

Patented Feb. 22, 1910.

Fig. 1.

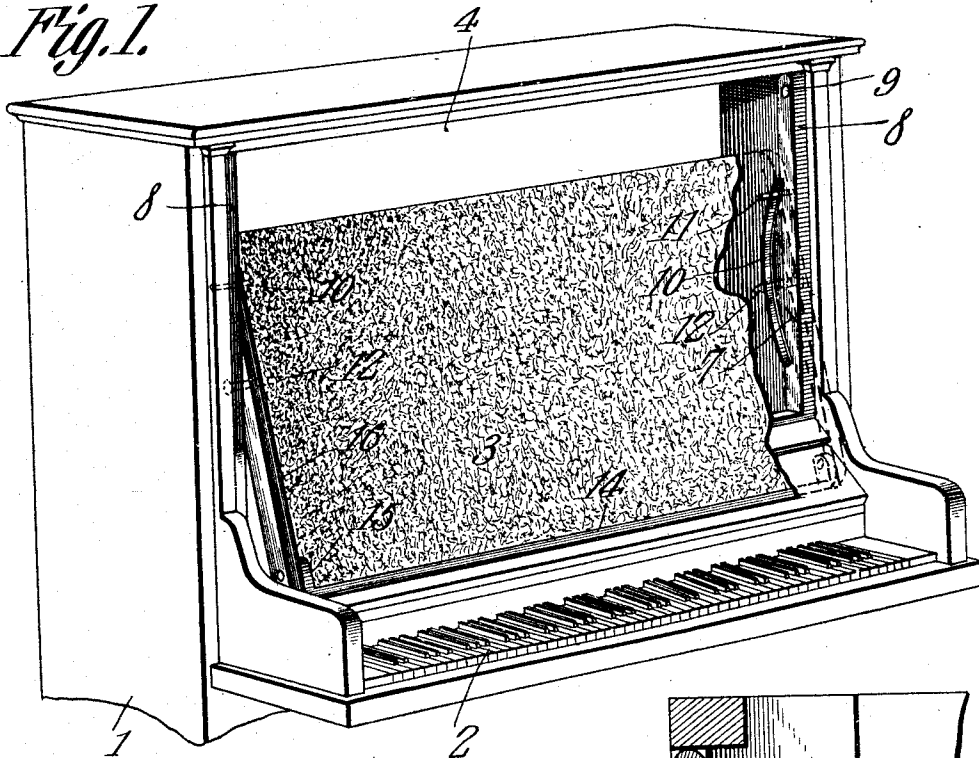
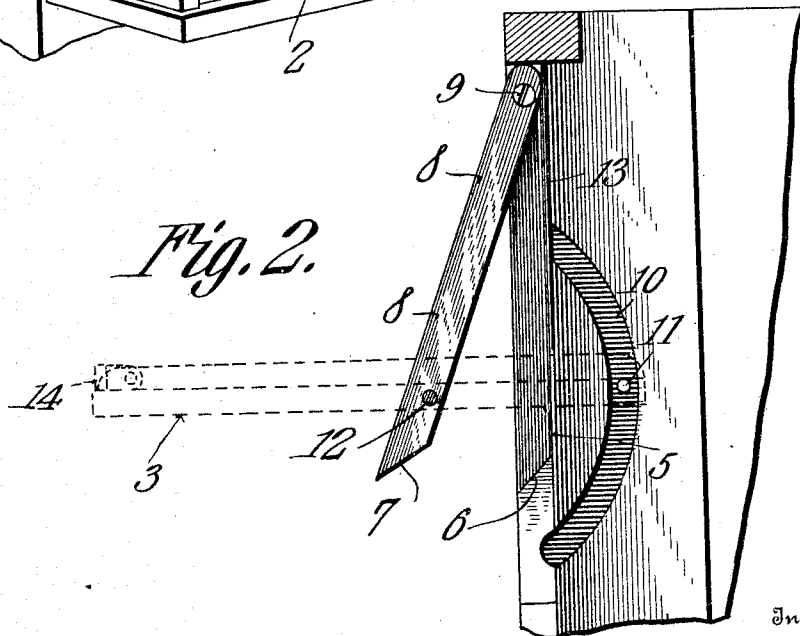


Fig. 2.



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UNITED STATES PATENT OFFICE.

LEVI WATSON NORCROSS, OF FORT WORTH, TEXAS.

COMBINED MUSIC-RACK AND FRONT PANEL FOR PIANOS.

949,806.

Specification of Letters Patent.

Patented Feb. 22, 1910.

Application filed February 15, 1909. Serial No. 478,034.

To all whom it may concern:

Be it known that I, LEVI W. NORCROSS, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented a new and useful Combined Music-Rack and Front Panel for Pianos, of which the following is a specification.

This invention relates to pianos and more particularly to improvements in the mounting and construction of the upper front panels of upright pianos. The device is more especially designed for use in connection with sound-controlling apparatus such as set forth in an application filed by me on February 15th, 1909, Serial No. 478,035.

The object of the invention is to provide a panel of the character referred to which is so mounted as to be readily swung outwardly and downwardly to constitute an efficient music-rack which may be used in lieu of or in addition to the ordinary music ledge often used in connection with upright pianos.

Another object is to provide a combined rack and panel which, when lowered, leaves a considerable space exposing the upper portion of the interior of the case to permit the free egress of the sound-waves.

A still further object is to provide simple means for supporting the panel whereby the same can be readily swung into raised or lowered position, said means being so constructed as to allow the panel to be readily detached when it is desired to reach the interior of the case either for tuning or repairing the instrument.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of the upper portion of an upright piano, having the present improvements applied thereto, the panel being shown lowered into position for use as a music-rack, one end portion of the panel being broken away. Fig. 2 is an inner elevation of one of the hangers and the adjoining portions of the case, said hanger being shown in the position assumed by it when the panel is partly lowered, the position of said panel being indicated by dotted lines.

Referring to the figures by characters of reference 1 designates the case of the piano, said case being open as ordinarily above the key-board 2 for the reception of an upper front panel, which, in the present instance, has been designated by the numeral 3. Each side of the opening 4 in the front of the case has a longitudinal recess 5 formed therein at the front thereof, the lower wall of said recess being beveled as indicated at 6 so as to constitute an abutment for the beveled end 7 of a hanger 8. Each hanger is pivotally mounted at its upper end as indicated at 9 and is designed to be normally seated within the recess 5 and, when thus seated, bears against both the inner and lower walls of said recess. An arcuate groove 10 is formed within each end wall of the opening 4, one end of the groove opening into recess 5, while the other end is closed. These grooves are designed to receive and guide studs 11 which extend laterally from the ends of panel 3, there being trunnions 12 upon the ends of said panel. The trunnions and the studs are so positioned with relation to each other that when the panel 3 is in closed position the studs 11 are located in the lower ends of the grooves 10 while when the panel is in lowered position said studs are seated within the upper ends of the grooves. In order to prevent the studs from leaving the upper ends of the grooves leaf springs 13 are secured to the inner walls of the recesses 5 and extend across the upper ends of grooves 10, said springs constituting cushioning means for limiting the movement of the studs and the panel when said panel is lowered. When the panel is in closed position the hangers 8 bear against the springs 13 and conceal them from view. Any suitable form of support may be mounted on the panel 3 for the purpose of holding sheet music, books and the like. This support may consist of a strip 14 having hangers 15 at its ends which are pivotally connected to side cleats 16 secured to the sides of the panel 3.

It is of course to be understood that the normal position of the panel is with the hangers 8 bearing against the springs 13 and the studs 11 located in the lower portions of the slots 10. The panel is thus supported entirely within the opening 4 and constitutes an efficient closure for the front of the case. When it is desired to partly open the front of the case to permit the egress of sound-

waves and at the same time enable the device to be used as a music-rack, the upper portion of the panel is swung outwardly and downwardly. The studs 11 will thus ride
 5 upwardly within the grooves 10 until they come into contact with the stop springs 13 and during this movement the hangers 8 will swing outwardly and thence backward to their initial position, the panel in the
 10 meantime assuming a downwardly inclined position as shown in Fig. 1 and with its former inner face outermost. This face is preferably covered with felt or other soft material as indicated in Fig. 1. With the
 15 panel thus located the supporting strip 14 is utilized for holding music in place and considerable space is left above the panel to permit sound-waves to readily pass from within the case.

20 Should it be desired to remove the panel from engagement with the case it is merely necessary to pull it outwardly while the studs are bearing against the springs 13. Said springs will therefore be sprung away
 25 from the walls of the recesses 5 and the studs will be free to pass from the grooves 10 and into the recesses 5. The hangers 8 can be detached from the case by removing the pivot devices 9, or, if preferred, said hangers can
 30 be so constructed as to swing upwardly a sufficient distance to permit the panel 3 to rest upon the top of the instrument.

It is of course to be understood that various changes may be made in the construction
 35 and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention.

What is claimed is:—

1. The combination with a piano case having an opening in the upper portion of the front thereof, of a reversible panel movably mounted within the opening, pivoted means for supporting said panel in one position to constitute a closure for the opening, there
 40 being a guide groove in a wall of the opening, and means upon the panel and movably mounted within the groove, and cooperating with said first mentioned means for supporting the panel in its reversed position partly
 45 within the opening, said reversed panel partly closing the opening and constituting a music rack.

2. The combination with a piano case having an opening in the upper portion of the

front thereof, of hangers pivotally mounted 55 within the opening, a panel pivotally supported by the hangers, a ledge upon the panel, said panel being reversible to constitute either a closure or a music support, and cooperating means upon the panel and case
 60 for guiding said panel into either open or closed position.

3. The combination with a piano case having an opening therein, of hangers pivotally supported within the opening, there being
 65 arcuate guide grooves within opposite walls of the opening, a panel pivotally supported by the hangers, a ledge upon the panel and guide devices extending from the panel and movably mounted within the grooves, said
 70 panel being reversible to constitute a closure for the opening or a music-rack.

4. The combination with a piano case having an opening therein and recesses at the sides of the opening, there being arcuate
 75 guide grooves in opposite walls of the opening, of hangers pivotally mounted within the opening, said recesses constituting seats for said hangers, said arcuate grooves opening at one end into the seats, yieldable closures
 80 for said open ends of the arcuate grooves, a reversible panel pivotally mounted upon the hangers and guide devices extending from the panel and movably mounted within the arcuate grooves.
 85

5. The combination with a piano case having an opening, of swinging supports suspended within the upper portion of the opening, and an invertible panel carried by the supports and movable with relation thereto
 90 to either entirely or partly close the opening.

6. The combination with a piano case having an opening, of swinging supports suspended within the upper portion of the opening, and an invertible panel carried by the supports and movable with relation thereto to either entirely or partly close the opening, and means cooperating with the supports for holding the panel partly projected beyond the opening while partly closing said
 100 opening.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

LEVI WATSON NORCROSS.

Witnesses:

DAVID R. CARR,
 F. G. SMITH.